DOCKETED		
Docket Number:	23-OPT-01	
Project Title:	Fountain Wind Project	
TN #:	248290-4	
Document Title:	FAA Determination of No Hazard	
Description:	N/A	
Filer:	Caitlin Barns	
Organization:	Stantec Consulting Services, Inc.	
Submitter Role:	Applicant Consultant	
Submission Date:	1/3/2023 12:49:44 PM	
Docketed Date:	1/3/2023	



Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine B02

Location: Burney, CA

Latitude: 40-51-12.61N NAD 83

Longitude: 121-47-18.63W

Heights: 4374 feet site elevation (SE)

679 feet above ground level (AGL) 5053 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_\_X\_\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5268-OE.

(DNH-WT)

Signature Control No: 440833037-486754890
Steve Phillips
Managar, Obstruction Evaluation Group

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5268-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

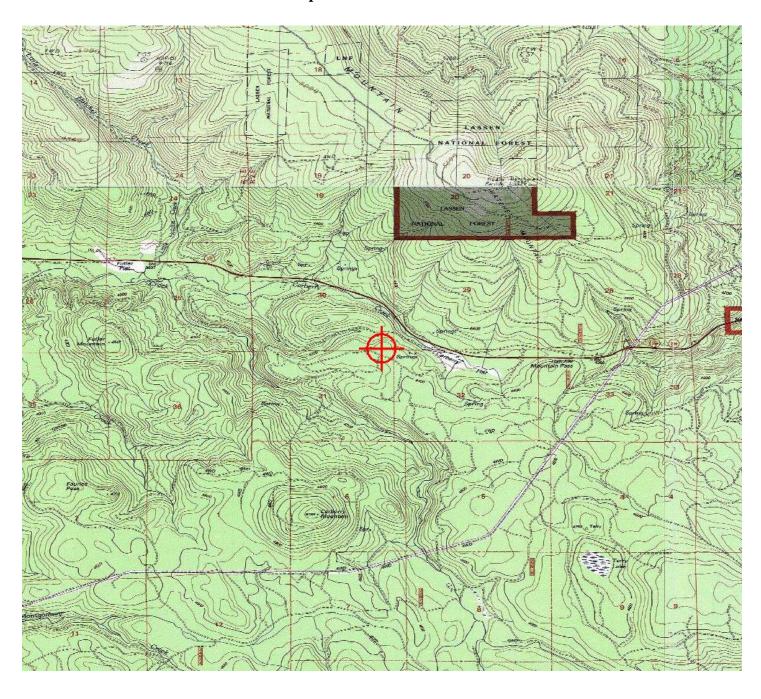
## 7. CONDITIONS

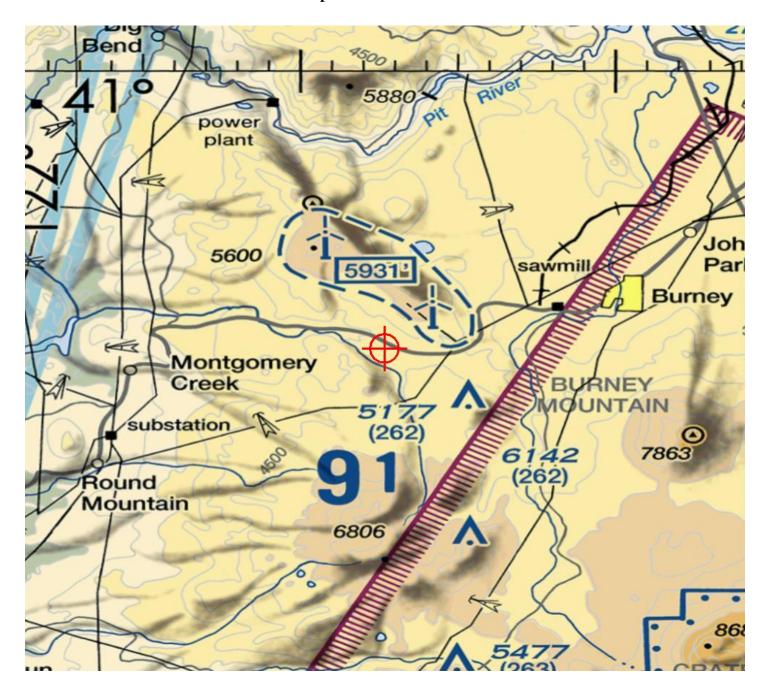
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

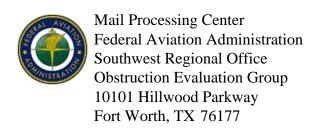
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5268-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine B03

Location: Burney, CA

Latitude: 40-50-51.13N NAD 83

Longitude: 121-46-59.89W

Heights: 4426 feet site elevation (SE)

679 feet above ground level (AGL) 5105 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_\_X\_\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5269-OE.

Signature Control No: 440833041-486754877
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5269-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		

SM- Statue Miles

. . . .

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (089), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG	
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /	
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /	
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /	
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /	
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /	
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /	
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /	
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /	
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /	

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

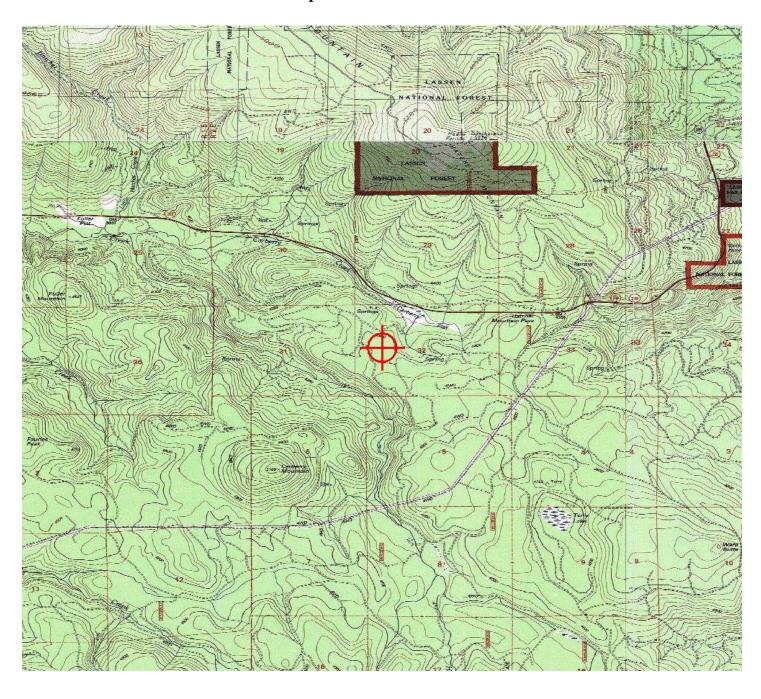
## 7. CONDITIONS

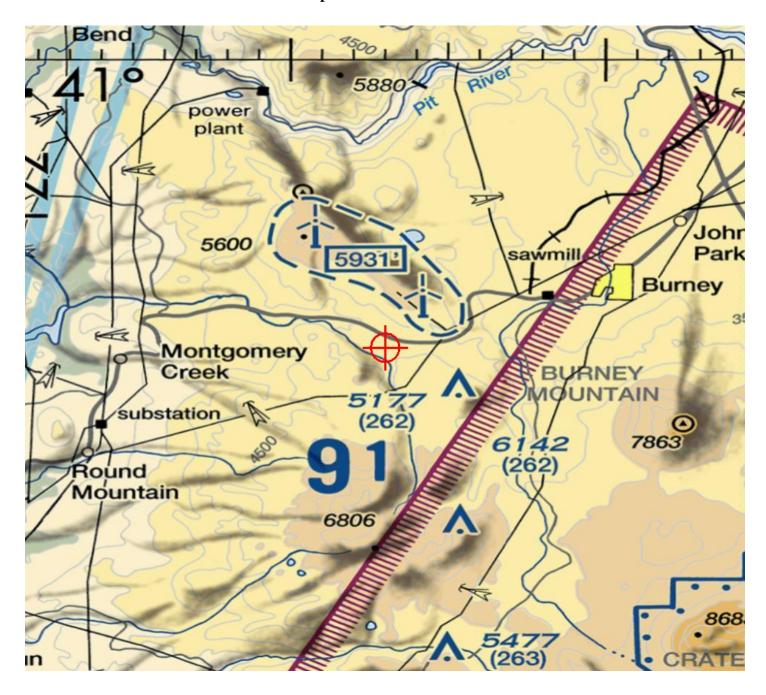
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

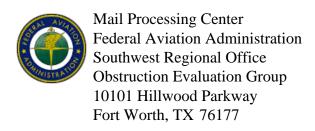
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5269-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine B04

Location: Burney, CA

Latitude: 40-50-32.31N NAD 83

Longitude: 121-46-49.02W

Heights: 4515 feet site elevation (SE)

679 feet above ground level (AGL) 5194 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

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Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5270-OE.

(DNH-WT)

Signature Control No: 440833042-486754884
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

#### Additional information for ASN 2020-WTW-5270-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
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2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

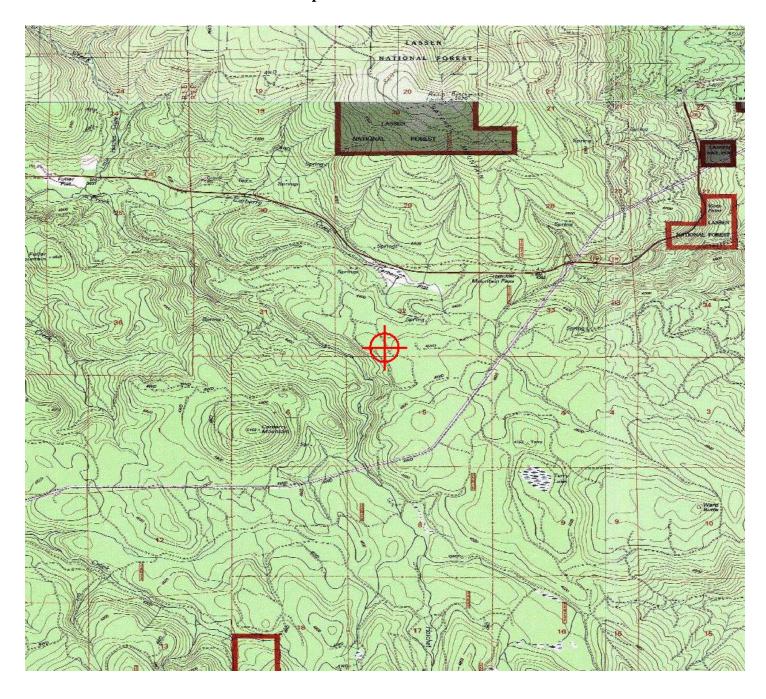
## 7. CONDITIONS

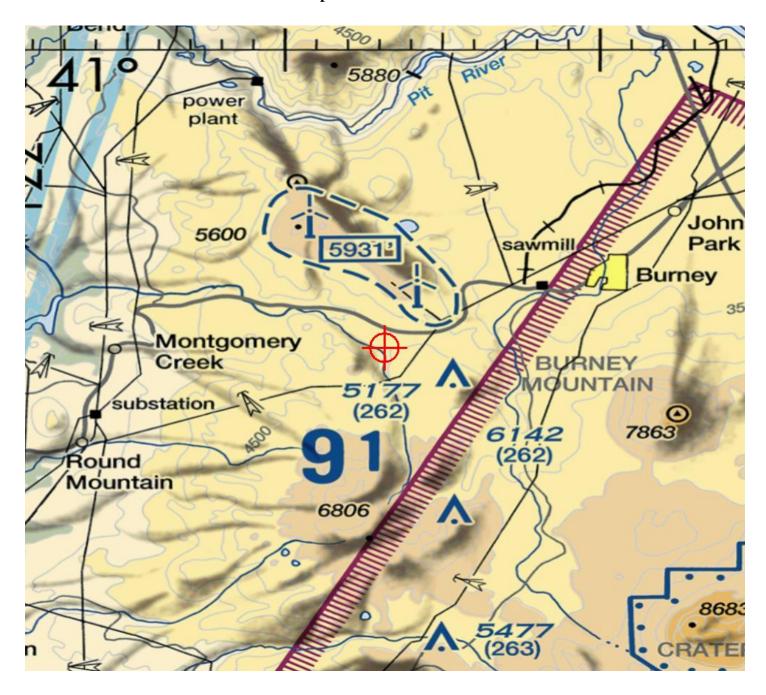
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5270-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine B05

Location: Burney, CA

Latitude: 40-50-06.94N NAD 83

Longitude: 121-46-42.63W

Heights: 4584 feet site elevation (SE)

679 feet above ground level (AGL) 5263 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5271-OE.

Signature Control No: 440833043-486754876
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5271-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
03.6.0. 3.63		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	/ 679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	/ 679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
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2020-WTW-5268-OE	/ 679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
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2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
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2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
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2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
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2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
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2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
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2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
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2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

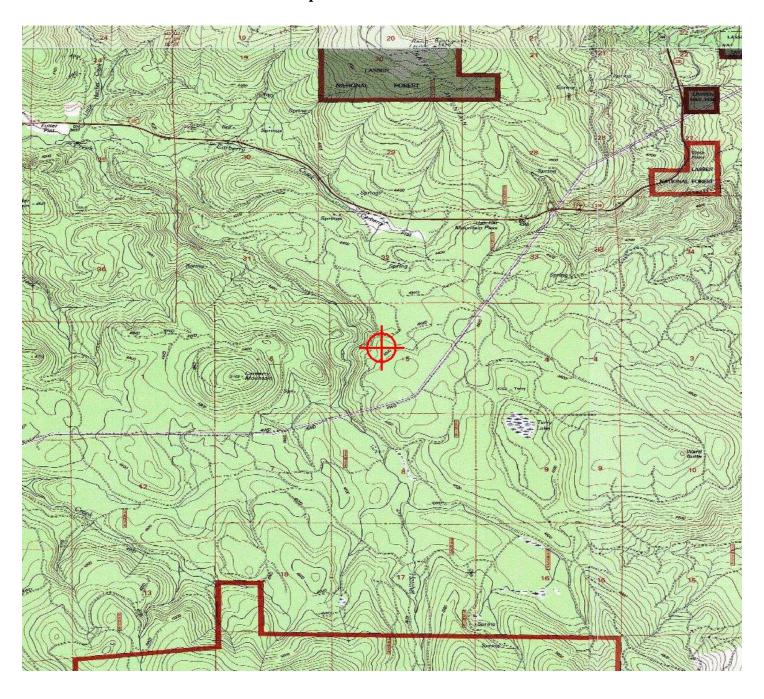
# 7. CONDITIONS

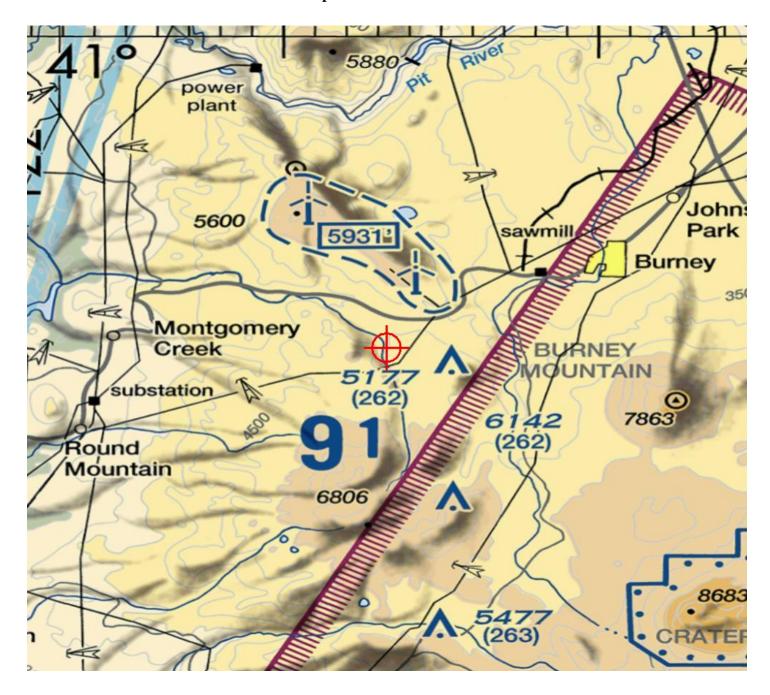
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

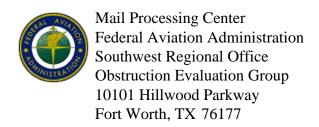
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5271-OE







Aeronautical Study No. 2020-WTW-5474-OE Prior Study No. 2020-WTW-5272-OE

Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine CO2

Location: Burney, CA

Latitude: 40-51-11.55N NAD 83

Longitude: 121-49-23.70W

Heights: 4520 feet site elevation (SE)

679 feet above ground level (AGL) 5199 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5474-OE.

Signature Control No: 442137774-486755596
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5474-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Αh	brev	V12	111C	ns

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE /	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE /	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE /	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE /	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE /	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE /	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE /	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
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2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
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2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
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2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
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2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
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2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

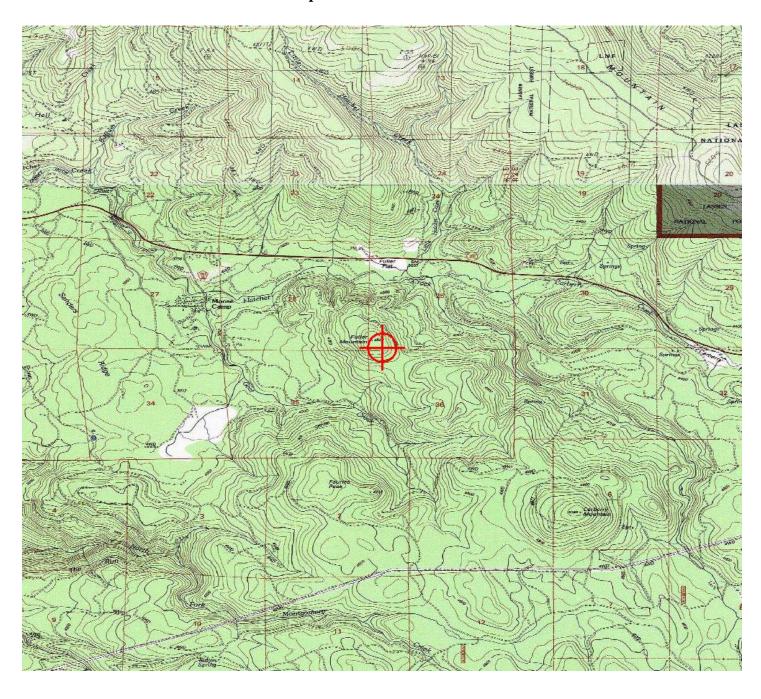
# 7. CONDITIONS

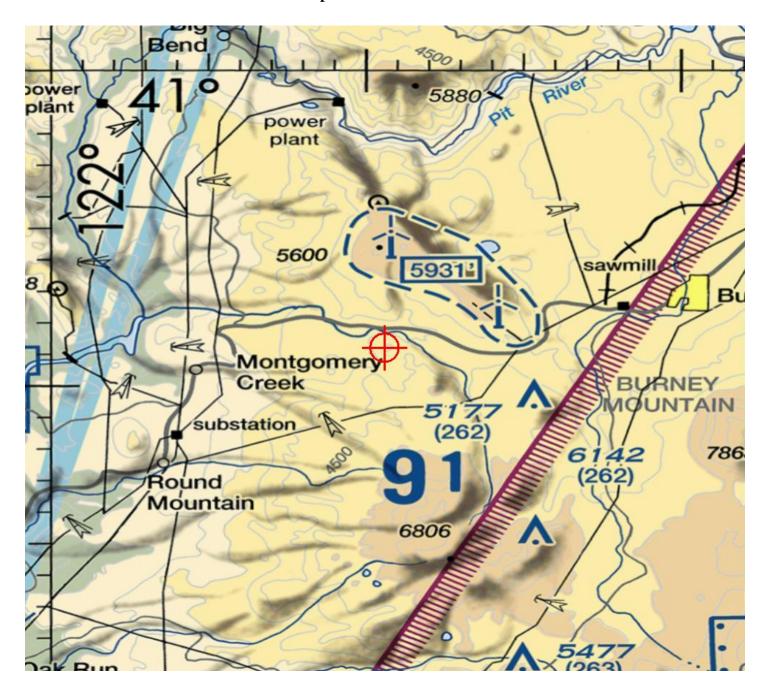
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

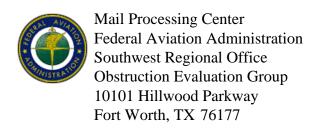
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5474-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C03

Location: Burney, CA

Latitude: 40-51-01.97N NAD 83

Longitude: 121-49-01.21W

Heights: 4505 feet site elevation (SE)

679 feet above ground level (AGL) 5184 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5273-OE.

(DNH-WT)

Signature Control No: 440833045-486754893
Steve Phillips
Manager Obstruction Evaluation Group

Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

#### Additional information for ASN 2020-WTW-5273-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		

SM- Statue Miles

. . . .

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
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2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
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2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

# 7. CONDITIONS

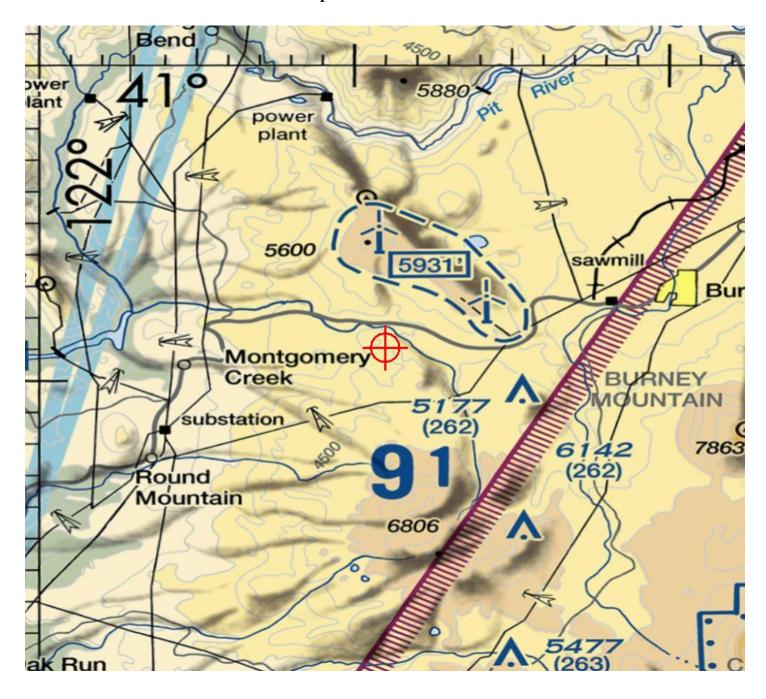
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5273-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C04

Location: Burney, CA

Latitude: 40-50-50.53N NAD 83

Longitude: 121-48-43.16W

Heights: 4617 feet site elevation (SE)

679 feet above ground level (AGL) 5296 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5274-OE.

(DNH-WT)

Signature Control No: 440833046-486754885 Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5274-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
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2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

# 7. CONDITIONS

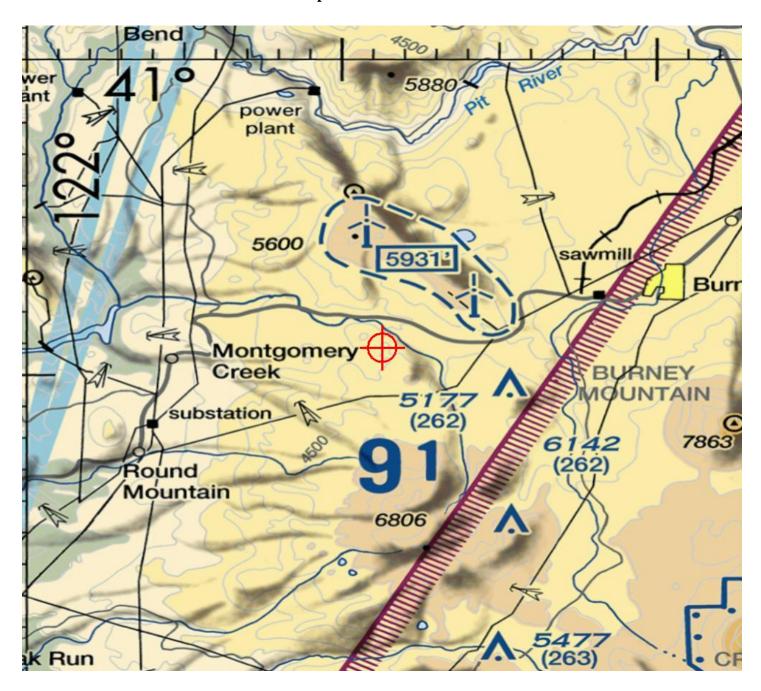
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

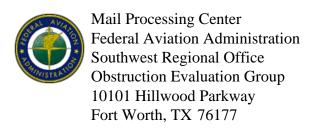
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5274-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C05

Location: Burney, CA

Latitude: 40-50-39.05N NAD 83

Longitude: 121-48-33.83W

Heights: 4518 feet site elevation (SE)

679 feet above ground level (AGL) 5197 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5275-OE.

