

DOCKETED

Docket Number:	23-OPT-01
Project Title:	Fountain Wind Project
TN #:	250341
Document Title:	wildfire_fwp_responses
Description:	N/A
Filer:	Caitlin Barns
Organization:	Stantec Consulting Services, Inc.
Submitter Role:	Applicant Consultant
Submission Date:	5/25/2023 1:51:55 PM
Docketed Date:	5/25/2023

Data Request Identifier	Request Source	Topic	Reviewer	Siting Regulations	Information	Opt-In Page Number And Section Number	Adequate	Information Required To Make OPT Conform With Regulations	Response Date	Applicant Response	Status
WILDFIRE-01	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	Multiple citations are provided for the DEIR wildfire setting and effects information and potential impacts related to wildfire as related to the Project. However, many of the references cited are not readily available for review to verify the information provided.	Not specified	No	See last page.	25-May	See last page.	submitted
WILDFIRE-02	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	DEIR Section 3.16.3.1 b) indicates "the Project is not intended for and would not be used for human occupation; therefore, no occupants would be exposed to increased risks associated with wildfire", however there will be up to 400 workers onsite during construction and up to 12 full-time employees onsite during operation.	Not specified	No	Provide a discussion on the potential for Project construction and operation to increase risks associated with wildfires to workers, including impacts of loss, injury or death from a wildfire or adverse effects due to inhalation of wildfire pollutants.	25-May	The Shasta County DEIR and specialist opinion concluded that there was low risk of wildfire ignition resulting from Project construction. Nevertheless, the Applicant plans to undertake fire prevention practices during construction, such as preparation of a project-specific Fire Prevention Plan (MM 3.16-2a), which mitigates risks to onsite workers and impacts of loss related to wildfire. The FPP will detail the standard fire prevention techniques will be observed during construction, including a prohibition on hot work during high fire risk weather. For details see Wildfire Effects Review memorandum (TN#248297-3).	submitted
WILDFIRE-03	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	DEIR Section 3.16.3.1 a) includes discussion of potential hazards due to the wind turbine towers interfering with firefighting operations in the event of a local wildfire and a mitigation measure (MM 3.16-1b) to reduce the risk. This measure has no way of verifying completion nor does it require any coordination with CALFIRE staff regarding this information.	Not specified	No	Provide a discussion on timing and verification of transmittal of data regarding tower locations to CALFIRE, and a discussion of whether any coordination would occur before or during fires with CALFIRE regarding aerial firefighting in the vicinity of the turbines.	25-May	The following mitigation measure outlines timing of transmittal of data regarding tower locations to CAL FIRE and contains a mechanism for CEC to verify compliance with requirement to transmit information: Mitigation Measure 3.16-1b: Pre-Construction Coordination with CAL FIRE: Prior to issuance of construction permits by the CEC, the Applicant shall provide evidence that it has submitted GIS files or other maps of the Project layout to CAL FIRE to facilitate aerial fire-fighting planning. The Applicant shall notify CAL FIRE of any changes to the Project layout or any maintenance that would require the use of helicopters or the use of equipment not previously identified on maps provided to CAL FIRE that could present a new, previously unidentified vertical obstacle to aerial firefighting.	submitted
WILDFIRE-04	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	DEIR Section 3.16.1.3 (Regulatory Setting) lists and summarizes federal, State, and local laws, ordinances, regulations, and standards (LORS) related to wildfire in the Project area. The summarized LORS do not discuss how each applies to the Project.	Not specified	No	Provide a discussion of how each of the LORS summarized in Section 3.16.1.3 applies specifically to the project.	12-Apr	Please see LORS Consistency Matrix (TN# 249636) submitted April 12, 2023.	submitted

