DOCKETED	
Docket Number:	23-OPT-01
Project Title:	Fountain Wind Project
TN #:	256385
Document Title:	fwp_water_responses
Description:	N/A
Filer:	Caitlin Barns
Organization:	Stantec Consulting Services, Inc.
Submitter Role:	Applicant Consultant
Submission Date:	5/15/2024 11:36:52 AM
Docketed Date:	5/15/2024

Stantec

Memo

To:	Lon Payne California Energy Commission	From:	Caitlin Barns Stantec Environmental Consulting, Inc.
File:	Fountain Wind Project, 23-OPT-01	Date:	May 15, 2024

Reference: Response to California Energy Commission Data Requests on Water Supply Report and Revised Traffic Report, Dated April 16, 2024

WATER RESOURCES

CEC BACKGROUND NARRATIVE TO 4/16/24 Data Request on Water Supply:

"On March 18, 2024, the applicant submitted a water supply report (WSR) (TN 255154) that replaced the original water supply assessment (TN 248320), which was made obsolete by the Burney Water District's decision to deny water supply to the Fountain Wind Project (BWD 2023). Although the WSR clarified many details regarding water supply for the Fountain Wind Project, it does not adequately provide details regarding the purveyor and source of the water supply, which is essential information to evaluate related environmental impacts.

During construction, groundwater would be pumped from private or public wells within five possible groundwater basins in the greater Redding area, or from the Burney Creek Valley groundwater basin and imported to the project site. This water source may also be utilized during project operations. This means that the location of groundwater extraction could be anywhere within a 600-square-mile area and in two possible directions from the project site. Moreover, the WSR did not explain why the amount of water proposed to be used during the 28-month construction period has increased from 49 acre-feet (AF) to 310.4 AF. In addition, by neither identifying a water purveyor, nor providing a letter of intent, will serve letter, or assurances from the water purveyor, the applicant is not complying with provisions of regulation (CCR, title 20, §§ 1701, Appendix B, (g) (14) (C) (v) & (g) (14) (C) (vi)). The WSR also contained several errors."

DATA REQUESTS

CEC DATA REQUEST WATER-1: Please identify the water purveyor that will supply the extracted groundwater for construction and possibly for operations, and provide documentation that the water purveyor intends to serve the project.

CEC DATA REQUEST WATER-2: Please identify the location, or locations, where groundwater would be extracted for project water supply.

APPLICANT RESPONSE:

CEQA does not require that an applicant provide a will serve letter or a letter of intent from a water purveyor. Nor does Appendix B require the submission of a letter intent, indicating there where a letter of intent "cannot be provided" that the applicant identify the "most likely water purveyor and discuss the necessary assurances from the water purveyor to serve the project. (App. B.(g)(14).v.) Nonetheless, the applicant has obtained a letter of intent to supply water required for construction and operations from Hat Creek Construction &

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Materials, Inc. (HCC), located at 24339 State Hwy 89, Burney, California, 96013. This supplier draws water from existing private wells owned and operated by it within the Burney Creek Valley Groundwater Basin. For more information on that basin and supplier, please see the updated Water Supply Report at sections 4.2 and 7. The supplier's Letter of Intent is included as Attachment A. Operational water supply is proposed to be obtained from an onsite well to be constructed at the O&M facility. Alternatively, HCC has indicated it can provide water during operations from the Burney Creek Valley Groundwater Basin.

WATER-3: Please explain the justification for increasing construction water demand from 49 AF to 310.4 AF.

The water demand calculations in the Water Supply Assessment submitted in January 2023 were originally performed by a third-party general engineering firm. In responding to the CEC's requested updates to the Water Supply Report in spring 2024, the Applicant consulted with a wind turbine construction firm with recent experience building wind projects in California and was able to obtain an appropriately more conservative water demand calculation for this location. As a result, the Applicant used these updated demand numbers for the Water Supply Report submitted most recently, which states a construction water demand of 310.4 AF. The single biggest driver of increased demand is the incorporation of a worst-case precipitation scenario for the construction period. Actual demand is likely to be less than 310.4 AF for construction. These updated calculations assume 100% of the construction water demand must be supplied, and there would be no reliance on normal rainfall or existing soil moisture for dust control or soil compaction.

Additional calculation methodology changes included:

- Compaction: changing the calculation methodology from gallons per ton of aggregate to gallons per cubic yards of aggregate and grading.
- Dust Control: changing the calculation methodology from gallons of water per acre to gallons of water per day for dry construction days
- Vegetation Establishment: increasing the acres of vegetation establishment from just the temporary laydown areas to the entire temporary disturbance area listed in the Project Description.
- Concrete Batching: assuming that all concrete needed for the project would be batched on-site (for a conservative water supply calculation even though the Project Traffic Impact Analysis assumes all concrete will be trucked to the site).
- Water for Fire Suppression during construction: added as a new category of water demand.

Collectively, these more conservative calculations resulted in a higher but potentially more accurate estimate of construction water demand.