**Signature Control No: 440833047-486754889**Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5275-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
CD C C D CD		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

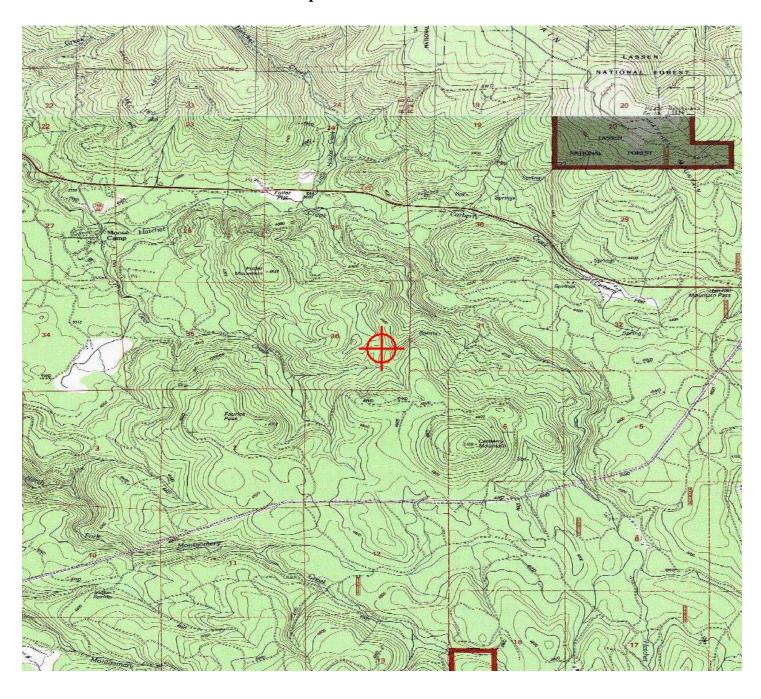
# 7. CONDITIONS

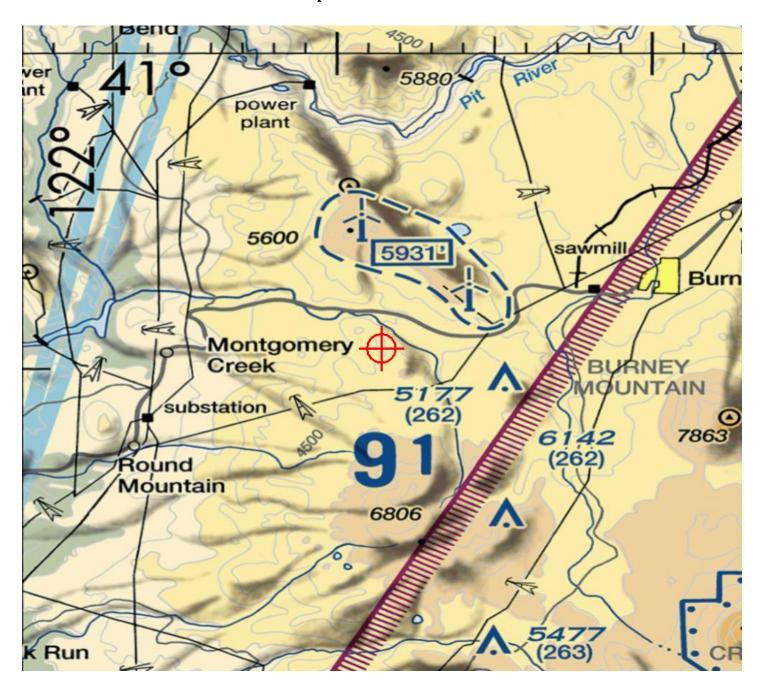
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

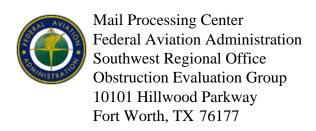
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5275-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C06

Location: Burney, CA

Latitude: 40-50-28.68N NAD 83

Longitude: 121-48-18.39W

Heights: 4689 feet site elevation (SE)

679 feet above ground level (AGL) 5368 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5276-OE.

(DNH-WT)

Signature Control No: 440833048-486754892 Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5276-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway	
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile	
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum	
Vectoring Altitude			
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum	
IFR Altitude			
SM- Statue Miles			

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

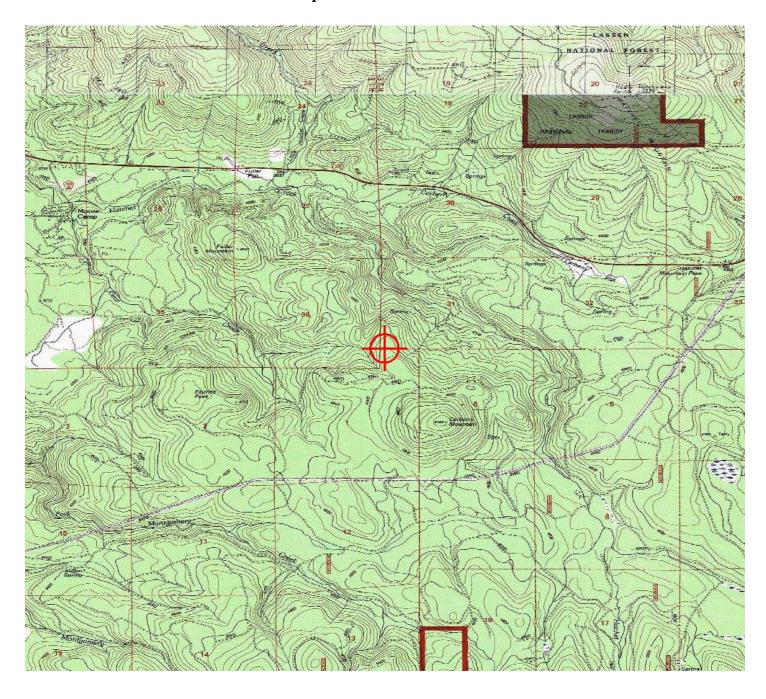
# 7. CONDITIONS

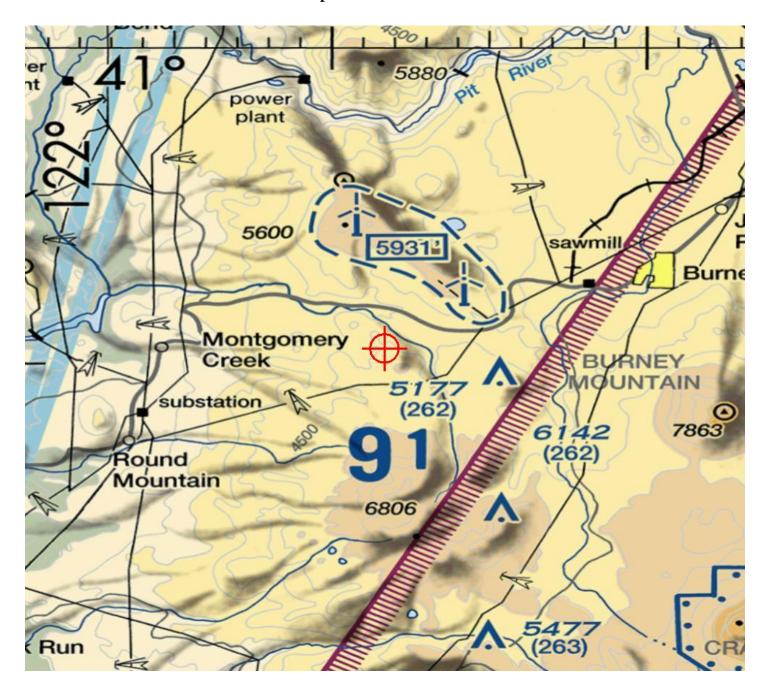
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5276-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C07

Location: Burney, CA

Latitude: 40-50-18.03N NAD 83

Longitude: 121-48-11.98W

Heights: 4738 feet site elevation (SE)

679 feet above ground level (AGL) 5417 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5277-OE.

Signature Control No: 440833049-486754881
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5277-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway	
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile	
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum	
Vectoring Altitude			
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum	
IFR Altitude			
SM- Statue Miles			

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

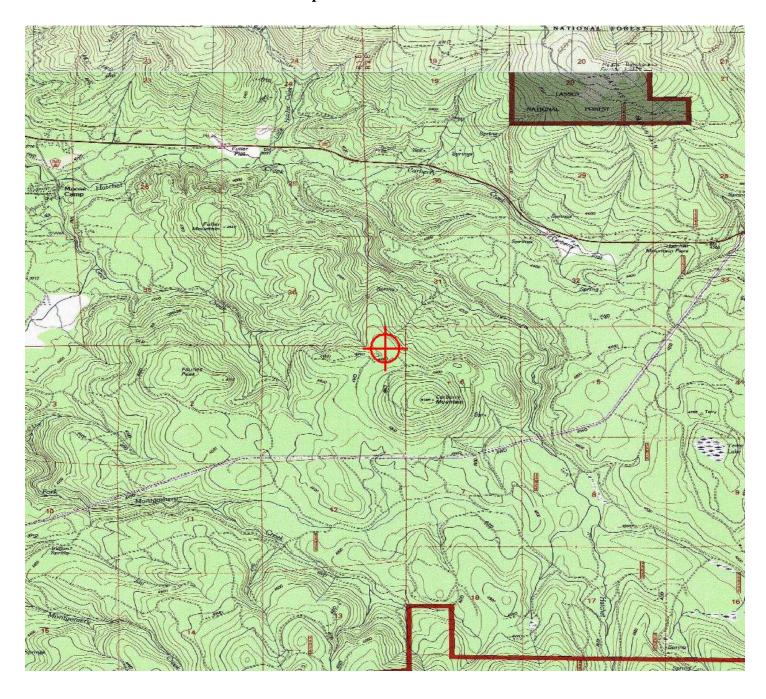
# 7. CONDITIONS

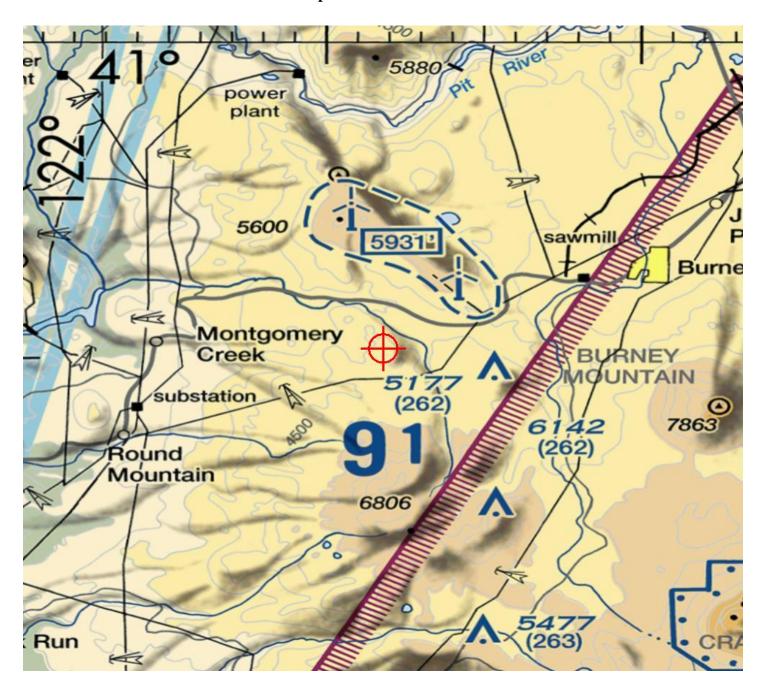
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

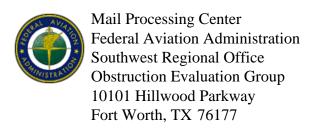
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5277-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C08

Location: Burney, CA

Latitude: 40-49-53.93N NAD 83

Longitude: 121-47-50.84W

Heights: 5178 feet site elevation (SE)

679 feet above ground level (AGL) 5857 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with selfcontained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5278-OE.

(DNH-WT)

Signature Control No: 440833051-486754894 Steve Phillips Manager, Obstruction Evaluation Group

Attachment(s) Additional Information

Map(s)

#### Additional information for ASN 2020-WTW-5278-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
03.6.0		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (089), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

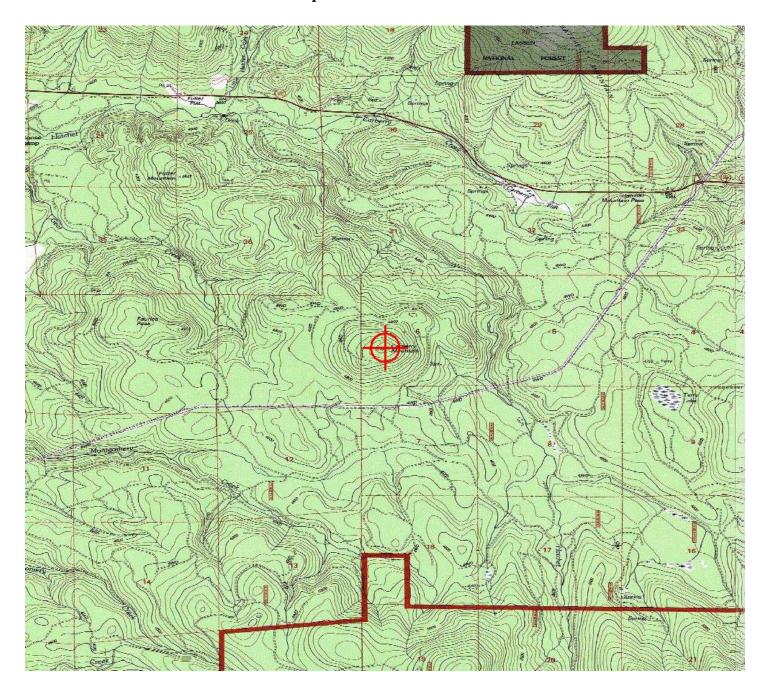
## 7. CONDITIONS

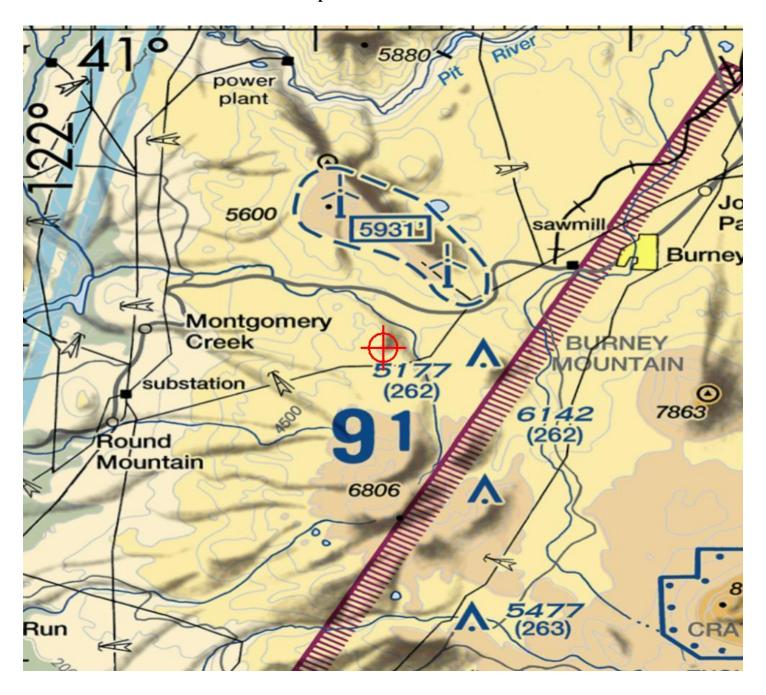
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5278-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C09

Location: Burney, CA

Latitude: 40-49-17.95N NAD 83

Longitude: 121-47-30.13W

Heights: 4613 feet site elevation (SE)

679 feet above ground level (AGL) 5292 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5279-OE.

(DNH-WT)

Signature Control No: 440833054-486754886
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5279-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile		
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum		
Vectoring Altitude				
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum		
IFR Altitude				
SM- Statue Miles				

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
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2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
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2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
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2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

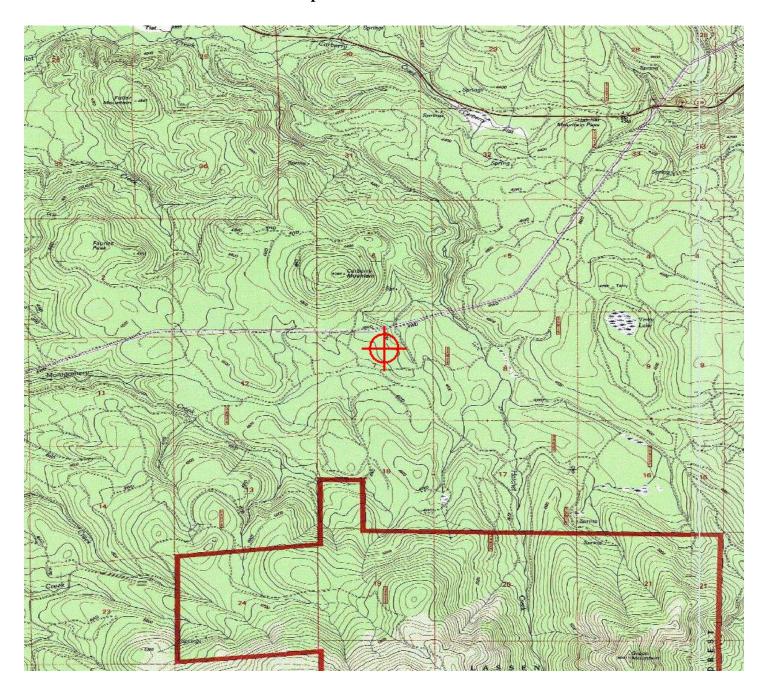
## 7. CONDITIONS

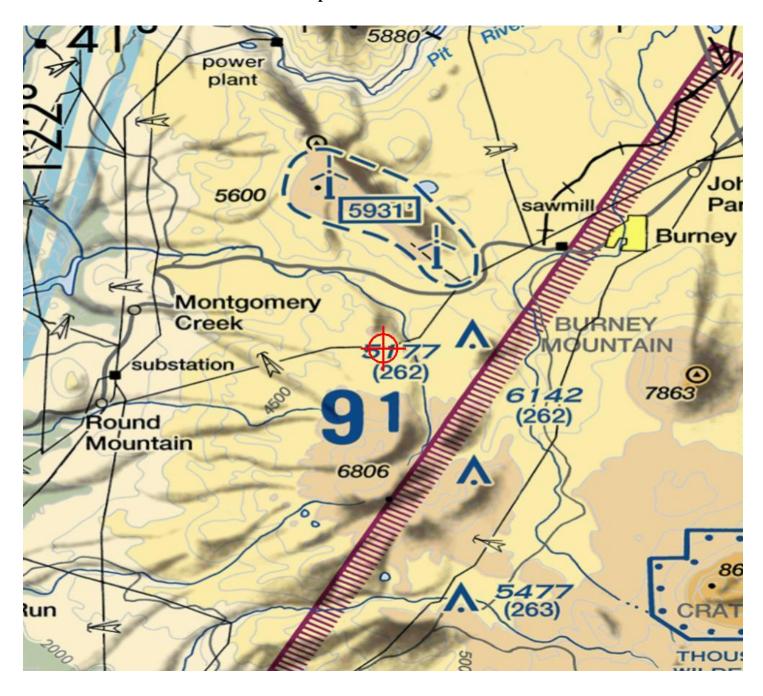
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

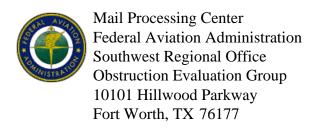
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5279-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C10

Location: Burney, CA

Latitude: 40-49-11.50N NAD 83

Longitude: 121-47-10.30W

Heights: 4607 feet site elevation (SE)

679 feet above ground level (AGL) 5286 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_\_X\_\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5280-OE.

(DNH-WT)

Signature Control No: 440833055-486754880 Steve Phillips Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5280-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway		
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Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

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For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

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2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
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2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
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2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
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2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
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2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
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2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
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2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
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2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
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2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

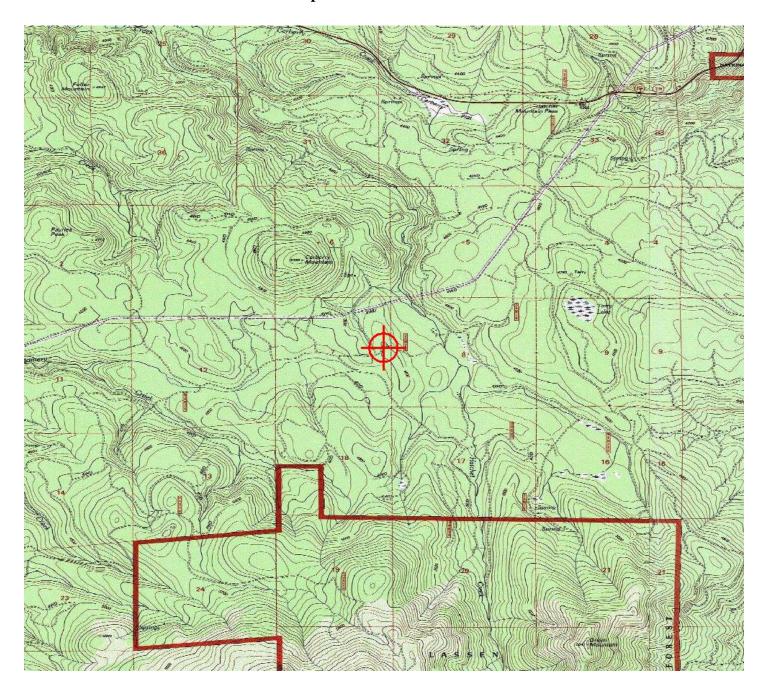
## 7. CONDITIONS

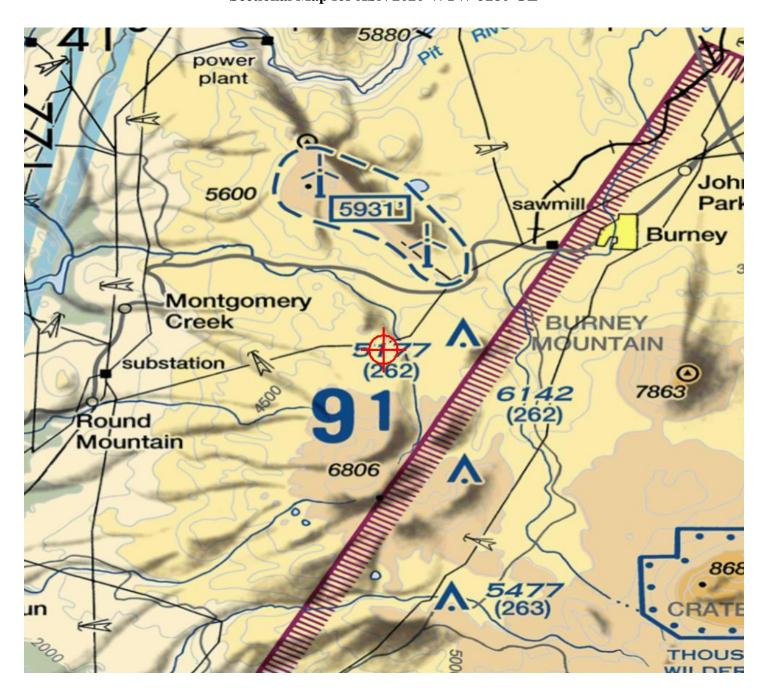
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

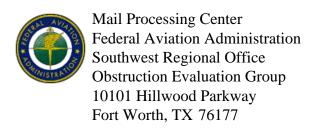
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5280-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine C11

Location: Burney, CA

Latitude: 40-48-55.92N NAD 83

Longitude: 121-47-01.52W

Heights: 4610 feet site elevation (SE)

679 feet above ground level (AGL) 5289 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5281-OE.