Data Request Identifier	Request Source	Topic	Reviewer	Siting Regulations	Information	Opt-In Page Number And Section Number	Adequate	Information Required To Make OPT Conform With Regulations	Response Date	Applicant Response	Status
WILDFIRE-05	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	DEIR Section 2.4.5 (Site Preparation and Construction) and the Application for Opt-in Certification Executive Summary and Project Description Section 4.4.1.3 both mention that emergency responders would be notified 24 hours in advance of blasting, that all blasting activities would be conducted in compliance with applicable federal, state, and local laws, and appropriate safety and environmental protection measures would be implemented, including weather restrictions in regards to wildfire risk. A minimal discussion of blasting as a potential fire source is in Section 3.16.3.1 b), but no procedures regarding blasting or blasting fire safety measures are included in the mitigation measure related to Fire Safety (3.16-2a).	Not specified	No	Provide a discussion or listing of procedures to be added to MM 3.16-2a specifically designed to reduce the potential for ignition of wildfire by blasting activities.	25-May	Mitigation Measure 3.12-2: Best Management Practices for Blasting outlines in detail practices that will be implemented to prevent ignition of wildfire by blasting.	submitted

Data Request Identifier	Request Source	Topic	Reviewer	Siting Regulations	Information	Opt-In Page Number And Section Number	Adequate	Information Required To Make OPT Conform With Regulations	Response Date	Applicant Response	Status
WILDFIRE-06	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	Mitigation measure 3.16-2b in DEIR Section 3.16.3.1 b) indicates that the turbines shall be equipped with fire detection and prevention technology compatible with the manufacturer's operating requirements and technology for fire detection and suppression within turbines. The mitigation measure also includes specific design requirements as related to fire, including fire detection and warning systems, and automatic fire extinguishing systems in the nacelle of each wind turbine, and shut down of the turbine if an out-of-range condition is reported.	Not specified	No	62. Provide a description of the automatic fire extinguishing systems for the nacelle. 63. Provide information on timing of and of inspection activities that would occur in the event of an out-of-range notification and shut down of a turbine. 64. Provide a discussion of activities required to restart a turbine after a shutdown to ensure there is no future chance of fire or sparks. 65. Provide procedures that would occur in the event of a turbine/nacelle fire. What procedures would occur in the event the automatic fire suppression does not fully extinguish a fire?	25-May	62. See fire suppression system specifications (TN# 250320). 63. Any error codes, alarms or alerts generated by the WTG related by the Fire Suppression System would be investigated as quickly as possible by the site operations and maintenance team. Based on initial WTG data, additional proactive measures may be taken by either the site operations and maintenance team or by the Remote Operations Control Center (ROCC). 64. Based on the type of Fire Suppression System shutdown (in the event of a fire response, a converter module failure, or if a hose needed replacement) the site operations and maintenance team would appropriately replace, inspect, and test the equipment before restarting the turbine. In addition, the site operations and maintenance team would create a Component Inspection Report (CIR) to keep on file that delineates the nature of the shutdown and the reactive measures taken. 65. In the unlikely event of a turbine/nacelle fire the turbine would cease operations, be disconnected from the site electrical system, and the ROCC / site operations and maintenance team would immediately implement the appropriate measures outlined in the site Emergency Response Plan (I.e. notifying CALFIRE and other appropriate agencies and taking the appropriate reactive measures). In addition to following all the procedures outlined in the Emergency Response Plan, once any turbine/nacelle fire would be deemed under control by the appropriate government agency, the Original Equipment Manufacturer (OEM) would initiate their Serious Incident (SI) protocol in conjunction with the site operations and maintenance team. The SI protocol would include setting a Restricted Approach Boundary to limit access and allow the OEM SI team to initiate the appropriate evaluation and communication protocols, including meeting with appropriate parties to summarize the events to date and the forthcoming project plan, within 48 hours of the incident. The SI team will then coordinate an all safe approach, business recovery, and investigation efforts through the life of the project until the turbine is safely returned to service and all investigative efforts are complete.	submitted
WILDFIRE-07	Deficiency Letter Attachment B	Wildfire	Not specified	Not specified	DEIR Section 3.16.3.1 c) indicates an approximately 80-foot-wide corridor along the overhead collector lines would be maintained free of taller woody vegetation during operation.	Not specified	No	Clarify whether this would include any of the understory vegetation, and if not how would this affect the potential for wildfire.	25-May	Yes, understory vegetation will be regularly removed as part of the operations and maintenance plan.	submitted

Data Request WILDFIRE-01: Please provide copies of the following references that are not readily available online (for many the online link does not work).