Reference: **Response to California Energy Commission Data Requests on Water Supply Report and Revised Traffic Report, Dated April 16, 2024**

WATER-4: Please make the following corrections to the WSR:

- Page 2, Project Overview Map 1 of 2 – Include the location of the proposed groundwater extraction well.
    - **APPLICANT RESPONSE:** The proposed well will be located at the Operations & Maintenance facility, which is colored orange in the Project Overview Map. The precise location within this 5-acre area has not been determined.
- Page 6, Section 4.0. last sentence – Please reword the misleading sentence "The Burney Creek Valley Groundwater Basin is underlain by this type of aquifer" since it refers to a fractured volcanic rock aquifer and the Burney Creek Valley groundwater basin consists of Quaternary lake deposits (DWR 2003).
    - **APPLICANT RESPONSE:** sentence reworded to say "The aquifer underlying the Project area is a fractured rock aquifer."
- Page 11, Section 4.2.3. fifth sentence – The age of the Tehama and Tuscan formations is incorrectly identified as Pleistocene, but should be Pliocene.
    - **APPLICANT RESPONSE:** sentence reworded to say "The Tertiary deposits are the Pliocene Tehama Formation and the Tuscan Formation."
- Page 19, Section 7.2.1.1, second sentence, and page 20, Table 5 – Nine existing wells are identified based on DWR well completion reports; however, well WW-1 at the CalTrans Hillcrest Rest Area was destroyed on Aug. 7, 1992.
    - **APPLICANT RESPONSE:** Paragraph reworded to say "The historic source is a single well at the Caltrans Hillcrest Safety Roadside Rest Area (Water System No. CA4500283), located 1.96 miles west of the O&M facility. This well was installed in 1977 and served approximately 2,500 users per year until it was destroyed in 1992."
- Page 21, Section 7.2.1.1, third paragraph, second sentence – The statement "No well completion report or yield information was available for Well 2" (associated with Moose Camp) is inaccurate. DWR well completion report No. 16785 is a well that was installed at Moose Camp and is probably Well 2 (DWR 2023).
    - **APPLICANT RESPONSE:** DWR well completion report No. 16785 added to Table 5 and discussed in Section 7.2.1.1.
- Page 23, Section 7.2.1.2, fourth paragraph, sixth sentence, and Section 7.2.2.1, first paragraph, third sentence – Table 10 is referenced, but there is no Table 10 in the document; the document has only 8 tables.

Reference: **Response to California Energy Commission Data Requests on Water Supply Report and Revised Traffic Report, Dated April 16, 2024**

- **APPLICANT RESPONSE:** corrected to be Table 5.

- Page 24, Section 7.2.2.1, second paragraph, fourth sentence – Table 11 is referenced, but there is no Table 11 in the document; there are only eight tables in the document.
  - **APPLICANT RESPONSE:** corrected to be Table 5.

- Page 25, Section 8.0. first sentence – Please revise the inconsistent sentence “Construction of the Fountain Wind Project would use water during construction and operational phases.”
  - **APPLICANT RESPONSE:** corrected to read “The Fountain Wind Project would use water during construction and operational phases.”

Reference: **Response to California Energy Commission Data Requests on Water Supply Report and Revised Traffic Report, Dated April 16, 2024**

Attachment A: Hat Creek Construction and Materials, Inc. Letter of Intent to Provide Construction and Operational Water to the Fountain Wind Project

HAT CREEK
Construction & Materials, Inc

TEAMWORK - RESPECT - PRIDE - REPUTATION - COMMUNITY

May 8, 2024

From: Hat Creek Construction & Materials, Inc.

To: Fountain Wind, LLC

RE: Letter of Intent to Provide Construction and Operational Water to the Fountain Wind Project

Dear Mr. Woltag,

This letter confirms that Hat Creek Construction & Materials, Inc. (HCC) intends to supply water from its existing water supplies for use by Fountain Wind, LLC for the Fountain Wind Project, in accordance with the terms described below.

Hat Creek Construction & Materials, Inc. (HCC) has sufficient existing water supplies to supply the Fountain Wind Project. HCC has multiple existing pumps (one is 4,000 GPM). The existing average daily demand for HCC is a small fraction or our output capacity. HCC has sufficient supplies and intends to provide non-potable construction water and potable operational water to Fountain Wind, in the amount of approximately 150 acre feet of non-potable water in Year 1 of construction and 150 acre feet of non-potable water in Year 2 of construction and, if not supplied by a proposed on-site well, approximately 5.6 acre feet per year of potable water for operational purposes. If required, HCC anticipates being able to supply potable water for operational purposes for the life of the project, which is estimated to be 40 years.

HCC intends to supply this water to the Fountain Wind Project site using water trucks within its control. Fountain Wind agrees to pay HCC for the water and trucking services, which payment will be established under separate cover.

By signing this letter, HCC confirms its intent to supply water in accordance with these terms and that it is duly authorized to provide the above-described water supplies.

Acknowledged and agreed by:

Perry Thompson

President

Hat Creek Construction & Materials, Inc.

24339 State Hwy 89, Burney, CA 96013