Signature Control No: 440833056-486755197
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5281-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG	
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /	
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /	
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /	
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /	
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /	
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /	
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /	
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /	
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /	

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
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2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

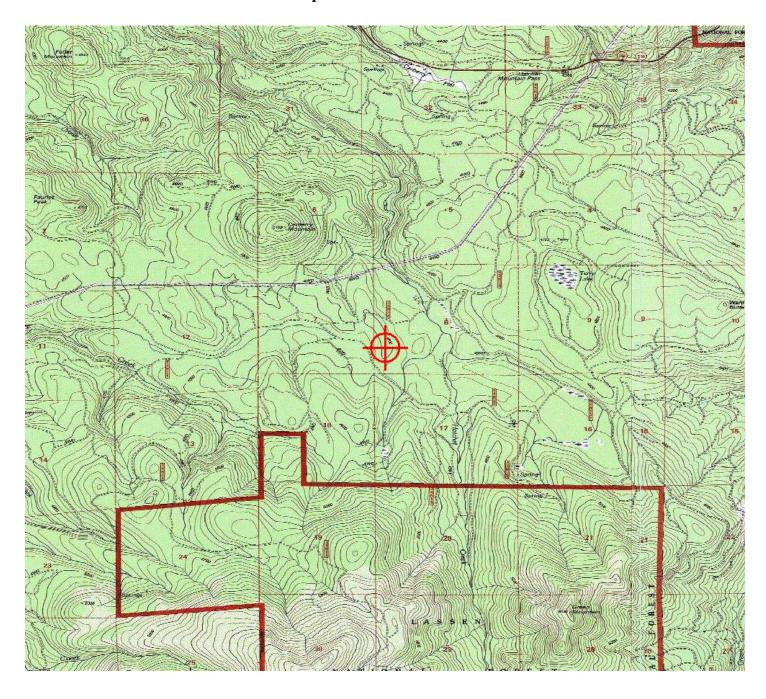
# 7. CONDITIONS

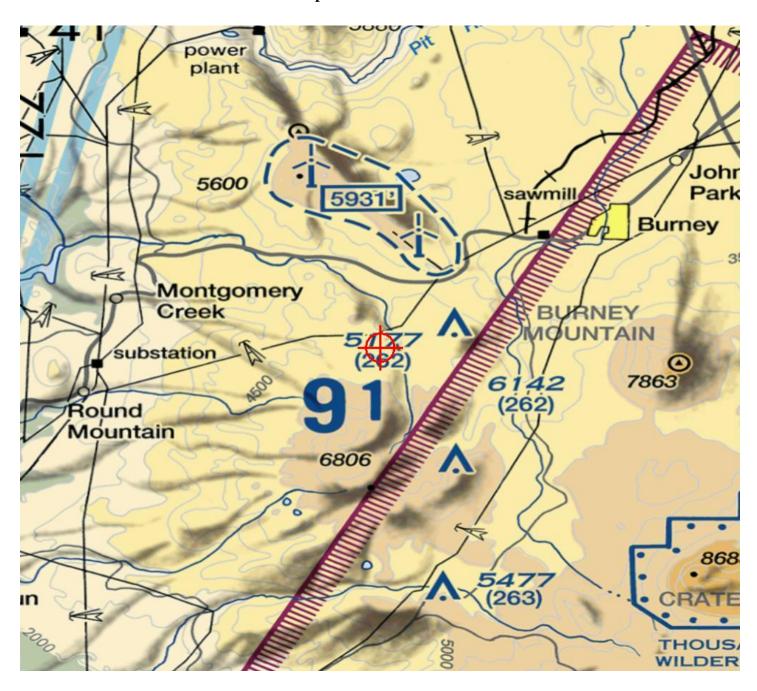
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5281-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine E01

Location: Burney, CA

Latitude: 40-50-04.49N NAD 83

Longitude: 121-51-47.80W

Heights: 4203 feet site elevation (SE)

679 feet above ground level (AGL) 4882 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_X_	At least	60 days	prior to	start of cons	struction	(7460-2,	Part :	1)
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\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5287-OE.

Signature Control No: 440833062-486752770
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5287-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Αh	brev	V12	<b>†1</b> (	ns

AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
G1. f. G 3. f. 1		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
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2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
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2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
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2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
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2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

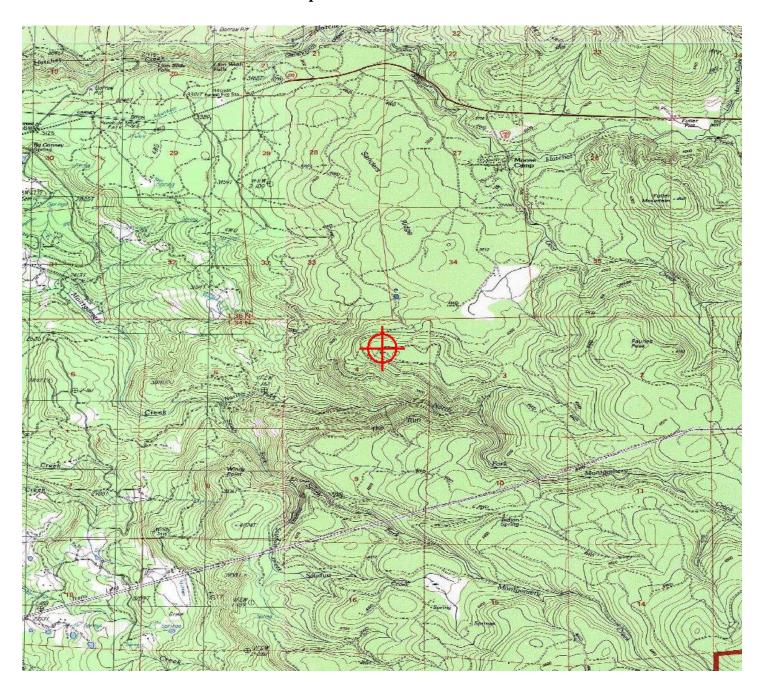
# 7. CONDITIONS

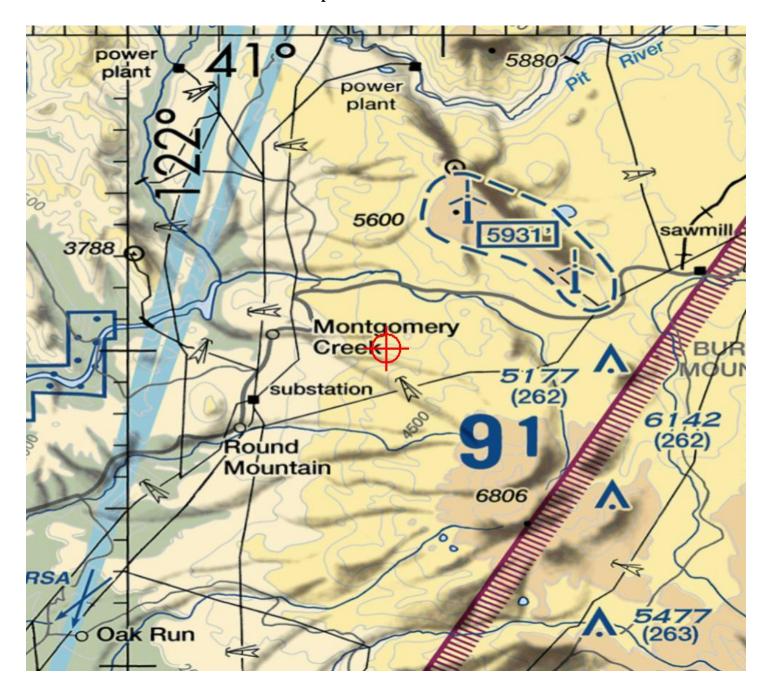
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

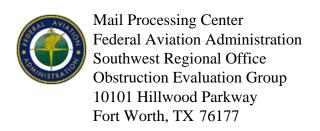
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5287-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine E02

Location: Burney, CA

Latitude: 40-50-00.31N NAD 83

Longitude: 121-51-33.80W

Heights: 4223 feet site elevation (SE)

679 feet above ground level (AGL) 4902 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_X\_ At least 60 days prior to start of construction (7460-2, Part 1)

\_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5288-OE.

(DNH-WT)

Signature Control No: 440833063-486752774
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5288-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE /	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE /	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE /	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE /	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE /	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE /	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE /	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE /	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE /	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

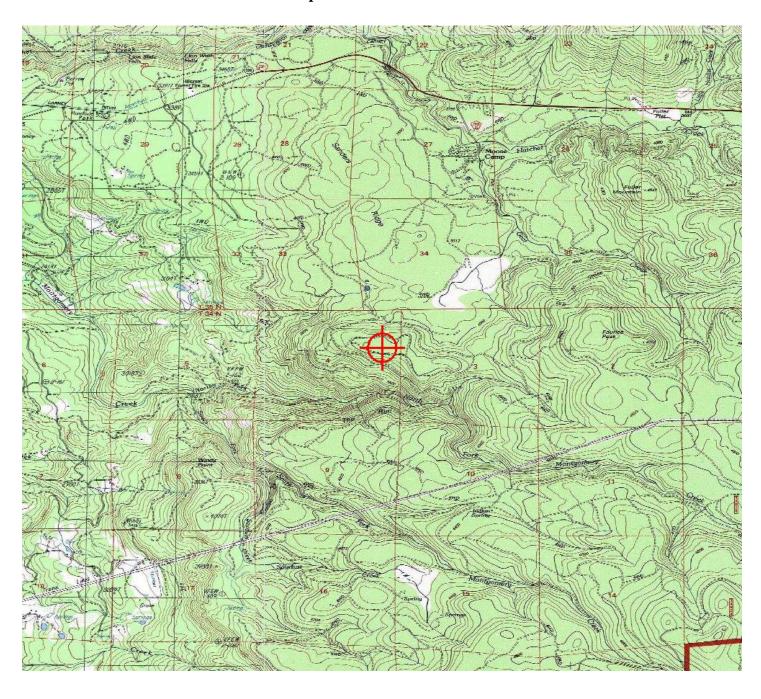
# 7. CONDITIONS

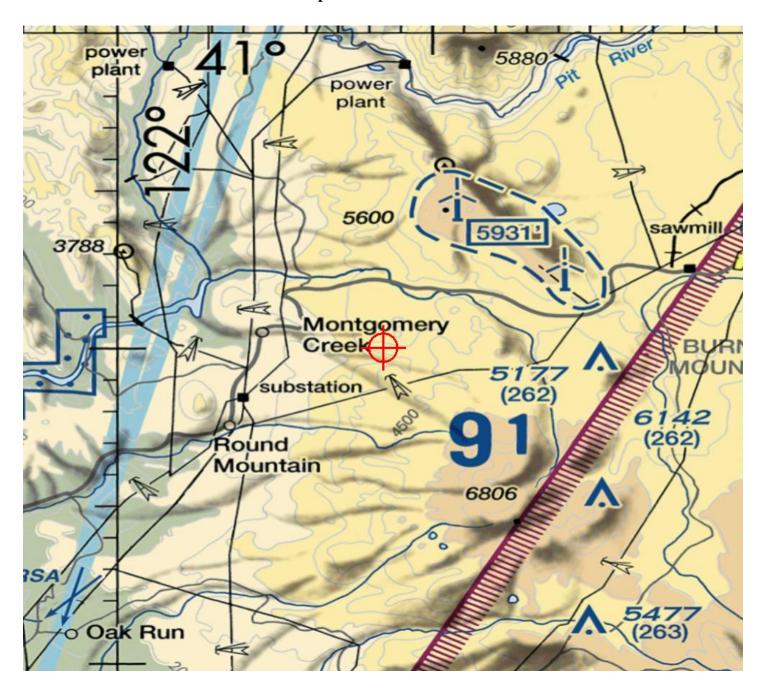
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

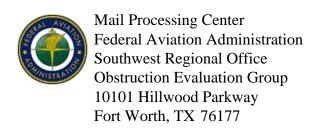
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5288-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine E03

Location: Burney, CA

Latitude: 40-49-57.92N NAD 83

Longitude: 121-51-20.17W

Heights: 4213 feet site elevation (SE)

679 feet above ground level (AGL) 4892 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_X\_ At least 60 days prior to start of construction (7460-2, Part 1)

\_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5289-OE.

Signature Control No: 440833064-486752769
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5289-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Αh	brev	V12	111C	ns

AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

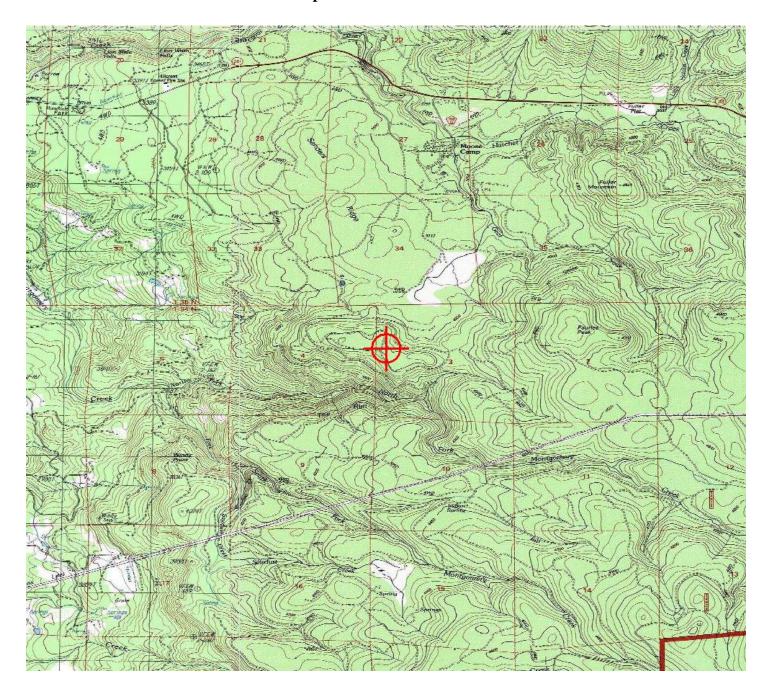
## 7. CONDITIONS

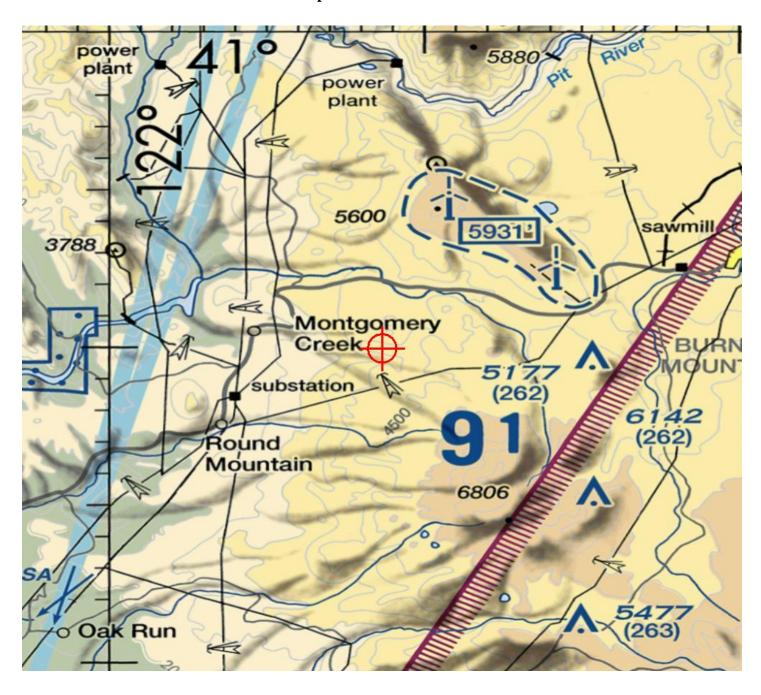
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

## TOPO Map for ASN 2020-WTW-5289-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine E04

Location: Burney, CA

Latitude: 40-49-54.02N NAD 83

Longitude: 121-51-03.40W

Heights: 4256 feet site elevation (SE)

679 feet above ground level (AGL) 4935 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5290-OE.

(DNH-WT)

Signature Control No: 440833066-486755295
Steve Phillips
Manager Obstruction Evaluation Group

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5290-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
03.6.0. 3.63		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
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2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
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2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

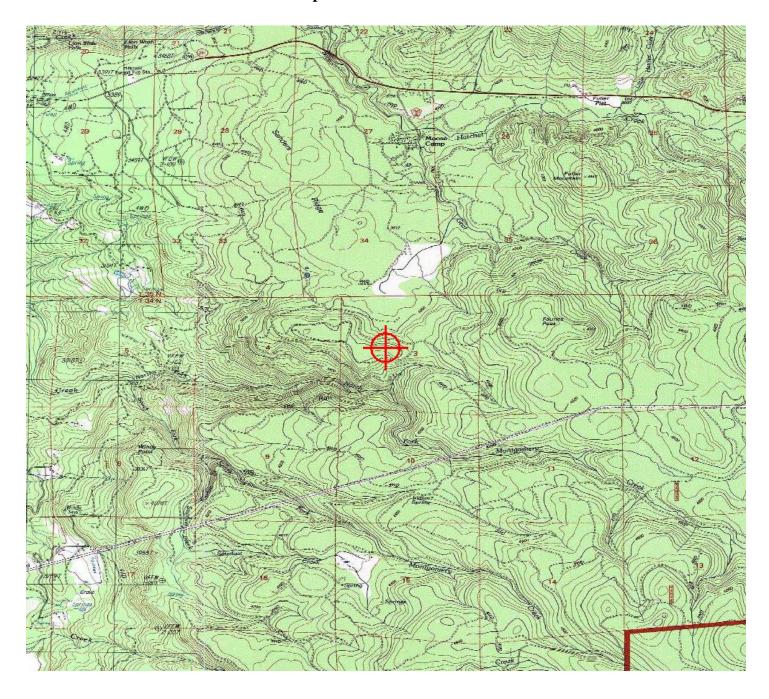
## 7. CONDITIONS

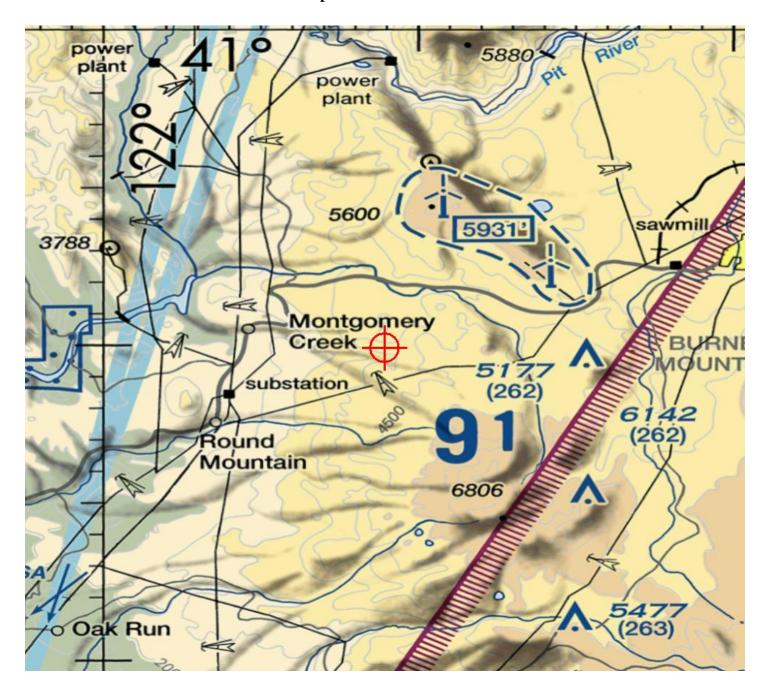
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

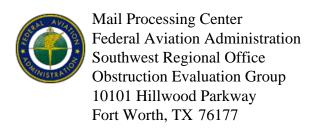
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5290-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine E05

Location: Burney, CA

Latitude: 40-49-53.11N NAD 83

Longitude: 121-50-44.95W

Heights: 4150 feet site elevation (SE)

679 feet above ground level (AGL) 4829 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5291-OE.

Signature Control No: 440833070-486755296
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5291-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
03.6.0. 3.63		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (089), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	/ 679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	/ 679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	/ 679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

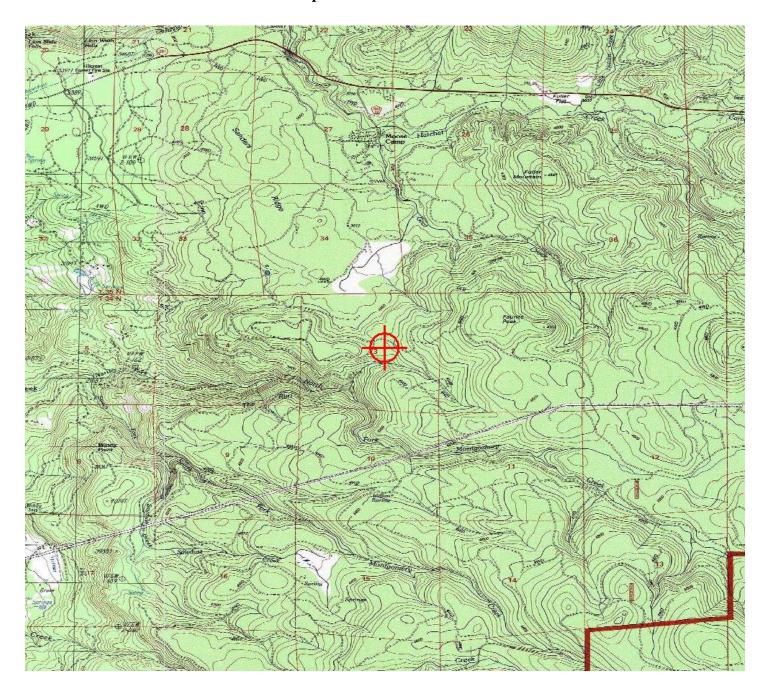
## 7. CONDITIONS

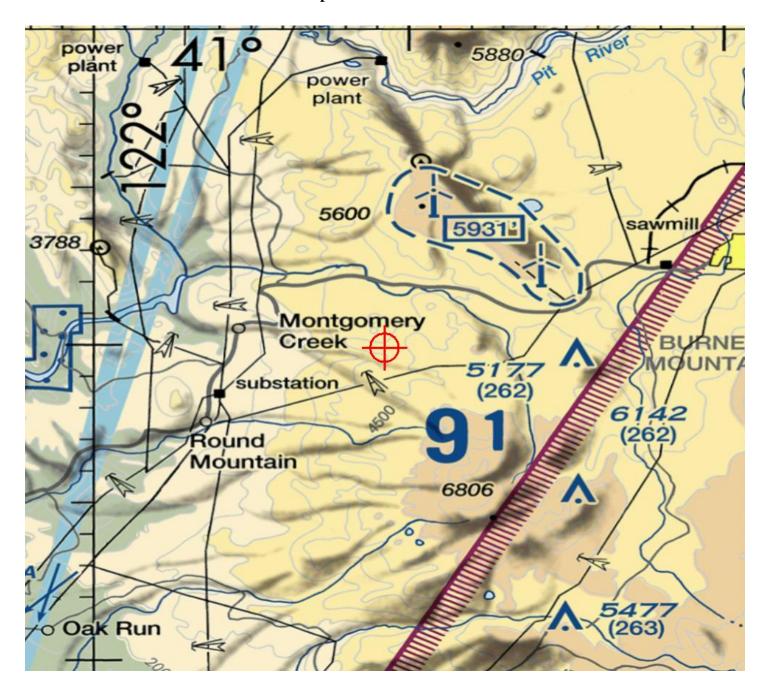
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5291-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine F01

Location: Burney, CA

Latitude: 40-50-05.15N NAD 83

Longitude: 121-49-49.54W

Heights: 4780 feet site elevation (SE)

679 feet above ground level (AGL) 5459 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5292-OE.