- Anderson, H. E., 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. Available online at: https://www.fs.fed.us/rm/pubs_int/int_gtr122.pdf.
- California Department of Forestry and Fire Protection (CAL FIRE), 2019a. Communities at Risk List [filtered to include only Shasta County]. Available online at: http://osfm.fire.ca.gov/fireplan/fireplanning_communities_at_risk?filter_field=county_name&filter_text=Shasta. Accessed May 23, 2019.
- CAL FIRE and Shasta County Fire, 2018. Shasta-Trinity Unit 2018 Strategic Fire Plan. Available online at: <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf1624.pdf>. May 10, 2018.
- California Public Utilities Commission (CPUC), 2020. CPUC Fire Safety Rulemaking Background. Available online: <https://www.cpuc.ca.gov/FireThreatMaps/> Accessed July 1, 2020.
- CPUC, 2017a. Decision 17-12-024- Order Instituting Rulemaking to Develop and Adopt Fire Threat Maps and Fire-Safety Regulations. Rulemaking 15-05-006. Issued December 21, 2017.
- Dupras, D., 1997. Geology of Eastern Shasta County. California Geological Survey. Map. Scale 1:100,000.
- Milman, O., 2018. "Wildfire Smoke: Experts Warn of 'Serious Health Effects' Across Western US." The Guardian, August 2, 2018. Available online at: <https://www.theguardian.com/world/2018/aug/02/wildfire-events-air-quality-health-issues-in-western-us>. Accessed August 23, 2019.
- National Association of State Foresters, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, National Park Service, Bureau of Indian Affairs, U.S. Department of Agriculture, and National Wildfire Coordinating Group (National Association of State Foresters et al.), 2003. Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy. June 20, 2003. Available online at: <https://www.sierraforestlegacy.org/Resources/Community/SmokeManagement/AirQualityPolicy/FedWldFireMgmtPolicy.pdf>.
- National Oceanic and Atmospheric Administration (NOAA), 2018. The Impact of Wildfires on Climate and Air Quality. Available online at: <https://www.esrl.noaa.gov/csd/factsheets/csdWildfiresFIREX.pdf>. Accessed June 24, 2020.
- National Wildfire Coordinating Group, 2015. National Fire Danger Rating System Fuel Model. Available online at: https://www.nwcg.gov/sites/default/files/stds/standards/nfdrs-fuel-model_v1-0.htm. Accessed March 30, 2020.
- Pacific Gas and Electric Company (PG&E), 2018. Company Emergency Response Plan. October 31, 2018.
- PG&E, 2019. Pacific Gas and Electric Company Amended 2019 Wildfire Safety Plan. February 6, 2019. Amended February 14, 2019 and April 25, 2019. Available online: <https://www.cpuc.ca.gov/SB901/>
- PG&E, 2017. Appendix D. Fire Prevention Plan- Electric Annex to the CERP. September 30, 2017.
- Sacramento Bee, 2019. "California's largest wildfire was caused by a hammer, Cal Fire says." June 6, 2019.
- Shasta County, 2016. Shasta County Communities Wildfire Protection Plan 2016. Available online at: <http://www.westernshastarc.org/Docs/ShastaCWPPs-2016.pdf>.
- Shasta County, 2017. Shasta County Development Standards—Chapter 6, Fire Safety Standards. Available online at: <https://www.co.shasta.ca.us/docs/libraries/public-works-docs/devstdmanual/sc-development-standards-manual.pdf>. Revised June 27, 2017.
- Shasta County, 2018. General Plan Element 5.0, Public Safety Group. Available online at: https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/54firesafety.pdf?sfvrsn=204962bd_0. Updated December 11, 2018.
- Shasta County Fire Department, 2018. Email from James Zanotelli to Bill Walker on February 1, 2018.
- Shasta County and City of Anderson, 2017. Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan. Available online at: https://www.co.shasta.ca.us/docs/libraries/public-works-docs/hmp-documents/shasta-county-hazard-mitigation-plan-november-2017.pdf?sfvrsn=b54ee689_2. November 16, 2017.
- Stantec and Pacific Wind Development, LLC, 2018. Environmental Initial Study, Fountain Wind Project Pacific Wind Development, LLC. Prepared in co-ordination with and for Shasta County Department of Resource Management Planning Division. June 28, 2019. Available online at: <https://www.co.shasta.ca.us/docs/libraries/resource-managementdocs/projects/fountain-wind-project/initial-study/initial-study.pdf>.
- U.S. Forest Service (USFS), 2015. The 2010 Wildland-Urban Interface of the Conterminous United States. June 2015. Available online: https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf Accessed June 17, 2020.
- U.S. Forest Service, U.S. Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, and National Park Service (USFS et al.), 2009. Guidance for Implementation of Federal Wildland Fire Management Policy. February 13, 2009. Available online at: https://www.nifc.gov/policies/policies_documents/GIFWFMP.pdf.
- WRCC, 2020b. Burney, California Total of Precipitation (Inches), Period of Record 1948 to 2015. Available online at: <https://wrcc.dri.edu/WRCCWrappers.py?sodxtrmts+041214+por+por+pcpn+none+msum+5+01+F>. Accessed June 24, 2020.