Signature Control No: 440833071-486755297
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5292-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
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2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
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2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

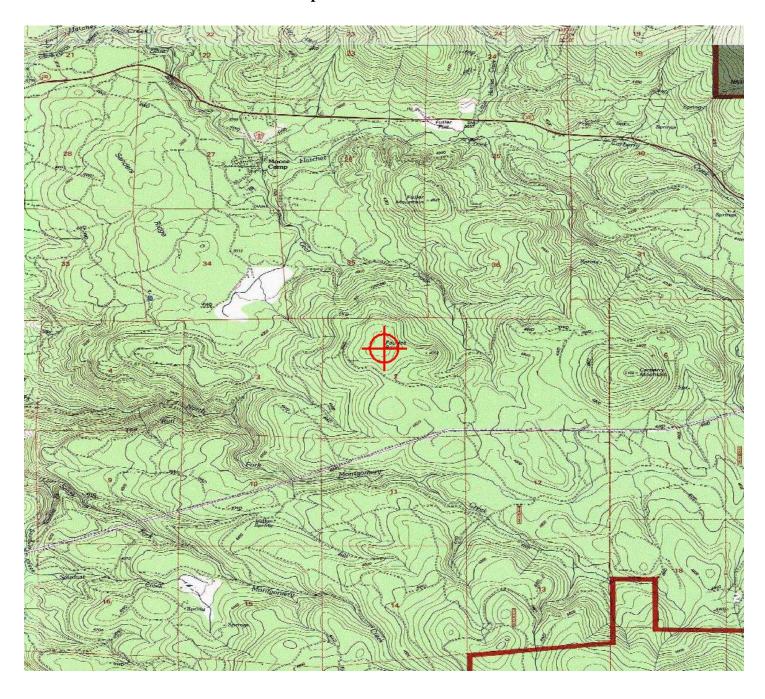
## 7. CONDITIONS

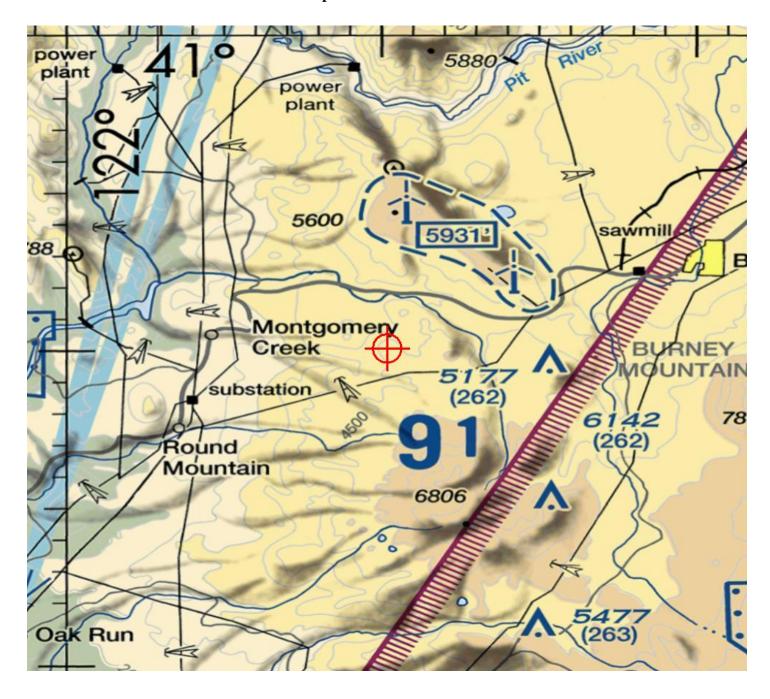
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5292-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine F02

Location: Burney, CA

Latitude: 40-49-45.47N NAD 83

Longitude: 121-49-45.42W

Heights: 4623 feet site elevation (SE)

679 feet above ground level (AGL) 5302 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5293-OE.

(DNH-WT)

Signature Control No: 440833072-486755298
Steve Phillips
Manager, Obstruction Evaluation Group

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5293-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
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SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
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2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
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2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
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2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
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2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
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2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
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2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
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2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
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2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

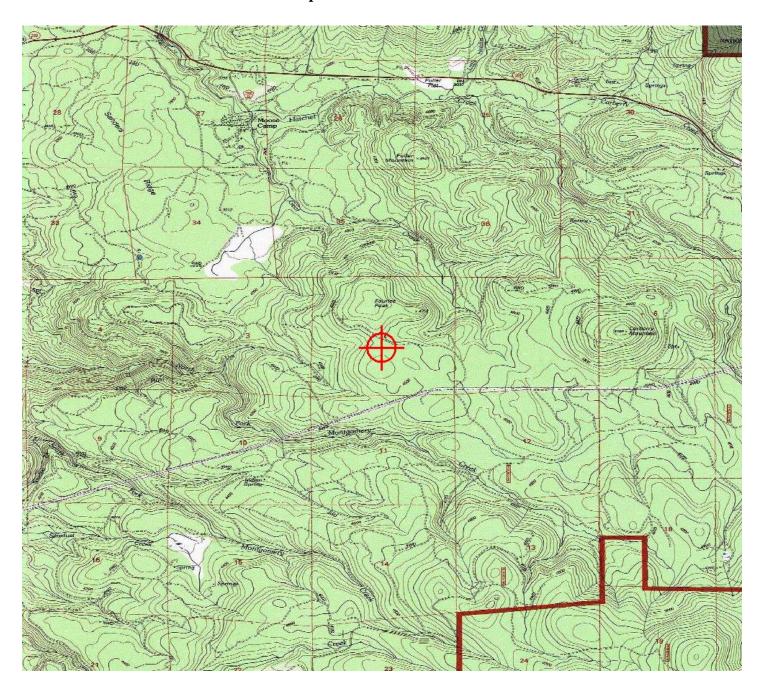
## 7. CONDITIONS

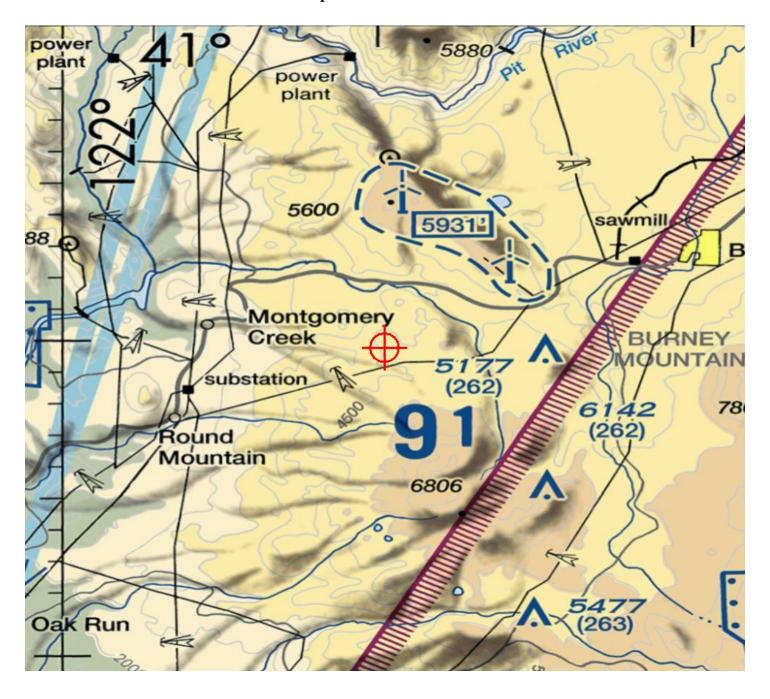
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5293-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine F03

Location: Burney, CA

Latitude: 40-49-33.93N NAD 83

Longitude: 121-49-41.25W

Heights: 4646 feet site elevation (SE)

679 feet above ground level (AGL) 5325 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5294-OE.

Signature Control No: 440833073-486755300 Steve Phillips Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5294-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Αh	brev	V12	111C	ns

AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
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2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
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2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
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2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
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2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
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2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

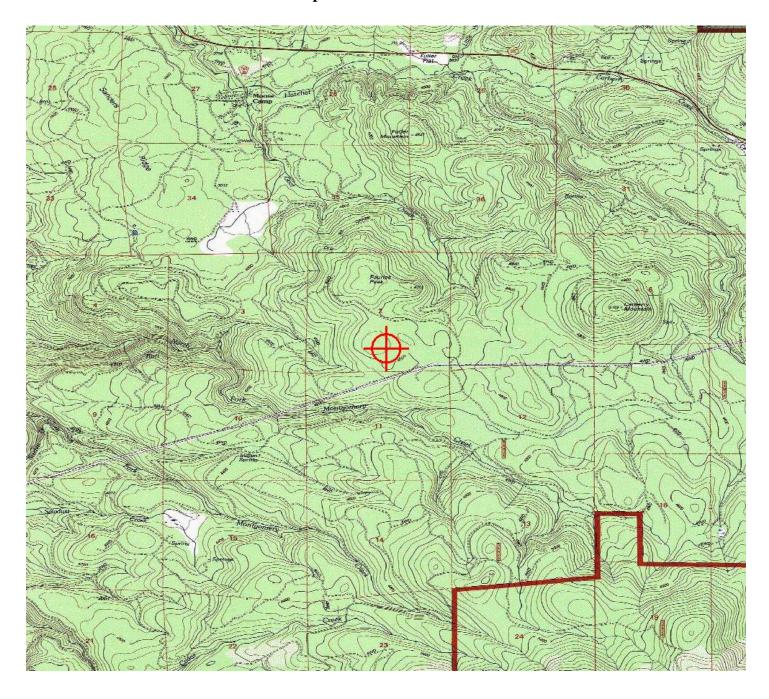
## 7. CONDITIONS

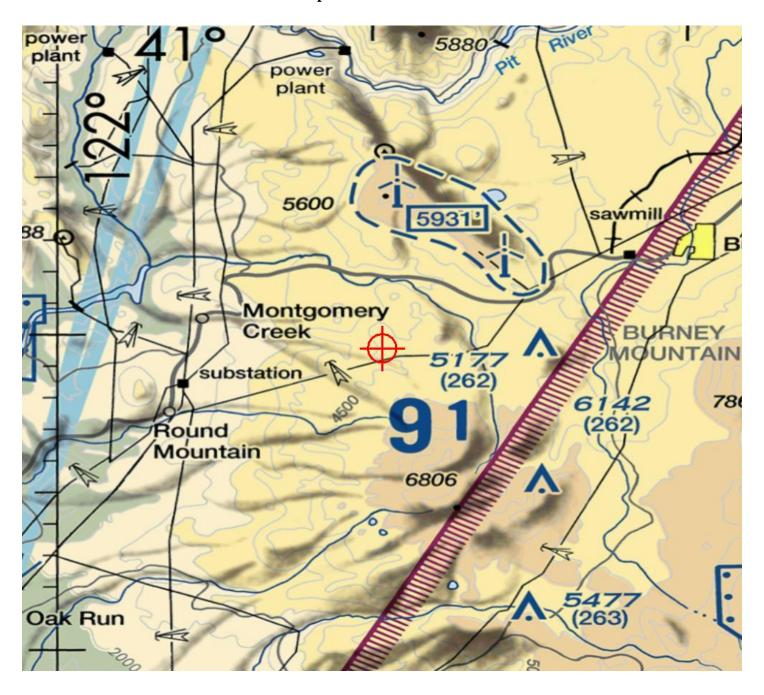
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5294-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine F04

Location: Burney, CA

Latitude: 40-49-16.67N NAD 83

Longitude: 121-48-34.54W

Heights: 4705 feet site elevation (SE)

679 feet above ground level (AGL) 5384 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5295-OE.

(DNH-WT)

Signature Control No: 440833074-486755302
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

#### Additional information for ASN 2020-WTW-5295-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
G1. f. G 3. f. 1		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE /	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE /	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE /	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE /	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE /	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE /	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE /	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE /	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE /	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
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2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
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2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
```

#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

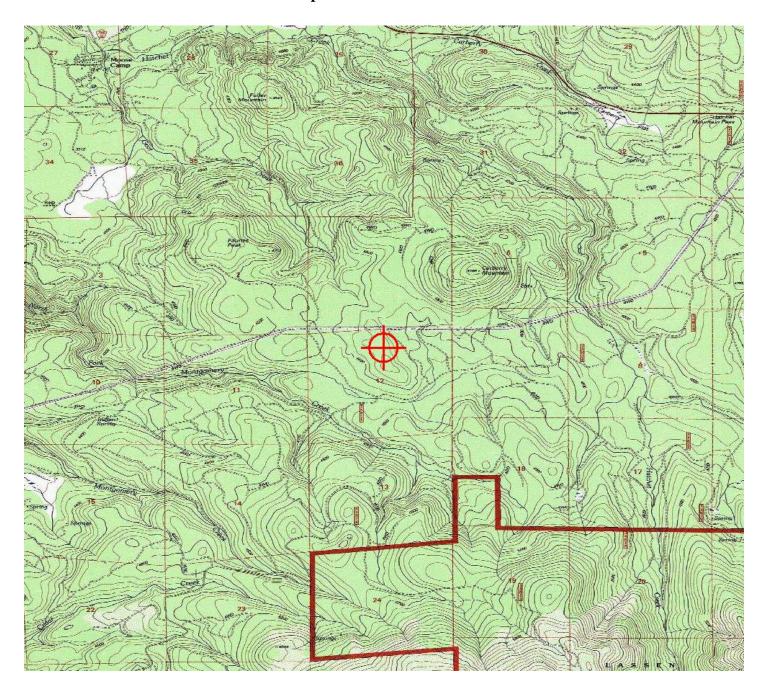
## 7. CONDITIONS

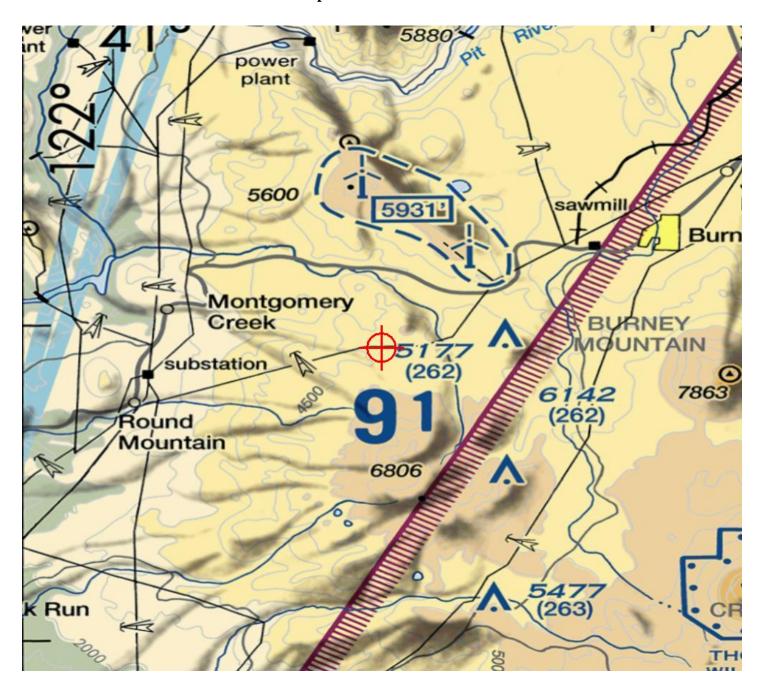
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5295-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

#### \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine F05

Location: Burney, CA

Latitude: 40-49-05.37N NAD 83

Longitude: 121-48-27.73W

Heights: 4724 feet site elevation (SE)

679 feet above ground level (AGL) 5403 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5296-OE.

Signature Control No: 440833075-486755304
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5296-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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110010 (1001011)		
AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG	
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /	
2020-WTW-5261-OE	/ 679 /	5610 /	40-53-32.45N / 121-50-24.28W /	
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /	
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /	
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /	
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /	
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /	
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /	
2020-WTW-5268-OE	/ 679 /	5053 /	40-51-12.61N / 121-47-18.63W /	

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

#### 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

#### 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

#### 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

#### 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

#### 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

#### 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

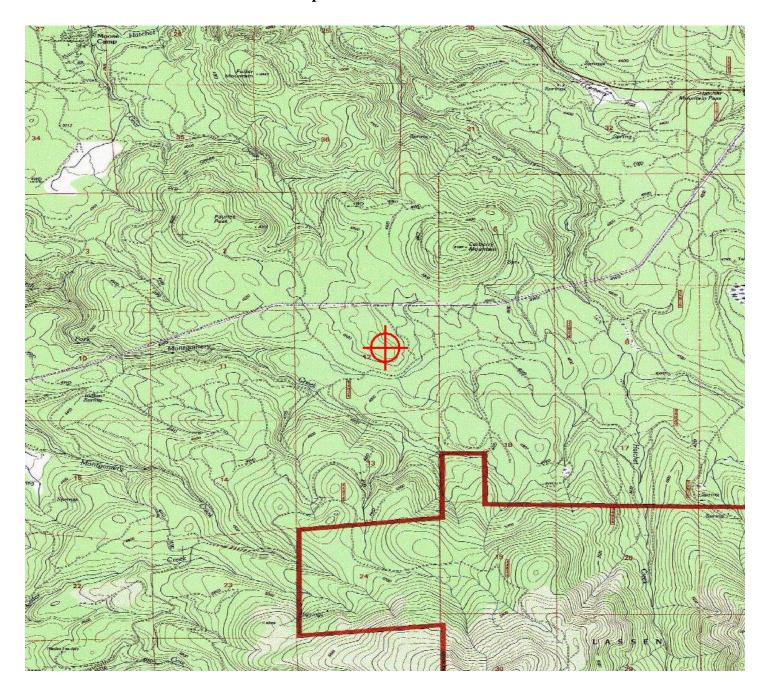
#### 7. CONDITIONS

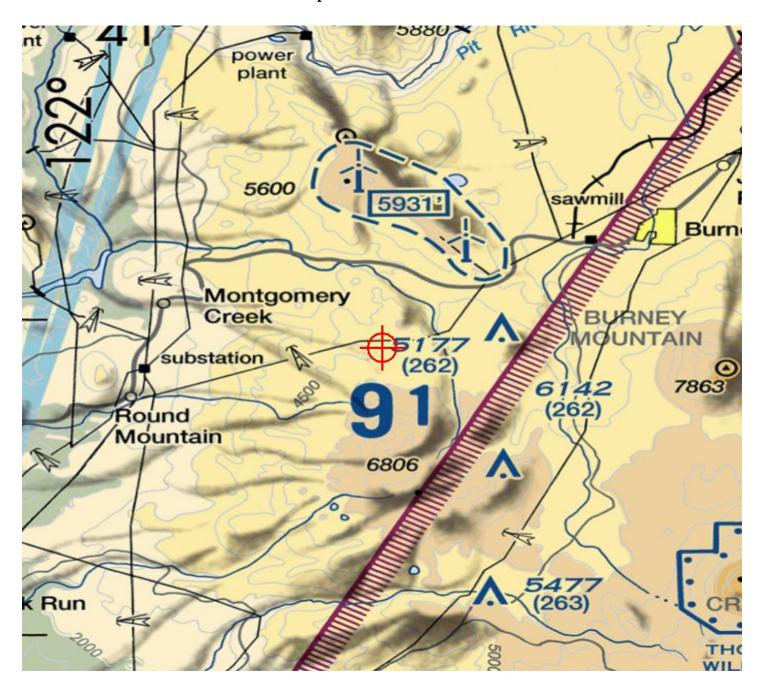
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

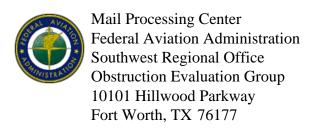
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5296-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

#### \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine F06

Location: Burney, CA

Latitude: 40-48-40.95N NAD 83

Longitude: 121-48-25.04W

Heights: 4656 feet site elevation (SE)

679 feet above ground level (AGL) 5335 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5297-OE.

(DNH-WT)

Signature Control No: 440833076-486755313
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information

Map(s)

#### Additional information for ASN 2020-WTW-5297-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

#### 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

#### 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

#### 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

#### 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

#### 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

#### 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

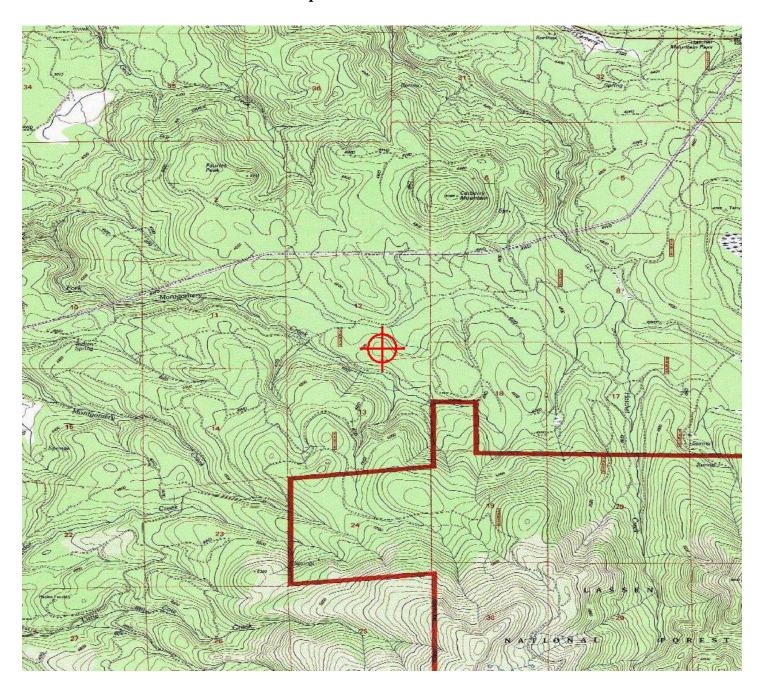
#### 7. CONDITIONS

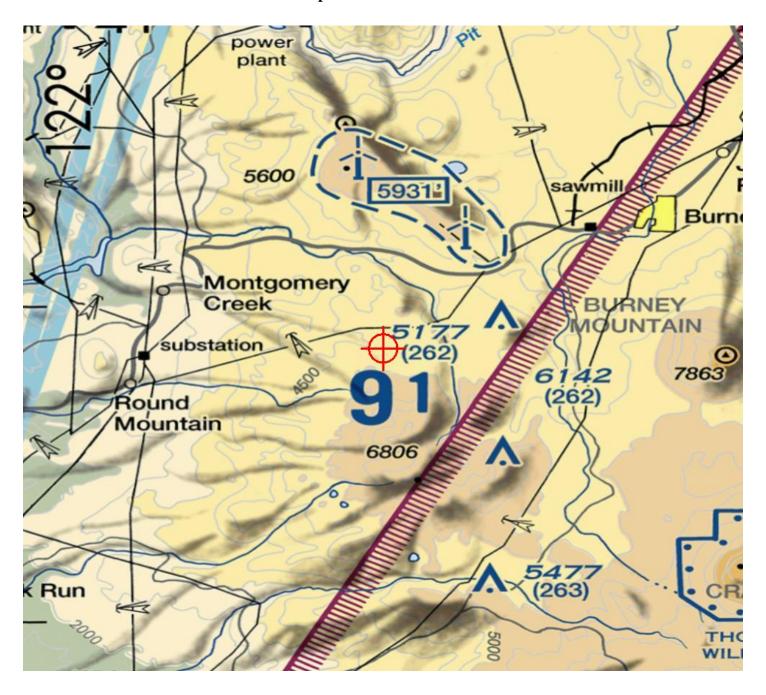
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

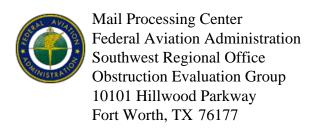
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5297-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

#### \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine H01

Location: Burney, CA

Latitude: 40-48-56.05N NAD 83

Longitude: 121-50-04.92W

Heights: 4528 feet site elevation (SE)

679 feet above ground level (AGL) 5207 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5298-OE.

Signature Control No: 440833077-486755317
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5298-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

#### 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

#### 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

#### 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

#### 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

#### 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

#### 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

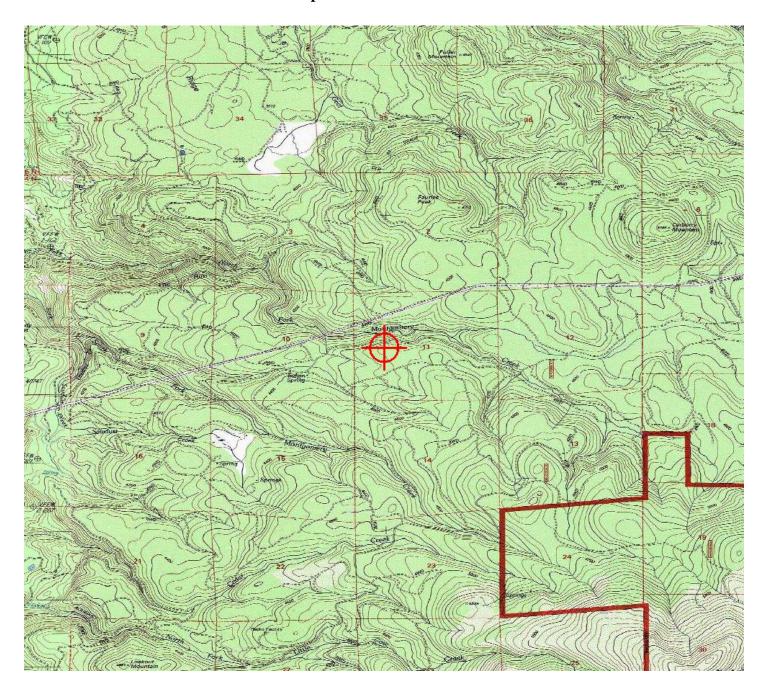
#### 7. CONDITIONS

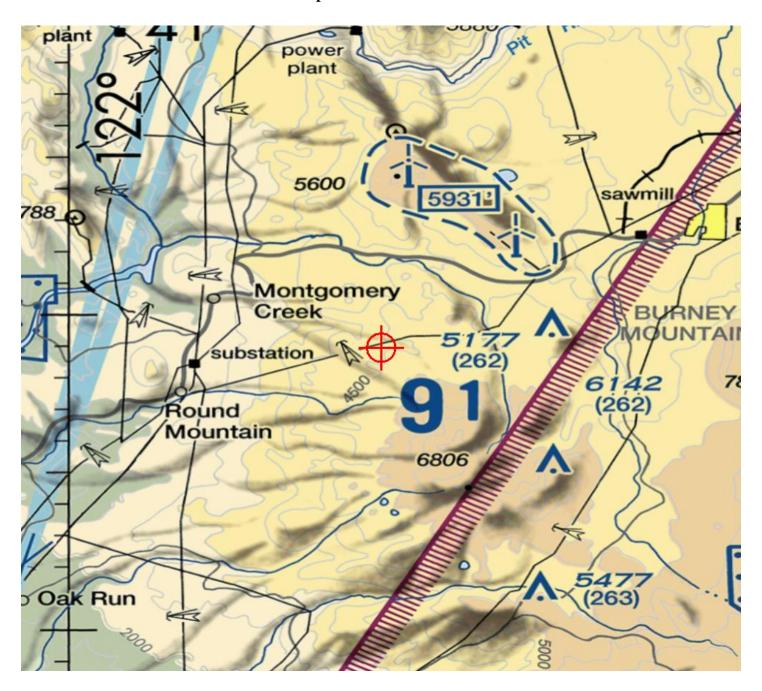
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5298-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

#### \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine H02

Location: Burney, CA

Latitude: 40-48-50.84N NAD 83

Longitude: 121-49-49.27W

Heights: 4565 feet site elevation (SE)

679 feet above ground level (AGL) 5244 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5299-OE.

(DNH-WT)

Signature Control No: 440833078-486755314
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

Page 3 of 11

#### Additional information for ASN 2020-WTW-5299-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

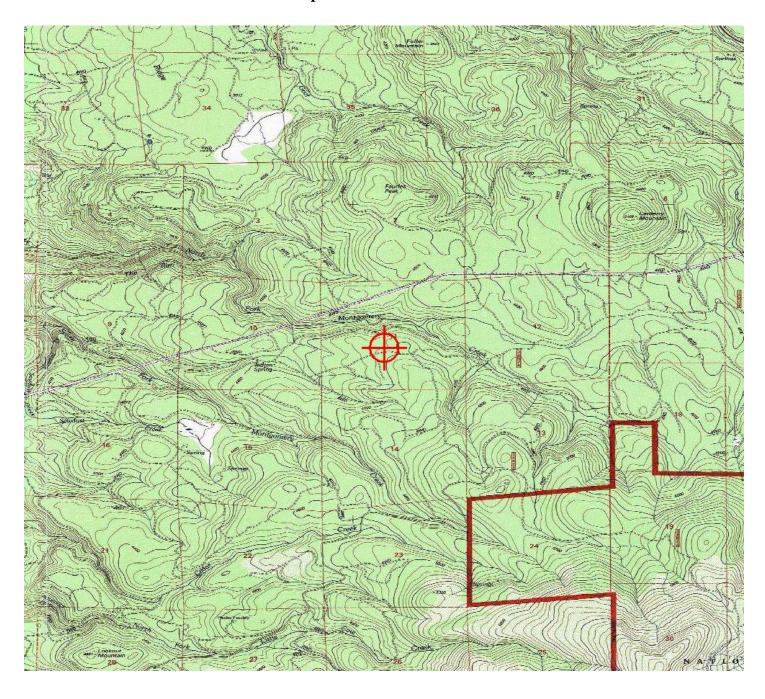
## 7. CONDITIONS

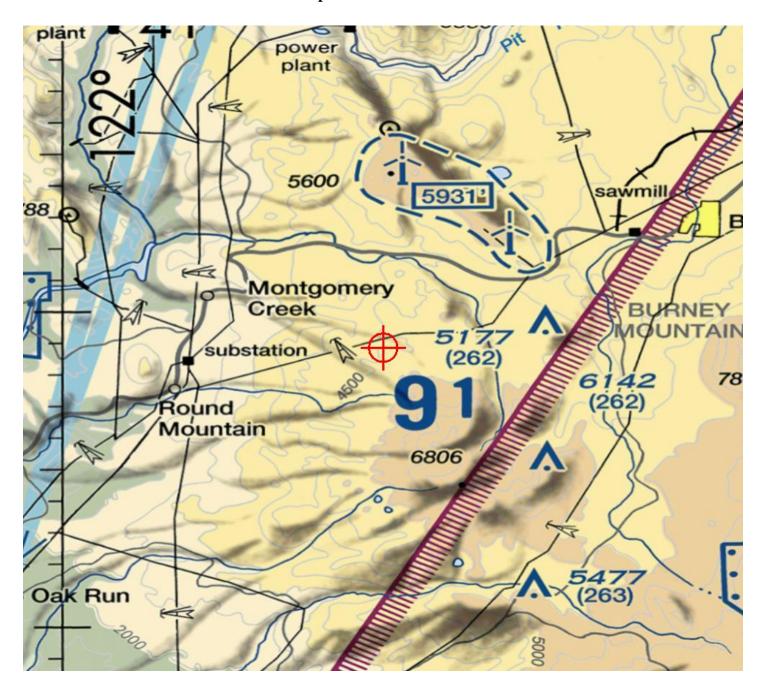
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

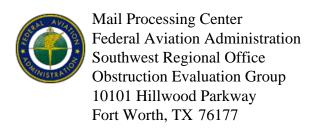
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

## $TOPO\ Map\ for\ ASN\ 2020\text{-}WTW\text{-}5299\text{-}OE$







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine H03

Location: Burney, CA

Latitude: 40-48-39.72N NAD 83

Longitude: 121-49-30.66W

Heights: 4698 feet site elevation (SE)

679 feet above ground level (AGL) 5377 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5300-OE.

Signature Control No: 440833079-486755319 Steve Phillips Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5300-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
CNA CO A NATI		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (089), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

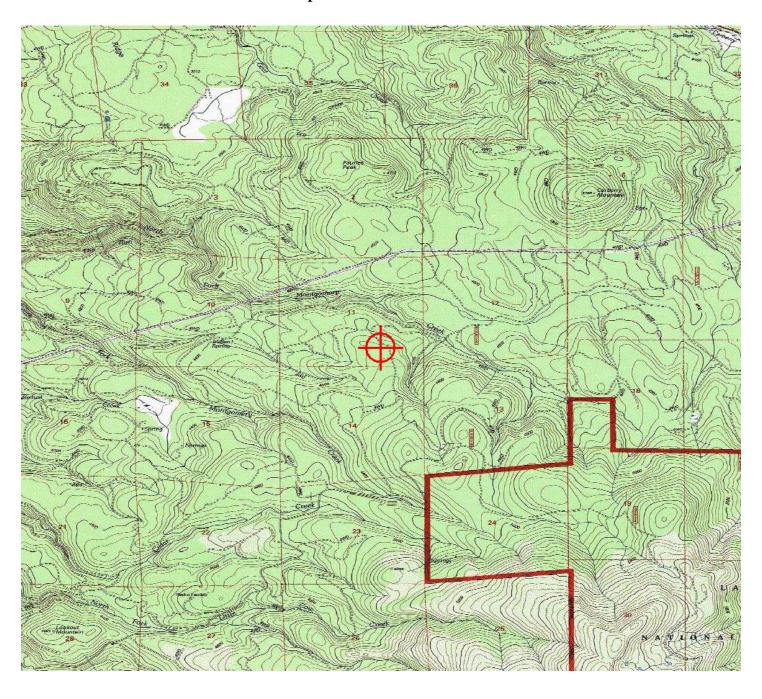
## 7. CONDITIONS

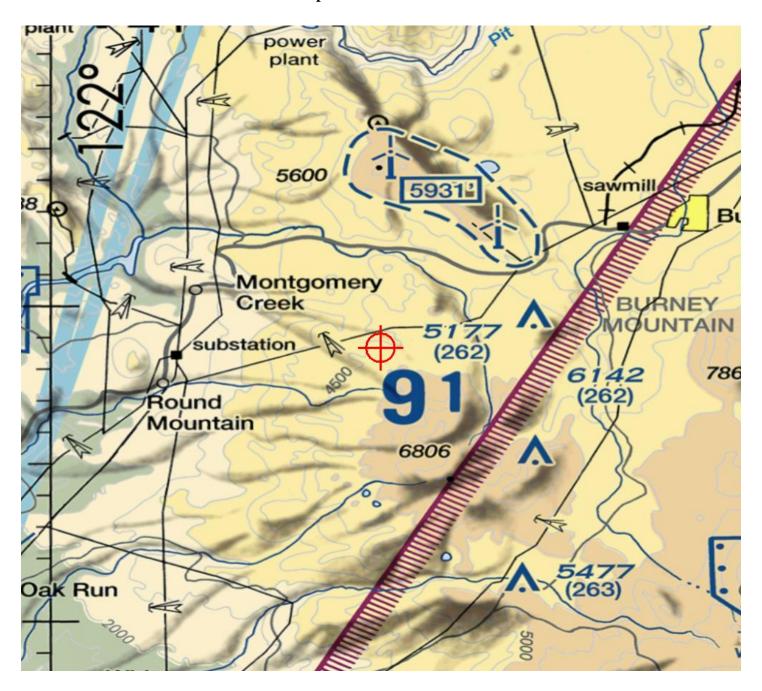
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

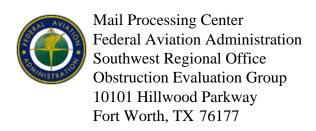
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5300-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine J01

Location: Burney, CA

Latitude: 40-47-59.69N NAD 83

Longitude: 121-48-48.88W

Heights: 5122 feet site elevation (SE)

679 feet above ground level (AGL) 5801 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5301-OE.

Signature Control No: 440833080-486755379
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5301-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
CNA CO A NATI		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
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2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
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2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
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2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
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2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
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2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
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2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

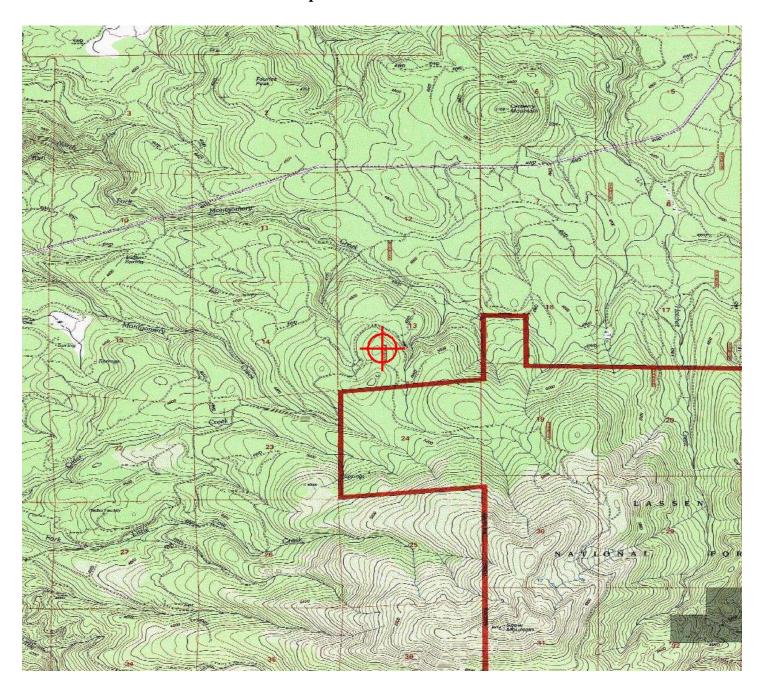
## 7. CONDITIONS

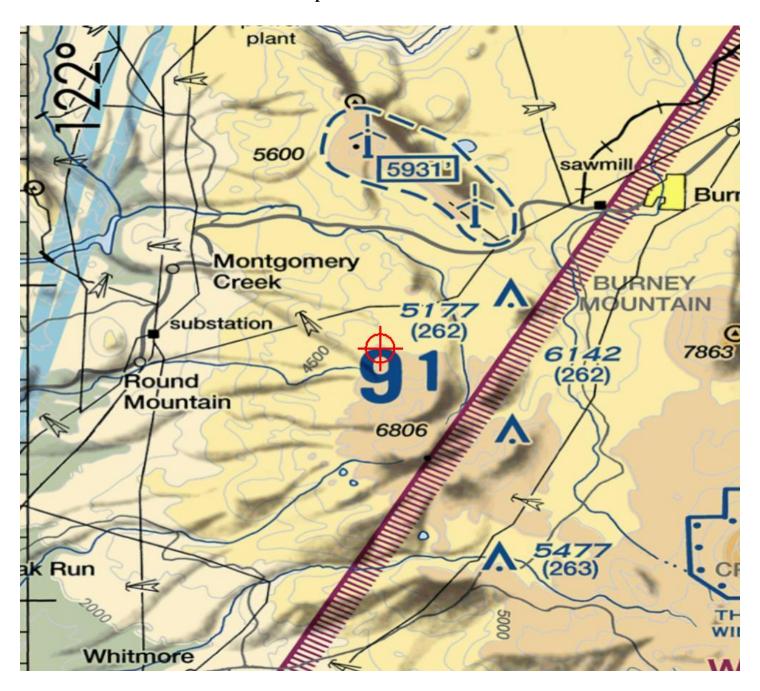
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

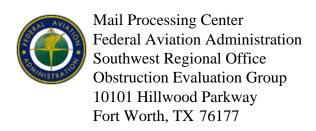
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

## TOPO Map for ASN 2020-WTW-5301-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine J02

Location: Burney, CA

Latitude: 40-47-52.25N NAD 83

Longitude: 121-48-18.54W

Heights: 5138 feet site elevation (SE)

679 feet above ground level (AGL) 5817 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5302-OE.

Signature Control No: 440833081-486755426
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5302-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

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For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

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2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
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2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
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2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
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2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
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2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
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2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
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2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
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2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

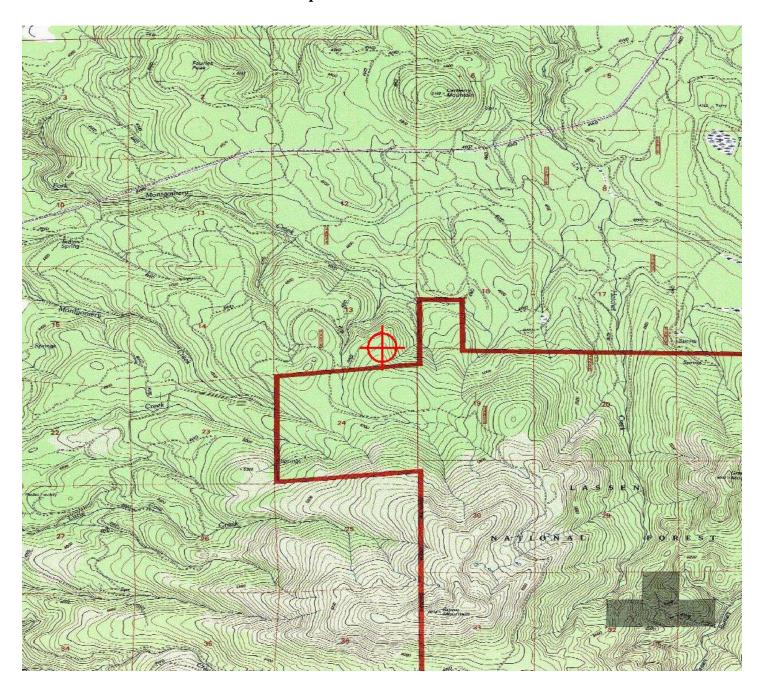
# 7. CONDITIONS

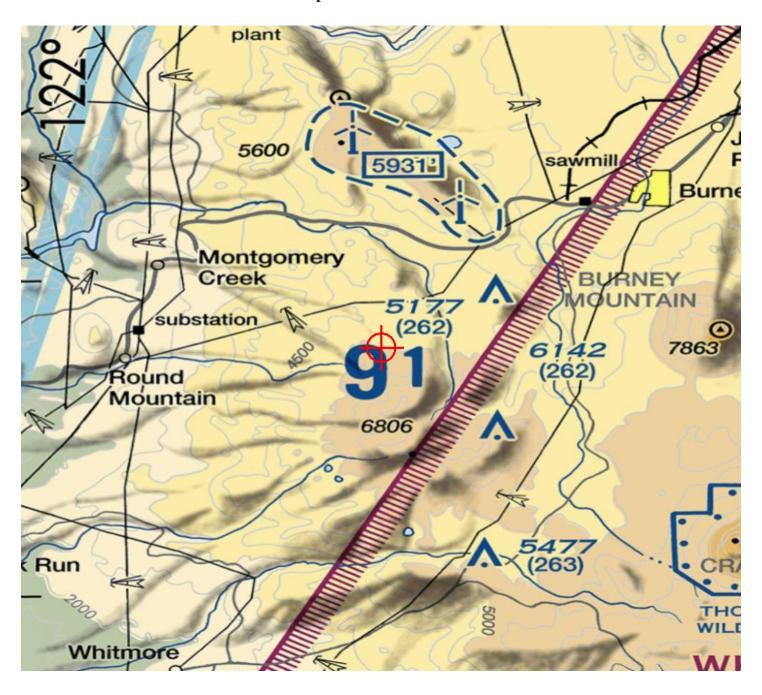
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5302-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K01

Location: Burney, CA

Latitude: 40-49-01.38N NAD 83

Longitude: 121-51-11.92W

Heights: 4265 feet site elevation (SE)

679 feet above ground level (AGL) 4944 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with selfcontained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5303-OE.

(DNH-WT)

Signature Control No: 440833082-486755428 Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5303-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
CD C C D CD		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	/ 679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	/ 679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	/ 679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
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2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
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2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