Data Response WILDFIRE-01 Response: The following sources were submitted. The remainder were unable to be found.

- (TN# 250321) Anderson, H. E., 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. Available online at: https://www.fs.fed.us/rm/pubs_int/int_gtr122.pdf.
- (TN# 250323). CAL FIRE and Shasta County Fire, 2018. Shasta-Trinity Unit 2018 Strategic Fire Plan. Available online at: <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf1624.pdf>. May 10, 2018.
- (TN# 250322). California Public Utilities Commission (CPUC), 2020. CPUC Fire Safety Rulemaking Background. Available online: <https://www.cpuc.ca.gov/FireThreatMaps/> Accessed July 1, 2020.
- [available at link only] National Association of State Foresters, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, National Park Service, Bureau of Indian Affairs, U.S. Department of Agriculture, and National Wildfire Coordinating Group (National Association of State Foresters et al.), 2003. Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy. June 20, 2003. Available online at: <https://www.sierraforestlegacy.org/Resources/Community/SmokeManagement/AirQualityPolicy/FedWldFireMgmtPolicy.pdf>.
- (TN# 250339). National Oceanic and Atmospheric Administration (NOAA), 2018. The Impact of Wildfires on Climate and Air Quality. Available online at: <https://www.esrl.noaa.gov/csd/factsheets/csdWildfiresFIREX.pdf>. Accessed June 24, 2020.
- (TN# 250338). PG&E, 2019. Pacific Gas and Electric Company Amended 2019 Wildfire Safety Plan. February 6, 2019. Amended February 14, 2019 and April 25, 2019. Available online: <https://www.cpuc.ca.gov/SB901/>
- (TN# 250336). Stantec and Pacific Wind Development, LLC, 2018. Environmental Initial Study, Fountain Wind Project Pacific Wind Development, LLC. Prepared in co-ordination with and for Shasta County Department of Resource Management Planning Division. June 28, 2019. (TN# 248297-2)
- [only available at link] Shasta County, 2016. Shasta County Communities Wildfire Protection Plan 2016. Available online at: <http://www.westernshastarc.org/Docs/ShastaCWPPs-2016.pdf>.
- (TN# 250337). Shasta County and City of Anderson, 2017. Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan. Available online at: https://www.co.shasta.ca.us/docs/libraries/public-works-docs/hmp-documents/shasta-county-hazard-mitigation-plan-november-2017.pdf?sfvrsn=b54ee689_2. November 16, 2017.
- (TN# 250335). U.S. Forest Service (USFS), 2015. The 2010 Wildland-Urban Interface of the Conterminous United States. June 2015. Available online: https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf Accessed June 17, 2020.
- (TN# 250334). WRCC, 2020b. Burney, California Total of Precipitation (Inches), Period of Record 1948 to 2015. Available online at: <https://wrcc.dri.edu/WRCCWrappers.py?sodxtrmts+041214+por+por+pcpn+none+msum+5+01+F>. Accessed June 24, 2020.