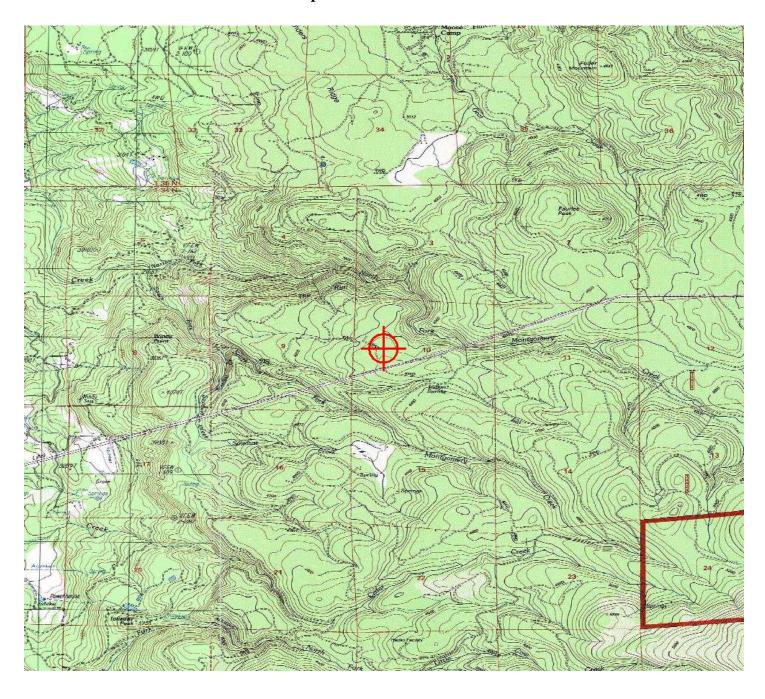
# 7. CONDITIONS

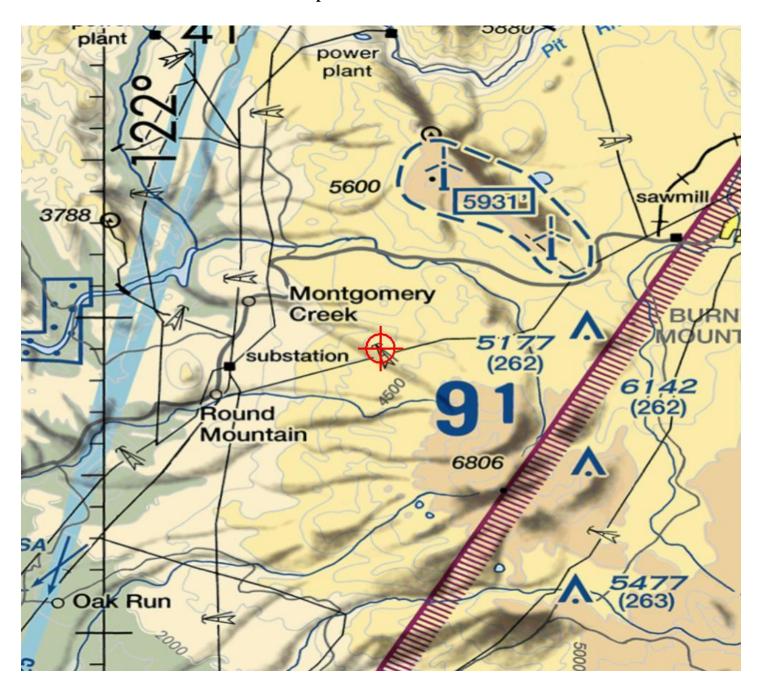
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

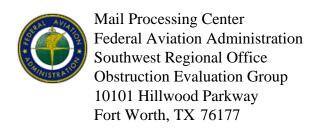
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5303-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K02

Location: Burney, CA

Latitude: 40-48-40.25N NAD 83

Longitude: 121-50-50.32W

Heights: 4418 feet site elevation (SE)

679 feet above ground level (AGL) 5097 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

	_ At least 10 days prior to start of construction (7460-2	, Part 1)	
X_	Within 5 days after the construction reaches its great	est height (7460-2,	Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5304-OE.

(DNH-WT)

Signature Control No: 440833083-486755441 Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5304-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
CNA CO A NATI		

SM- Statue Miles

. . . .

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG	
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /	
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /	
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /	
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /	
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /	
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /	
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /	
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /	
2020-WTW-5268-OE	/ 679 /	5053 /	40-51-12.61N / 121-47-18.63W /	

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
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2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

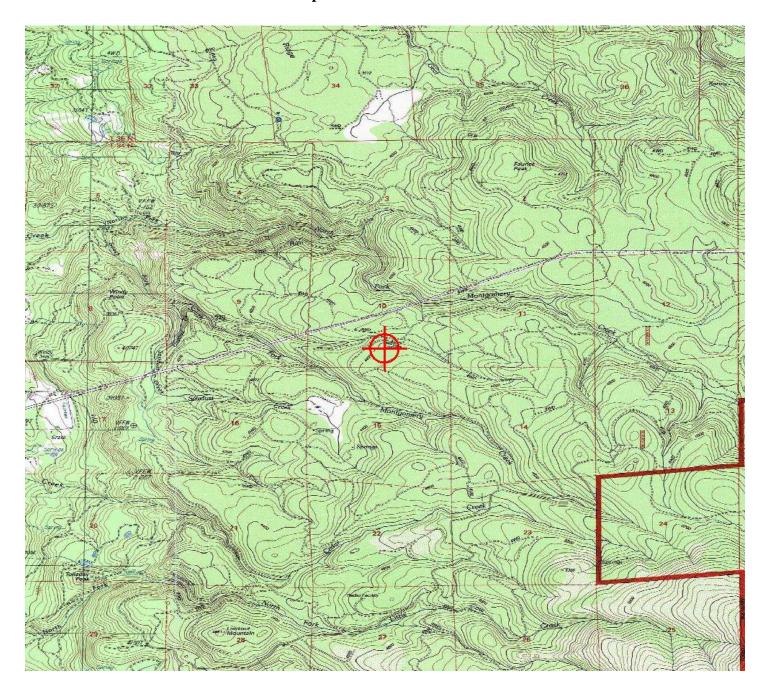
# 7. CONDITIONS

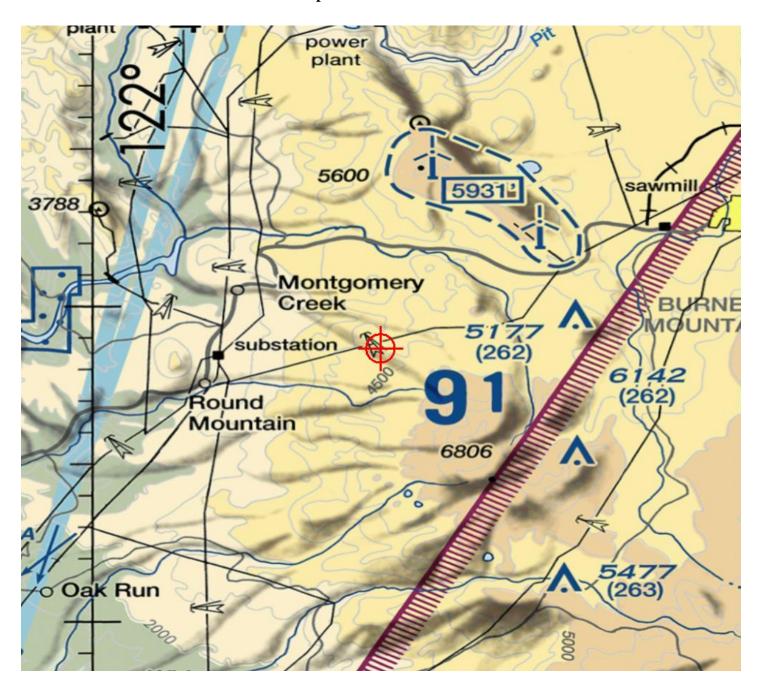
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

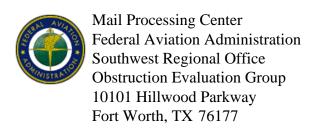
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5304-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K03

Location: Burney, CA

Latitude: 40-48-30.86N NAD 83

Longitude: 121-50-39.37W

Heights: 4518 feet site elevation (SE)

679 feet above ground level (AGL) 5197 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5305-OE.

(DNH-WT)

Signature Control No: 440833084-486755451 Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5305-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Αh	brev	V12	<b>†1</b> (	ns

1 1001C viacions		
AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

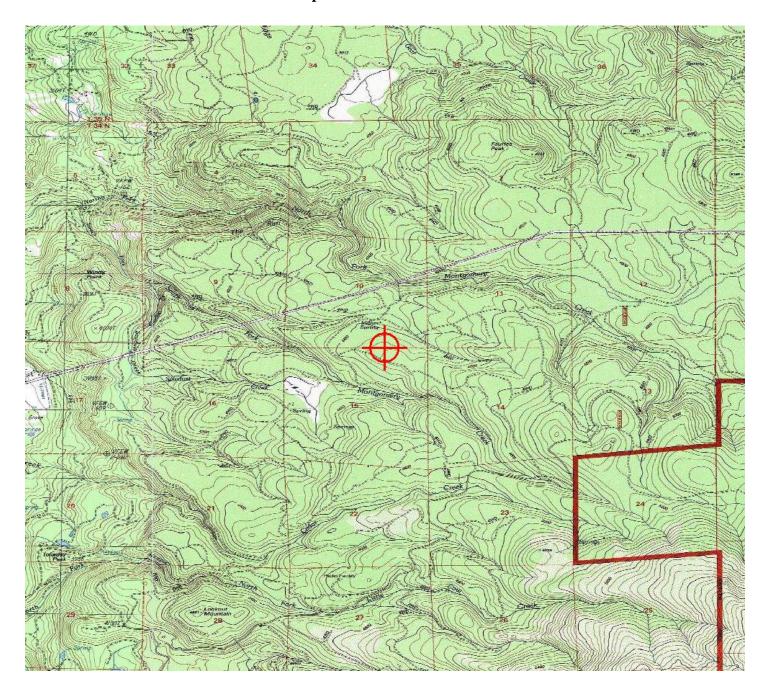
## 7. CONDITIONS

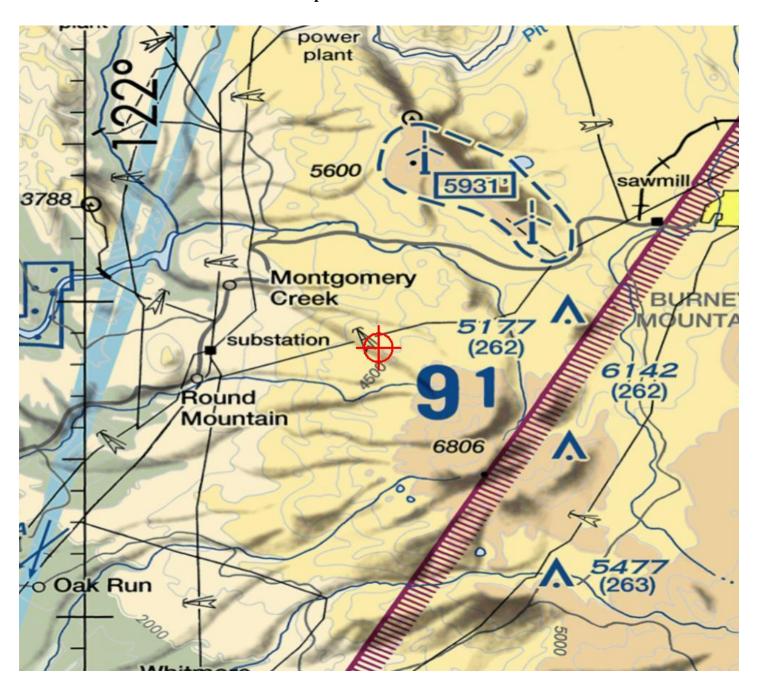
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

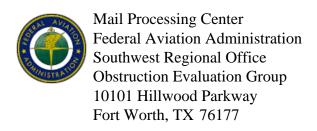
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5305-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K04

Location: Burney, CA

Latitude: 40-48-22.89N NAD 83

Longitude: 121-50-27.78W

Heights: 4538 feet site elevation (SE)

679 feet above ground level (AGL) 5217 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5306-OE.

(DNH-WT)

Signature Control No: 440833085-486755452
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5306-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

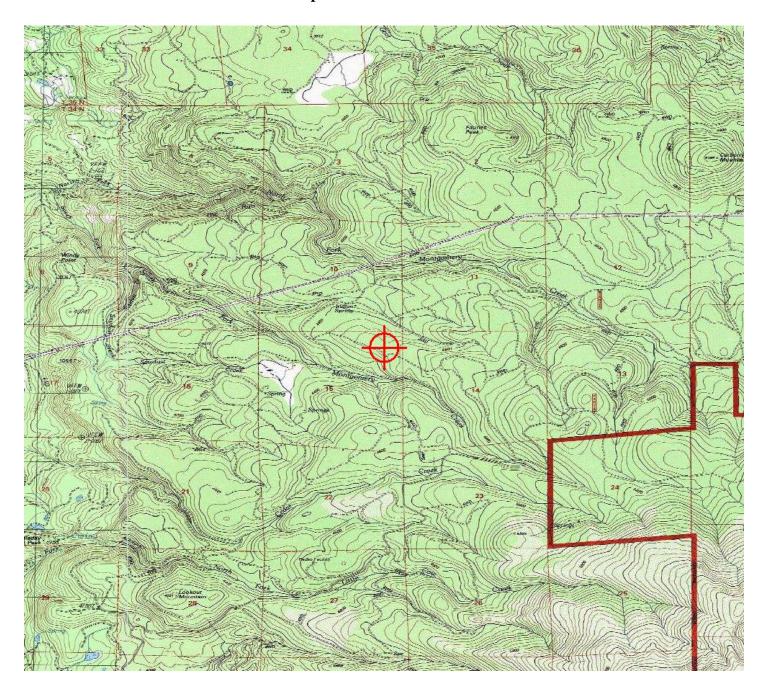
## 7. CONDITIONS

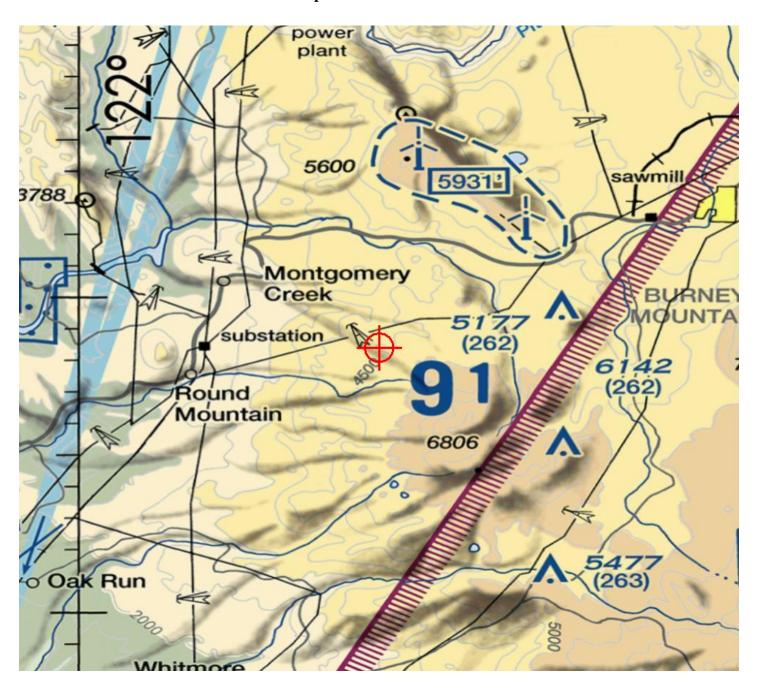
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

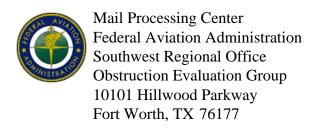
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5306-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K05

Location: Burney, CA

Latitude: 40-48-12.64N NAD 83

Longitude: 121-50-18.85W

Heights: 4570 feet site elevation (SE)

679 feet above ground level (AGL) 5249 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5307-OE.

Signature Control No: 440833088-486755455
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5307-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	/ 679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

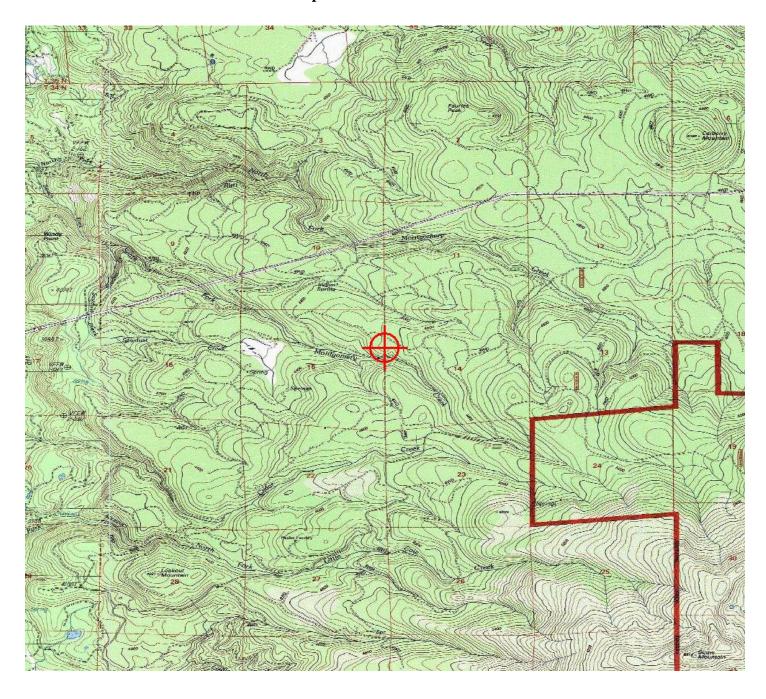
## 7. CONDITIONS

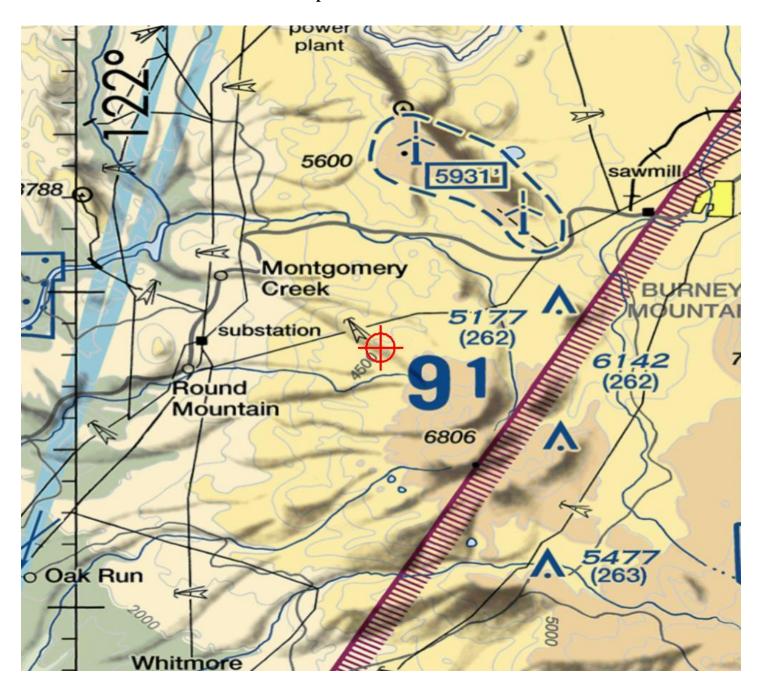
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

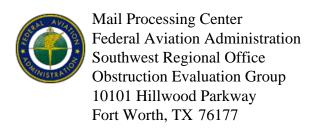
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5307-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K06

Location: Burney, CA

Latitude: 40-48-12.69N NAD 83

Longitude: 121-49-46.55W

Heights: 4790 feet site elevation (SE)

679 feet above ground level (AGL) 5469 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5308-OE.

(DNH-WT)

Signature Control No: 440833089-486755469 Steve Phillips Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5308-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

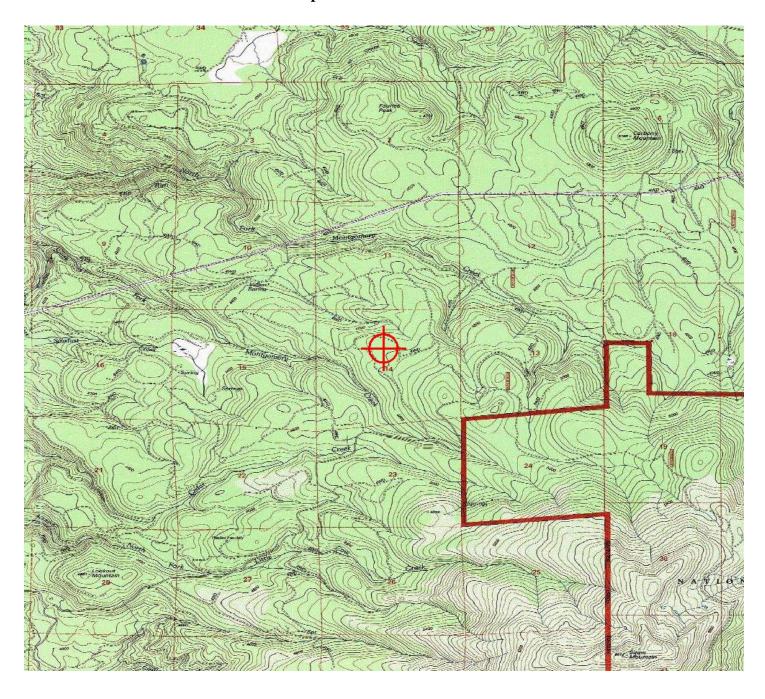
## 7. CONDITIONS

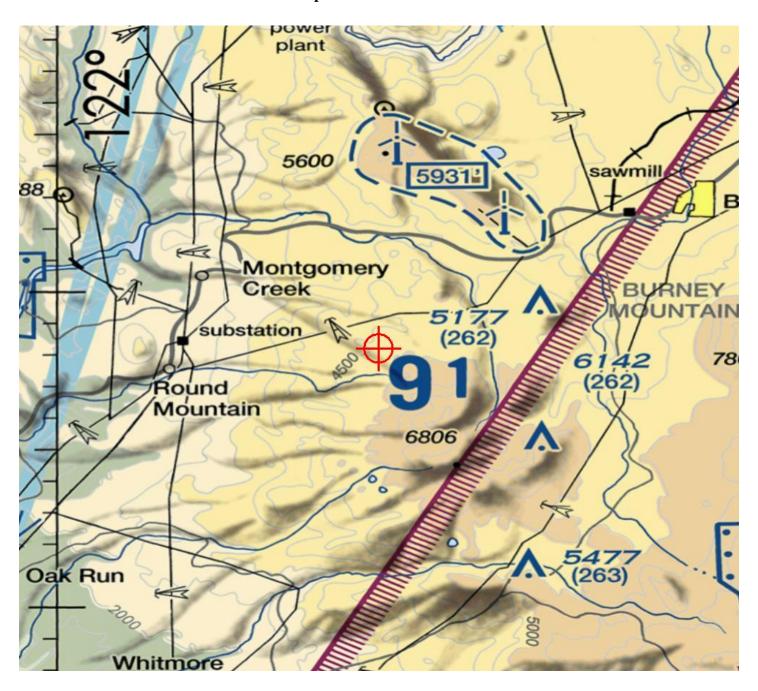
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5308-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine K07

Location: Burney, CA

Latitude: 40-48-08.05N NAD 83

Longitude: 121-49-33.30W

Heights: 4859 feet site elevation (SE)

679 feet above ground level (AGL) 5538 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5309-OE.

(DNH-WT)

Signature Control No: 440833090-486755470
Steve Phillips
Manager Obstruction Evaluation Group

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5309-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

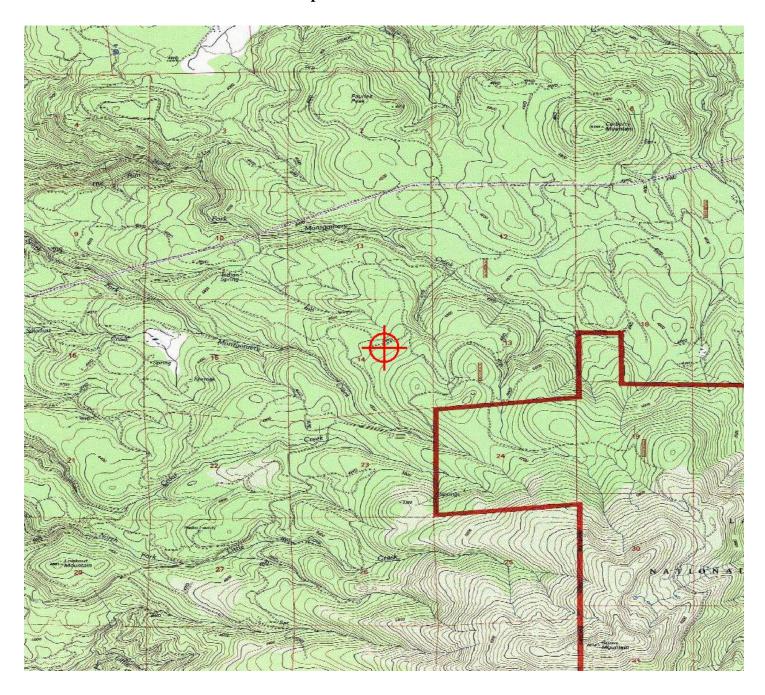
# 7. CONDITIONS

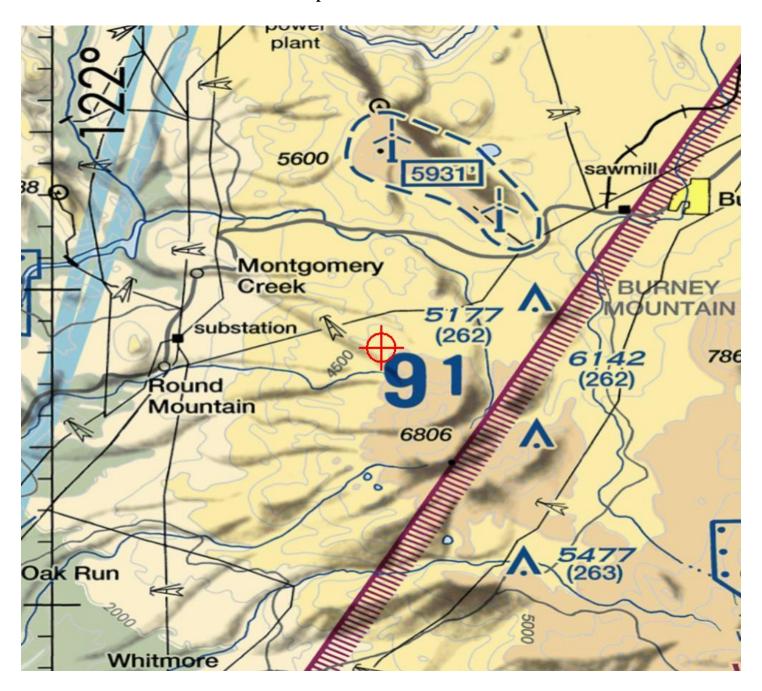
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

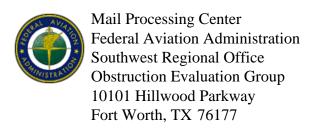
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5309-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine L04

Location: Burney, CA

Latitude: 40-47-44.06N NAD 83

Longitude: 121-50-33.35W

Heights: 4807 feet site elevation (SE)

679 feet above ground level (AGL) 5486 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5310-OE.

(DNH-WT)

Signature Control No: 440833091-486755472
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

#### Additional information for ASN 2020-WTW-5310-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
G1. f. G 3. f. 1		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	/ 679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	/ 679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
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2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
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2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
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2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
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2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
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2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
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2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

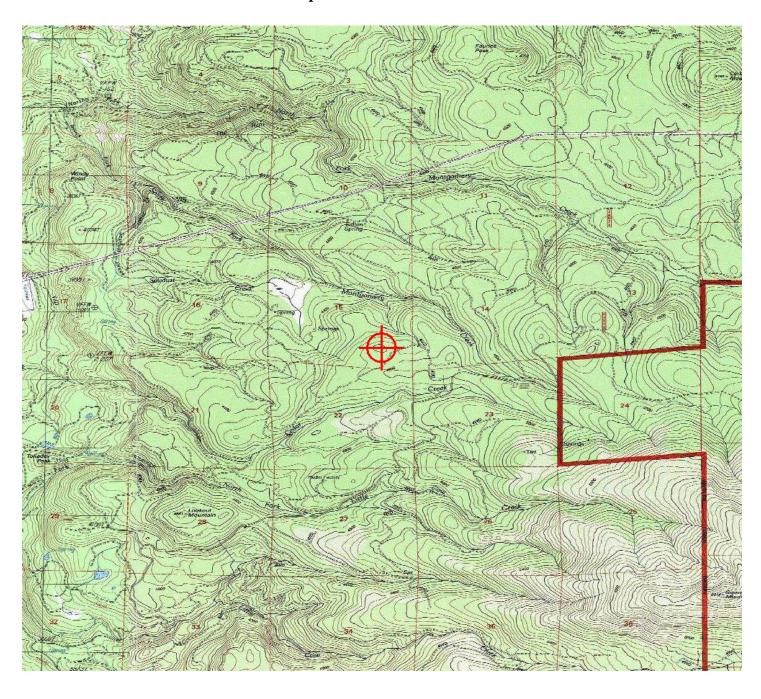
# 7. CONDITIONS

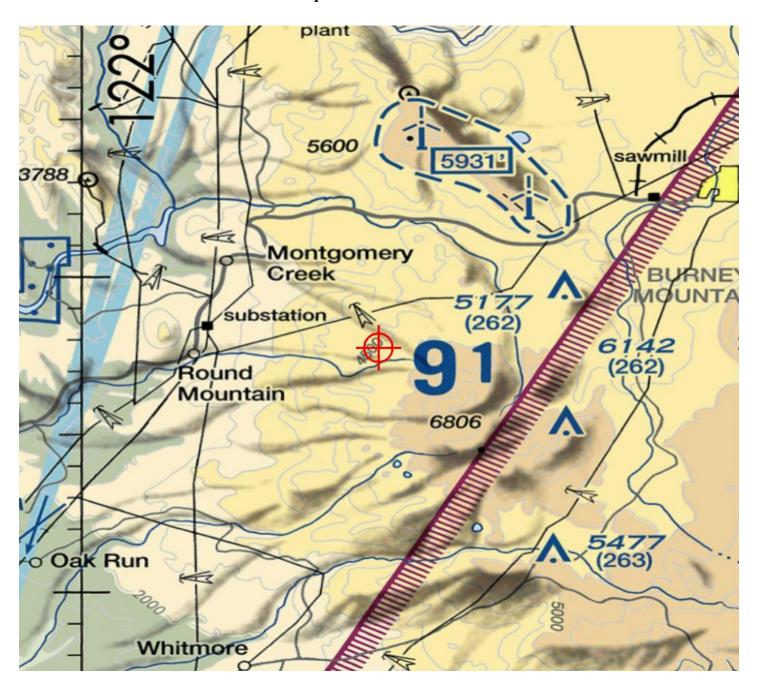
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

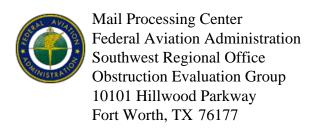
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5310-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine L05

Location: Burney, CA

Latitude: 40-47-33.46N NAD 83

Longitude: 121-50-27.03W

Heights: 4808 feet site elevation (SE)

679 feet above ground level (AGL) 5487 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5311-OE.

Signature Control No: 440833093-486755477
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5311-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
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CNA CO A NATI		

SM- Statue Miles

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Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

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For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

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2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
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2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
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2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
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2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
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2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

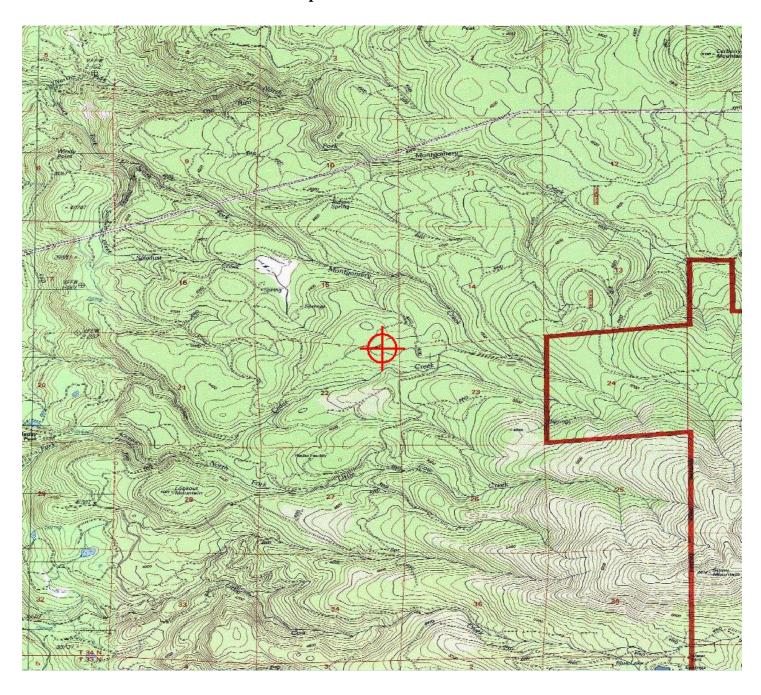
# 7. CONDITIONS

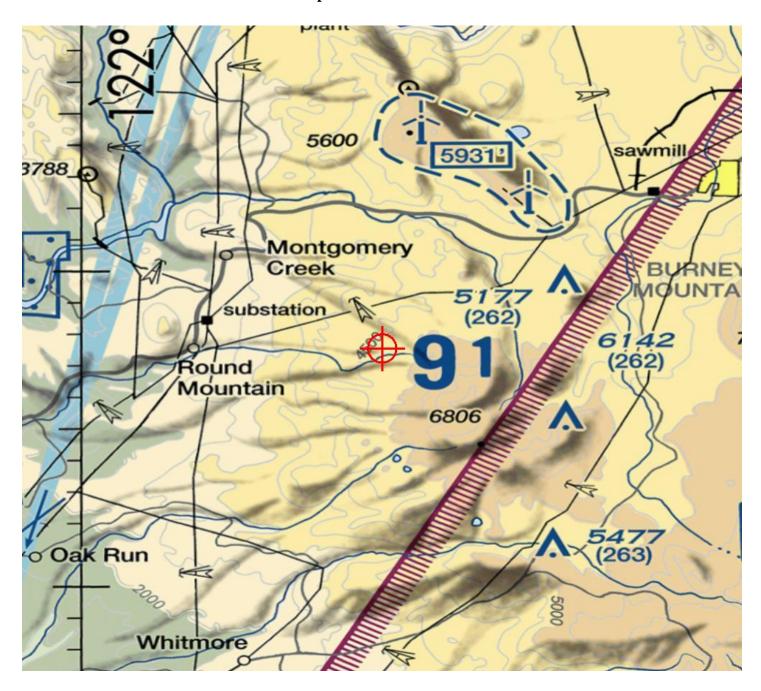
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5311-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine L06

Location: Burney, CA

Latitude: 40-47-31.39N NAD 83

Longitude: 121-50-04.72W

Heights: 4817 feet site elevation (SE)

679 feet above ground level (AGL) 5496 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5312-OE.

(DNH-WT)

Signature Control No: 440833098-486755481
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5312-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
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2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
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2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
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2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
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2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

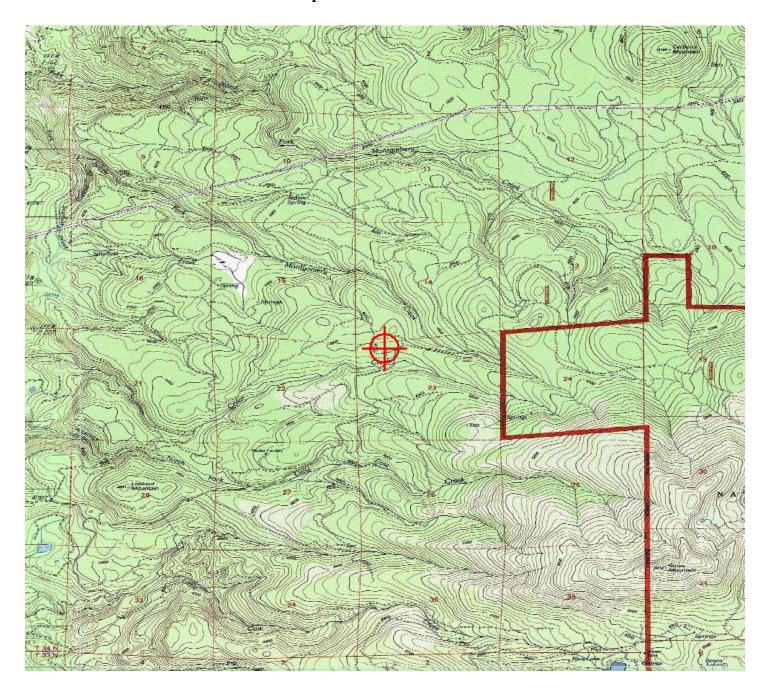
## 7. CONDITIONS

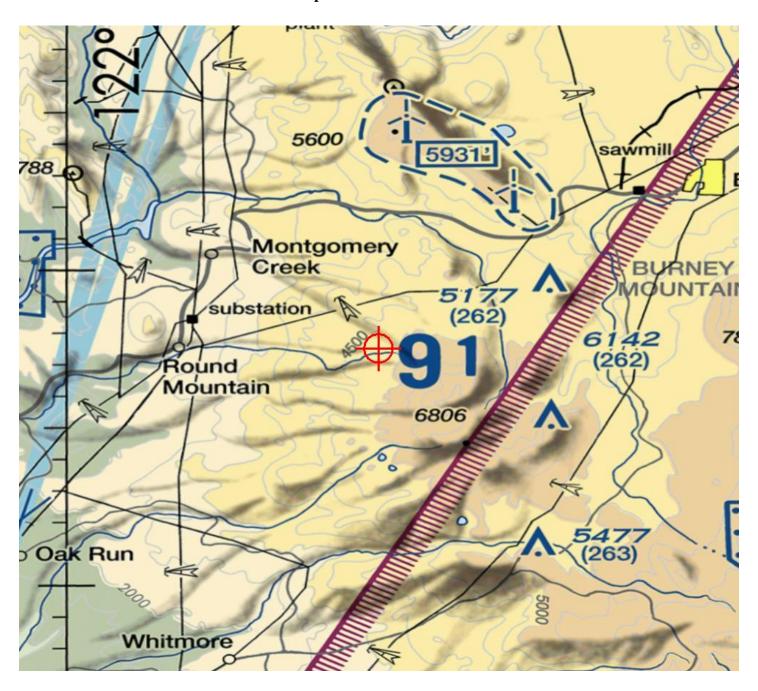
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5312-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine L07

Location: Burney, CA

Latitude: 40-47-16.17N NAD 83

Longitude: 121-49-57.60W

Heights: 4908 feet site elevation (SE)

679 feet above ground level (AGL) 5587 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5313-OE.

Signature Control No: 440833104-486755483
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s) (DNH-WT)

#### Additional information for ASN 2020-WTW-5313-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

A :		
Δ	h	breviations
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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
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2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
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2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
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2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
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2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
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2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
```

#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

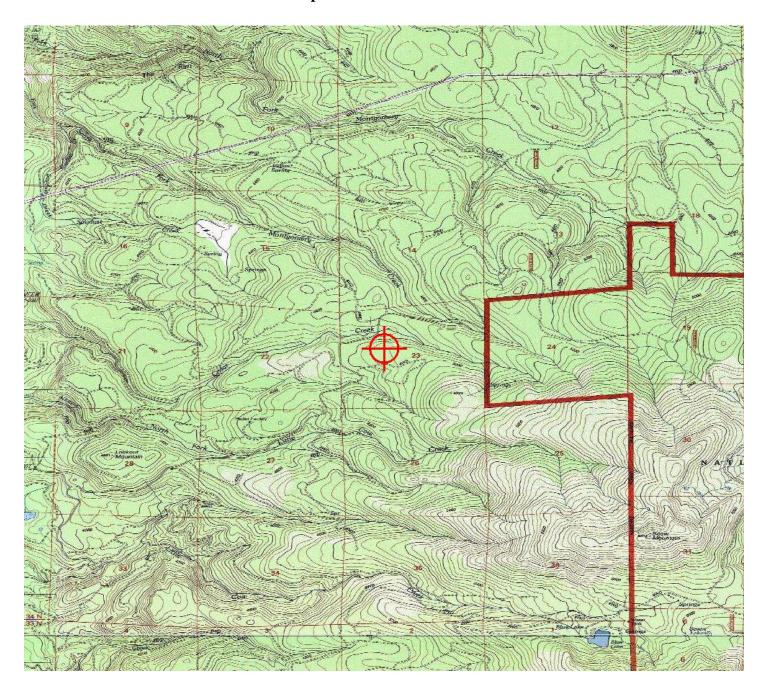
## 7. CONDITIONS

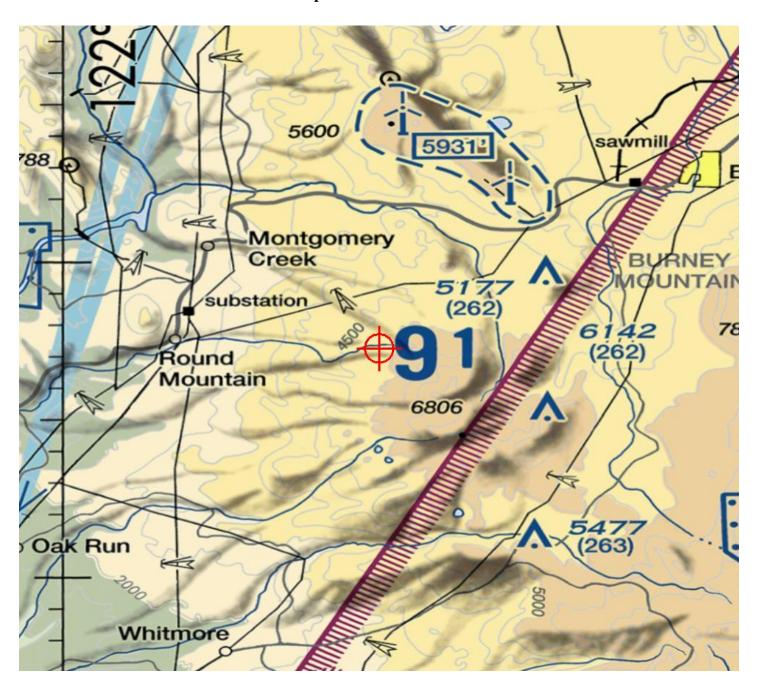
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

## TOPO Map for ASN 2020-WTW-5313-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine L08

Location: Burney, CA

Latitude: 40-47-05.06N NAD 83

Longitude: 121-49-33.70W

Heights: 5053 feet site elevation (SE)

679 feet above ground level (AGL) 5732 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1) \_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5314-OE.

(DNH-WT)

Signature Control No: 440833111-486755533
Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5314-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Αh	brev	งาล	<b>†1</b> (	ns

AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
```

#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

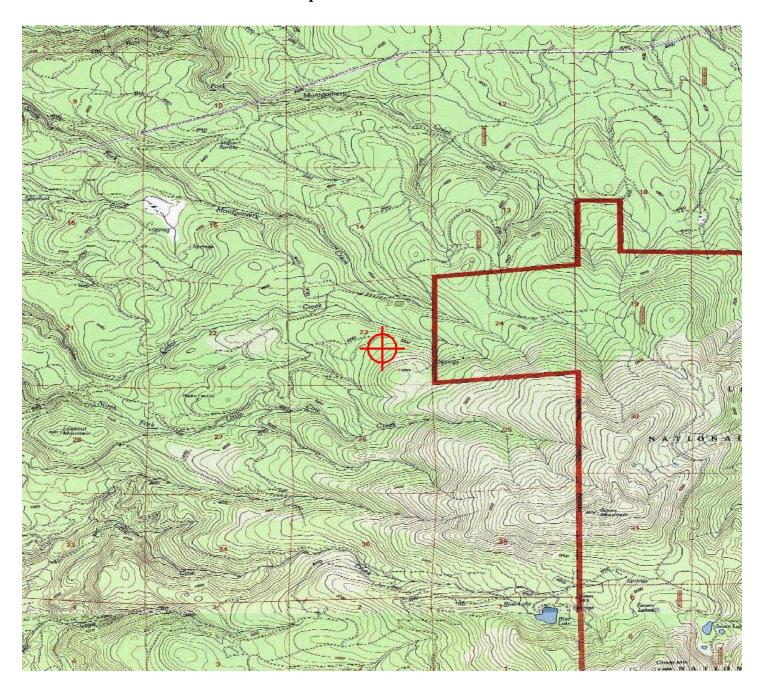
## 7. CONDITIONS

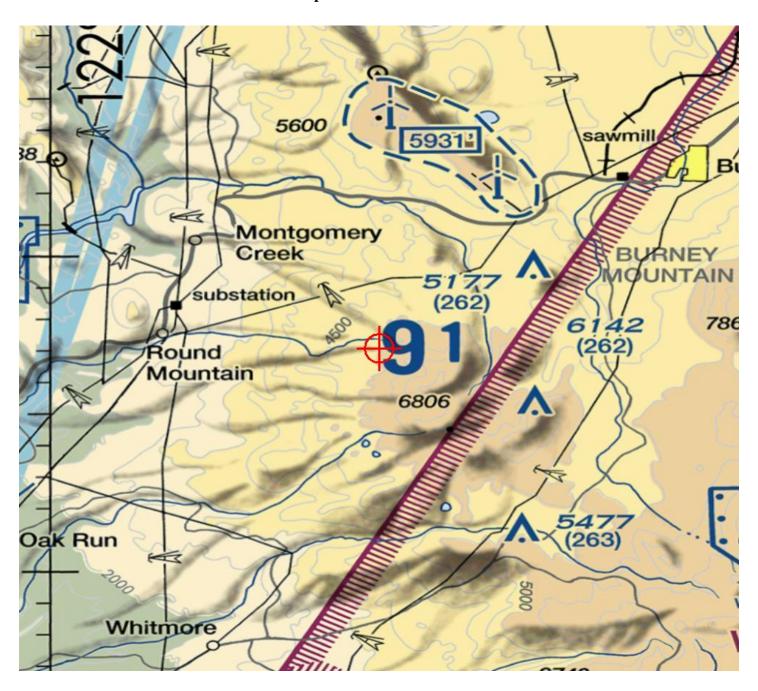
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

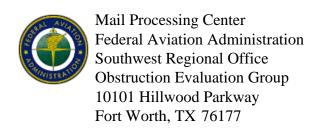
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

## TOPO Map for ASN 2020-WTW-5314-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine L09

Location: Burney, CA

Latitude: 40-46-51.60N NAD 83

Longitude: 121-49-21.73W

Heights: 5328 feet site elevation (SE)

679 feet above ground level (AGL) 6007 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_X	At least 60	days	prior to	start of	construction	(7460-2,	Part	1)
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\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5315-OE.

(DNH-WT)

Signature Control No: 440833112-486752776
Steve Phillips
Manager, Obstruction Evaluation Group

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5315-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG	
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /	
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /	
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /	
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /	
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /	
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /	
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /	
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /	
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /	

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

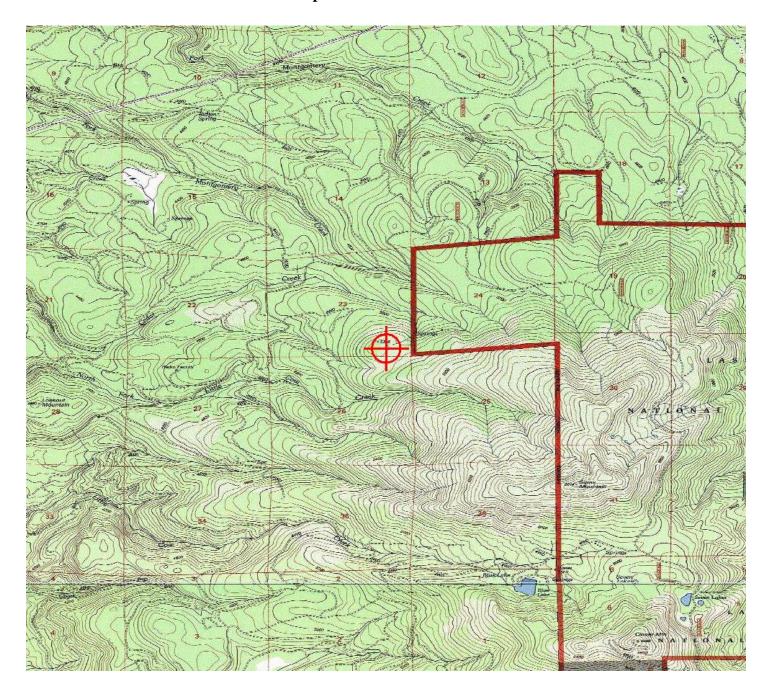
# 7. CONDITIONS

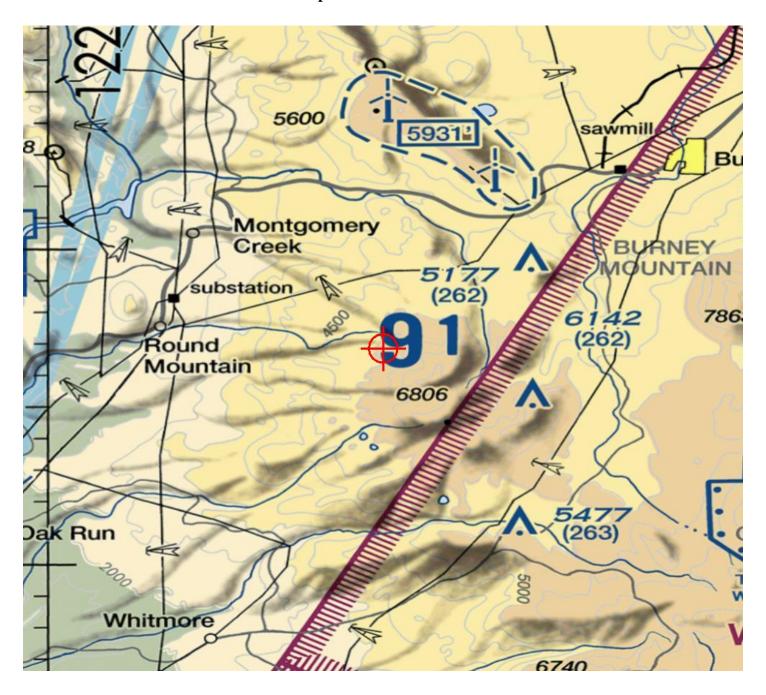
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5315-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine M06

Location: Burney, CA

Latitude: 40-47-29.32N NAD 83

Longitude: 121-52-10.95W

Heights: 4302 feet site elevation (SE)

679 feet above ground level (AGL) 4981 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_X	At least 60	days prior to	start of construction	(7460-2, Part 1)
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\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5319-OE.

(DNH-WT)

Signature Control No: 440833118-486752775
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information

Additional Map(s)

#### Additional information for ASN 2020-WTW-5319-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
03.6.0		

SM- Statue Miles

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
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2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

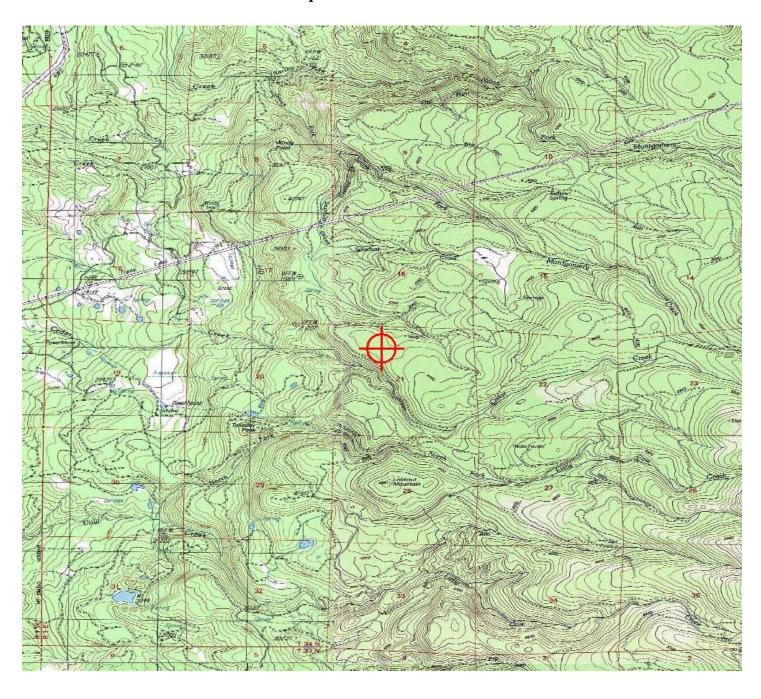
# 7. CONDITIONS

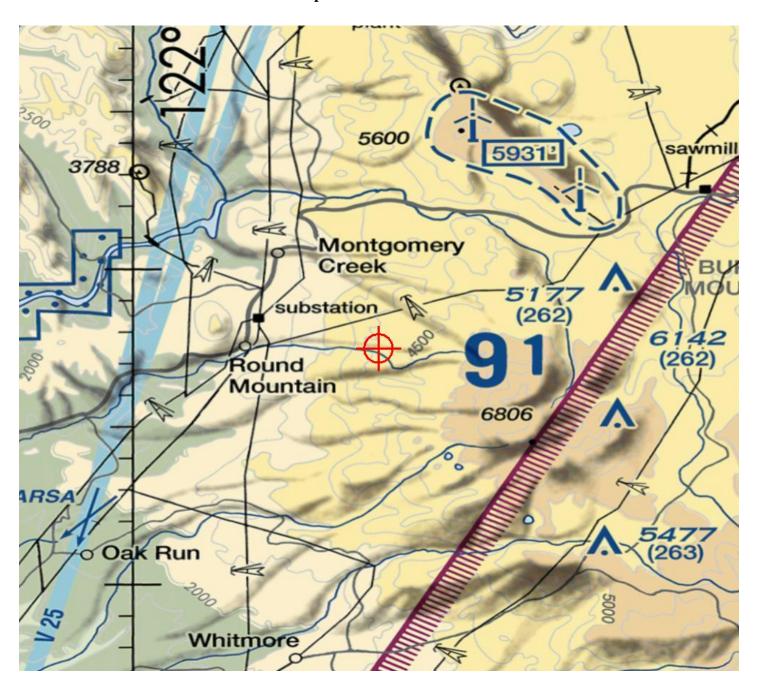
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

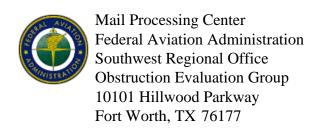
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5319-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine M07

Location: Burney, CA

Latitude: 40-47-21.14N NAD 83

Longitude: 121-51-52.30W

Heights: 4387 feet site elevation (SE)

679 feet above ground level (AGL) 5066 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_X	At least 60	days prior	to start of	construction	(7460-2,	Part 1)
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\_\_X\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5320-OE.

(DNH-WT)

Signature Control No: 440833120-486752771 Steve Phillips

Manager, Obstruction Evaluation Group

Attachment(s) Additional Information Map(s)

#### Additional information for ASN 2020-WTW-5320-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

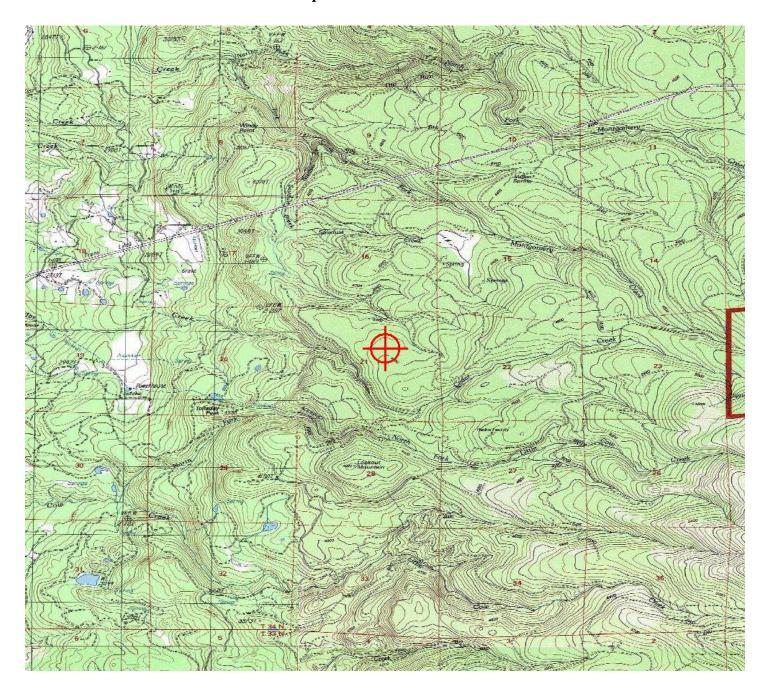
# 7. CONDITIONS

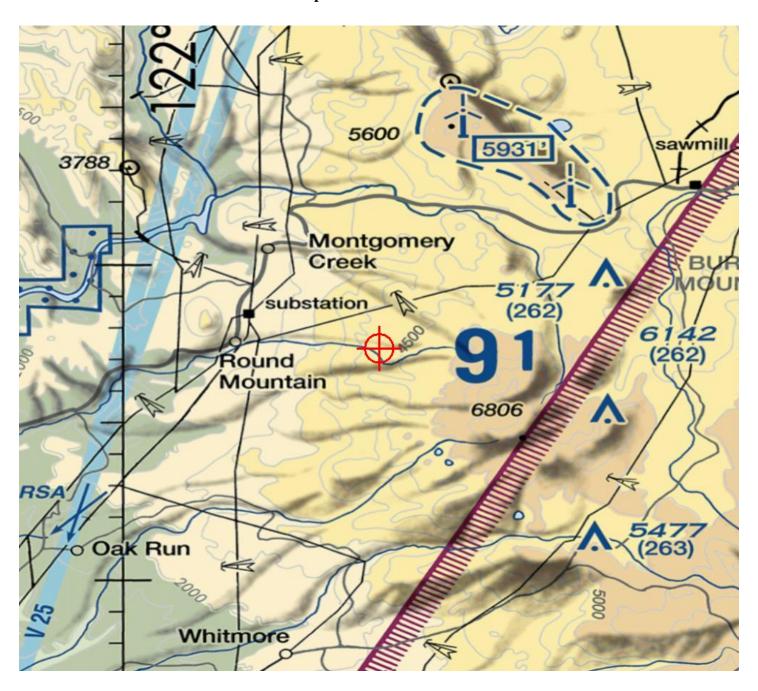
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

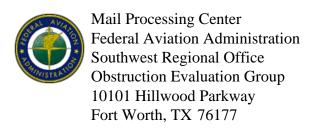
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5320-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

# \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine M08

Location: Burney, CA

Latitude: 40-46-50.54N NAD 83

Longitude: 121-51-23.15W

Heights: 4528 feet site elevation (SE)

679 feet above ground level (AGL) 5207 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5321-OE.

(DNH-WT)

Signature Control No: 440833122-48675556 Steve Phillips Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

#### Additional information for ASN 2020-WTW-5321-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
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2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

# 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

# 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

# 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

# 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

# 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

# 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

# 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

# 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

# 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

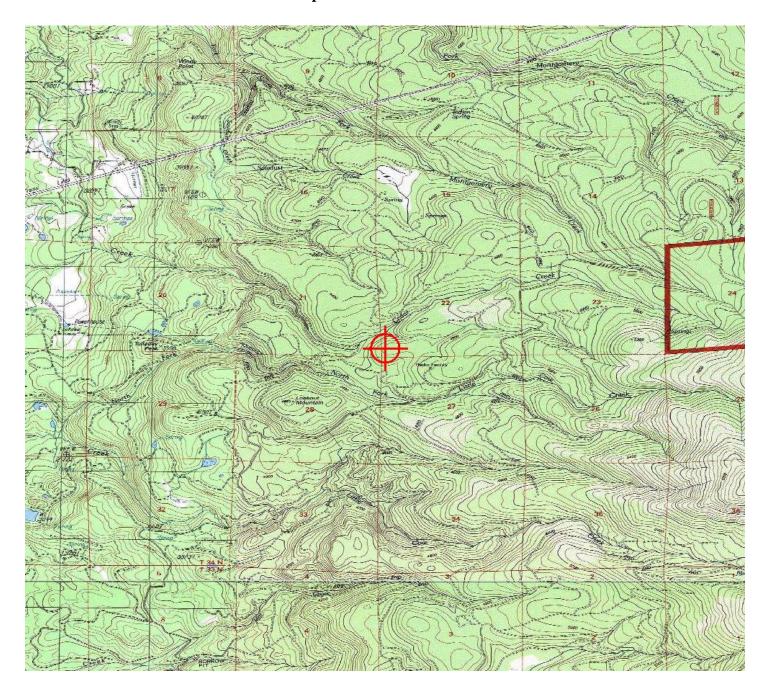
# 7. CONDITIONS

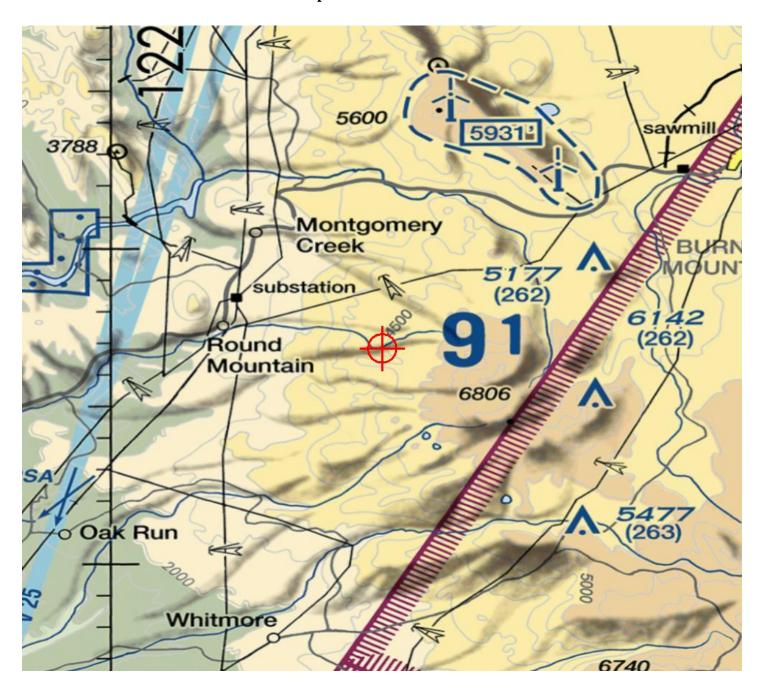
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

## TOPO Map for ASN 2020-WTW-5321-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine M09

Location: Burney, CA

Latitude: 40-46-54.89N NAD 83

Longitude: 121-50-35.04W

Heights: 4735 feet site elevation (SE)

679 feet above ground level (AGL) 5414 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5323-OE.

Signature Control No: 440833124-486755566
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5323-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and nonaeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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Vectoring Altitude		
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IFR Altitude		
G1. f. G 3. f. 1		

SM- Statue Miles

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Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

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For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG
2020-WTW-5260-OE	679 /	5538 /	40-53-44.11N / 121-50-40.93W /
2020-WTW-5261-OE	679 /	5610 /	40-53-32.45N / 121-50-24.28W /
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /
2020-WTW-5265-OE	679 /	5526 /	40-52-55.57N / 121-49-42.09W /
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /
2020-WTW-5267-OE	679 /	5099 /	40-51-25.75N / 121-47-49.78W /
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
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2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
2020-WTW-5277-OE / 679 / 5417 / 40-50-18.03N / 121-48-11.98W /
2020-WTW-5278-OE / 679 / 5857 / 40-49-53.93N / 121-47-50.84W /
2020-WTW-5279-OE / 679 / 5292 / 40-49-17.95N / 121-47-30.13W /
2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
2020-WTW-5281-OE / 679 / 5289 / 40-48-55.92N / 121-47-01.52W /
2020-WTW-5282-OE / 679 / 4416 / 40-51-54.09N / 121-52-15.87W /
2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
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2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
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2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
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2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
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2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

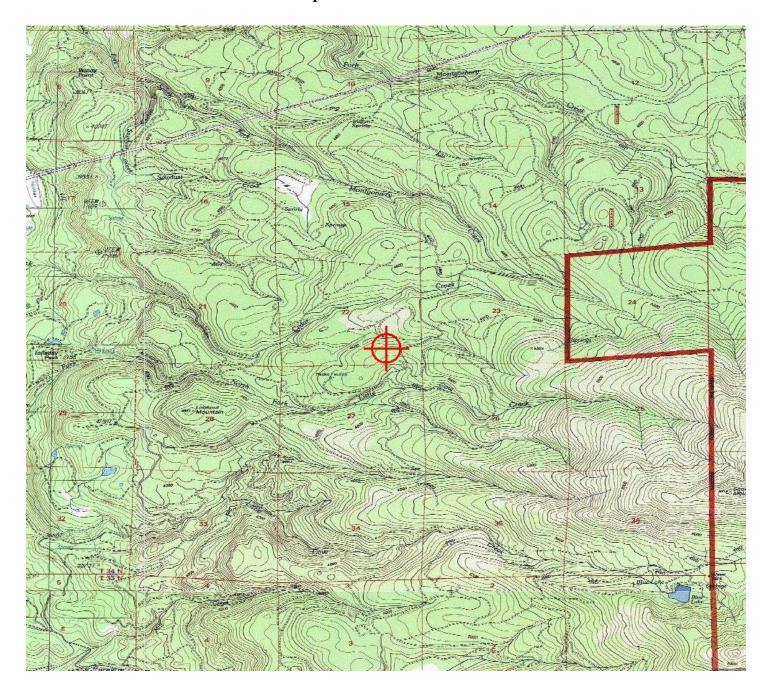
## 7. CONDITIONS

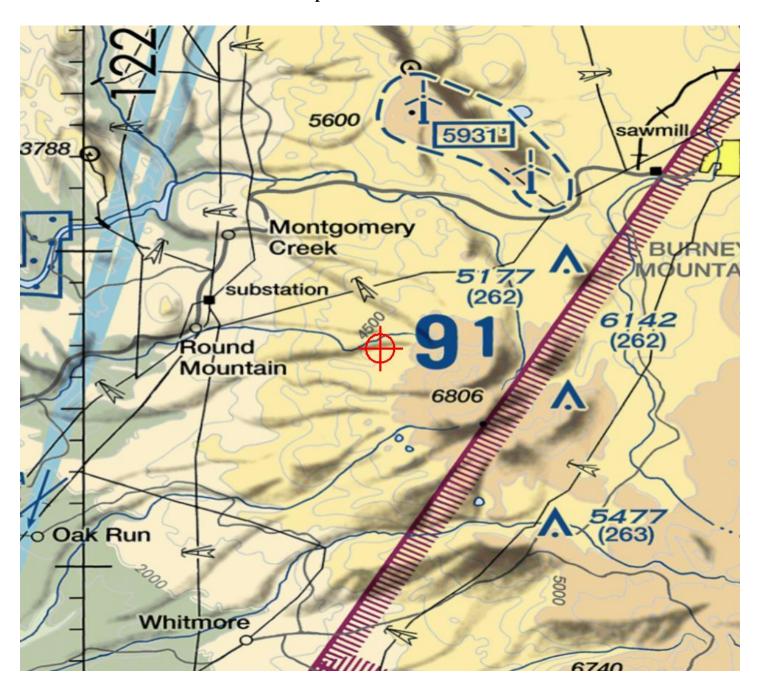
The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

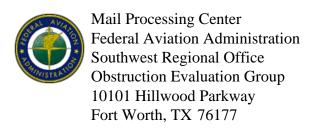
2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5323-OE







Issued Date: 07/01/2021

Parker Lewis CG Fountain Wind LLC 1001 McKinney St. Suite 700 Houston, TX 77002

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine M10

Location: Burney, CA

Latitude: 40-46-51.23N NAD 83

Longitude: 121-50-03.01W

Heights: 4944 feet site elevation (SE)

679 feet above ground level (AGL) 5623 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/sychronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

See attachment for additional condition(s) or information.

This determination expires on 01/01/2023 unless:

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 31, 2021. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on August 10, 2021 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be

used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Ratts, at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-WTW-5324-OE.

Signature Control No: 440833125-486755568
Steve Phillips
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

(DNH-WT)

#### Additional information for ASN 2020-WTW-5324-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

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AGL - above ground level	AMSL - above mean sea level	RWY - runway
VFR - visual flight rules	IFR - instrument flight rules	NM - nautical mile
ASN- Aeronautical Study Number	CAT - category aircraft	MVA- Minimum
Vectoring Altitude		
MDA - minimum descent altitude	DA - decision altitude	MIA- Minimum
IFR Altitude		
SM- Statue Miles		

Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Proposed are seventy-two (72) wind turbines near Burney, CA reviewed by the FAA under Aeronautical Study Numbers (ASNs) 2020-WTW-5260-OE sequentially through 2020-WTW-5331-OE, except 2020-WTW-5272-OE (terminated). The project includes an additional proposed structure that was filed under ASN 2020-WTW-5474-OE. The closest public use airport is Falls River Mills Airport (O89), Falls River Mills, CA. The closest proposal to the airport, filed as ASN 2020-WTW-5269-OE would be located 18.83 NM southwest of the Airport Reference Point (ARP). The O89 airport elevation is 3328 feet AMSL.

For the sake of efficiency, the 72 wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative.

#### 1. LOCATION OF PROPOSED CONSTRUCTION

The seventy- two wind turbines' described heights and locations are expressed Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	AGL/	AMSL	LAT/LONG	
2020-WTW-5260-OE	/ 679 /	5538 /	40-53-44.11N / 121-50-40.93W /	
2020-WTW-5261-OE	/ 679 /	5610 /	40-53-32.45N / 121-50-24.28W /	
2020-WTW-5262-OE	679 /	5587 /	40-53-23.62N / 121-50-14.66W /	
2020-WTW-5263-OE	679 /	5569 /	40-53-15.50N / 121-50-04.95W /	
2020-WTW-5264-OE	679 /	5593 /	40-53-06.02N / 121-49-53.76W /	
2020-WTW-5265-OE	/ 679 /	5526 /	40-52-55.57N / 121-49-42.09W /	
2020-WTW-5266-OE	679 /	5446 /	40-52-46.87N / 121-49-35.37W /	
2020-WTW-5267-OE	/ 679 /	5099 /	40-51-25.75N / 121-47-49.78W /	
2020-WTW-5268-OE	679 /	5053 /	40-51-12.61N / 121-47-18.63W /	

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2020-WTW-5269-OE / 679 / 5105 / 40-50-51.13N / 121-46-59.89W /
2020-WTW-5270-OE / 679 / 5194 / 40-50-32.31N / 121-46-49.02W /
2020-WTW-5271-OE / 679 / 5263 / 40-50-06.94N / 121-46-42.63W /
2020-WTW-5273-OE / 679 / 5184 / 40-51-01.97N / 121-49-01.21W /
2020-WTW-5274-OE / 679 / 5296 / 40-50-50.53N / 121-48-43.16W /
2020-WTW-5275-OE / 679 / 5197 / 40-50-39.05N / 121-48-33.83W /
2020-WTW-5276-OE / 679 / 5368 / 40-50-28.68N / 121-48-18.39W /
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2020-WTW-5280-OE / 679 / 5286 / 40-49-11.50N / 121-47-10.30W /
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2020-WTW-5283-OE / 679 / 4568 / 40-51-38.69N / 121-51-58.64W /
2020-WTW-5284-OE / 679 / 4610 / 40-51-27.69N / 121-51-40.82W /
2020-WTW-5285-OE / 679 / 4580 / 40-50-58.12N / 121-51-52.01W /
2020-WTW-5286-OE / 679 / 4649 / 40-50-45.46N / 121-51-21.92W /
2020-WTW-5287-OE / 679 / 4882 / 40-50-04.49N / 121-51-47.80W /
2020-WTW-5288-OE / 679 / 4902 / 40-50-00.31N / 121-51-33.80W /
2020-WTW-5289-OE / 679 / 4892 / 40-49-57.92N / 121-51-20.17W /
2020-WTW-5290-OE / 679 / 4935 / 40-49-54.02N / 121-51-03.40W /
2020-WTW-5291-OE / 679 / 4829 / 40-49-53.11N / 121-50-44.95W /
2020-WTW-5292-OE / 679 / 5459 / 40-50-05.15N / 121-49-49.54W /
2020-WTW-5293-OE / 679 / 5302 / 40-49-45.47N / 121-49-45.42W /
2020-WTW-5294-OE / 679 / 5325 / 40-49-33.93N / 121-49-41.25W /
2020-WTW-5295-OE / 679 / 5384 / 40-49-16.67N / 121-48-34.54W /
2020-WTW-5296-OE / 679 / 5403 / 40-49-05.37N / 121-48-27.73W /
2020-WTW-5297-OE / 679 / 5335 / 40-48-40.95N / 121-48-25.04W /
2020-WTW-5298-OE / 679 / 5207 / 40-48-56.05N / 121-50-04.92W /
2020-WTW-5299-OE / 679 / 5244 / 40-48-50.84N / 121-49-49.27W /
2020-WTW-5300-OE / 679 / 5377 / 40-48-39.72N / 121-49-30.66W /
2020-WTW-5301-OE / 679 / 5801 / 40-47-59.69N / 121-48-48.88W /
2020-WTW-5302-OE / 679 / 5817 / 40-47-52.25N / 121-48-18.54W /
2020-WTW-5303-OE / 679 / 4944 / 40-49-01.38N / 121-51-11.92W /
2020-WTW-5304-OE / 679 / 5097 / 40-48-40.25N / 121-50-50.32W /
2020-WTW-5305-OE / 679 / 5197 / 40-48-30.86N / 121-50-39.37W /
2020-WTW-5306-OE / 679 / 5217 / 40-48-22.89N / 121-50-27.78W /
2020-WTW-5307-OE / 679 / 5249 / 40-48-12.64N / 121-50-18.85W /
2020-WTW-5308-OE / 679 / 5469 / 40-48-12.69N / 121-49-46.55W /
2020-WTW-5309-OE / 679 / 5538 / 40-48-08.05N / 121-49-33.30W /
2020-WTW-5310-OE / 679 / 5486 / 40-47-44.06N / 121-50-33.35W /
2020-WTW-5311-OE / 679 / 5487 / 40-47-33.46N / 121-50-27.03W /
2020-WTW-5312-OE / 679 / 5496 / 40-47-31.39N / 121-50-04.72W /
2020-WTW-5313-OE / 679 / 5587 / 40-47-16.17N / 121-49-57.60W /
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2020-WTW-5314-OE / 679 / 5732 / 40-47-05.06N / 121-49-33.70W /
2020-WTW-5315-OE / 679 / 6007 / 40-46-51.60N / 121-49-21.73W /
2020-WTW-5316-OE / 679 / 4566 / 40-48-01.18N / 121-52-52.21W /
2020-WTW-5317-OE / 679 / 4770 / 40-47-48.60N / 121-52-38.39W /
2020-WTW-5318-OE / 679 / 4967 / 40-47-37.50N / 121-52-19.54W /
2020-WTW-5319-OE / 679 / 4981 / 40-47-29.32N / 121-52-10.95W /
2020-WTW-5320-OE / 679 / 5066 / 40-47-21.14N / 121-51-52.30W /
2020-WTW-5321-OE / 679 / 5207 / 40-46-50.54N / 121-51-23.15W /
2020-WTW-5322-OE / 679 / 5266 / 40-47-06.45N / 121-51-03.11W /
2020-WTW-5323-OE / 679 / 5414 / 40-46-54.89N / 121-50-35.04W /
2020-WTW-5324-OE / 679 / 5623 / 40-46-51.23N / 121-50-03.01W /
2020-WTW-5325-OE / 679 / 5102 / 40-46-59.67N / 121-52-20.21W /
2020-WTW-5326-OE / 679 / 5095 / 40-46-50.17N / 121-52-10.80W /
2020-WTW-5327-OE / 679 / 5325 / 40-46-26.07N / 121-51-48.21W /
2020-WTW-5328-OE / 679 / 5371 / 40-46-25.08N / 121-52-08.27W /
2020-WTW-5329-OE / 679 / 5259 / 40-46-17.46N / 121-51-10.38W /
2020-WTW-5330-OE / 679 / 5459 / 40-46-10.01N / 121-50-42.40W /
2020-WTW-5331-OE / 679 / 5630 / 40-46-10.02N / 121-50-10.56W /
2020-WTW-5474-OE / 679 / 5199 / 40-51-11.55N / 121-49-23.70W /
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#### 2. OBSTRUCTION STANDARDS EXCEEDED

The 72 proposed wind turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this surface by 180 feet.
- b. Section 77.17(a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

## 2020-WTW-5328-OE

ZOA\_RBL\_MVA\_2018\_v1, Minimum Vectoring Altitude (MVA), increase ZOA sector OR333 MVA from 7200 to 7400 AMSL.

c. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The following ASNs are listed with their effect:

## 2020-WTW-5287-OE

At 4882 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

2020-WTW-5288-OE

At 4902 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

#### 2020-WTW-5289-OE

At 4892 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 6900 AMSL.

## 2020-WTW-5315-OE

At 6007 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS042 from 7900 to 8000 AMSL.

## 2020-WTW-5318-OE

At 4967 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5319-OE

At 4981 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7000 AMSL.

## 2020-WTW-5320-OE

At 5066 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

## 2020-WTW-5325-OE

At 5102 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_V1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5326-OE

At 5095 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7100 AMSL.

#### 2020-WTW-5328-OE

At 5371 AMSL 4D, Oakland ARTCC (ZOA) Oakland, CA. ZOA\_TAV\_2018\_v1, Minimum IFR Altitude (MIA) increase sector OJOS040 from 6800 to 7400 AMSL.

## 3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR or effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes: No substantial adverse effect due to an internal FAA evaluation and no objections were received from the public.

There are no effects on the VFR traffic pattern airspace

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR: No substantial adverse effect due to an internal FAA evaluation.

c. The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

VFR Route: The FAA found that 60 out of 73 proposed wind turbines would lie within 2SM of a VFR Route. No substantial adverse effect due to internal FAA evaluation.

Radar: The FAA found that 61 out of 72 proposed wind turbines in this project would have a physical and/or electromagnetic radiation effect upon the Common Air Route Surveillance Radar (CARSR) at Red Bluff, CA, however, Air Traffic has determined this would not create a substantial adverse impact on their operations at this time.

## 4. CIRCULATION AND COMMENTS RECEIVED

The proposal was circulated for public comment under ASN 2020-WTW-5260-OE on 10 February 2021. No comments were received by 19 March 2021.

#### 5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

## 6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The proposed wind turbines in in this project exceed the Part 77 Section 77.17(a)(1) obstruction standard by 180 feet, however, no substantial adverse effect was found and no issues were raised during the public comment period. At 679 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with JO 7400.2N, the proposed wind farm would not affect a significant volume of aircraft and therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations. Air Traffic Control has confirmed that the increase to the MVA and the MIA would not adversely impact their operations. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no effects on any airspace and routes used by the military.

## 7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, sixty days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2020-WTW-5287-OE 2020-WTW-5288-OE 2020-WTW-5289-OE 2020-WTW-5315-OE 2020-WTW-5318-OE 2020-WTW-5319-OE 2020-WTW-5320-OE 2020-WTW-5325-OE 2020-WTW-5326-OE 2020-WTW-5328-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

# TOPO Map for ASN 2020-WTW-5324-OE

