DOCKETED	
Docket Number:	23-OPT-01
Project Title:	Fountain Wind Project
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Document Title:	ROC - Informal Data Requests_Questions
Description:	Report of Conversation
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Siting, Transmission and Environmental Protection Division		**FILE:** n/a
	PROJECT TITLE: Fountain Wind Project	**Docket:** 23-OPT-01

TECHNICAL AREA(s): WORKER SAFETY & FIRE PROTECTION + WILDFIRE			
Telephone	**Email** √	**Meeting Location:**	
NAME(s): Alvin J. Greenberg, Ph.D. Aurie Patterson, P.G.		**DATE:** 2/23/2024 2/26/2024 3/20/2024	**TIME:**
WITH: Caitlin Barns, Stantec			
SUBJECT: Informal Data Requests/Questions			

Supplemental data requests from CEC are dated 2/23/24 and 2/26/24. Responses from Caitlin Barns are dated 3/20/24.

WORKER SAFETY AND FIRE PROTECTION:

1. At the November 28, 2023 Scoping Workshop, the applicant mentioned that a construction work-stoppage would be called during "*higher-risk conditions*".

Data Request: Please provide a definition of and technical reasons for "higher-risk conditions," who would make that decision, the expected duration of any work stoppage, and if workers would stand-down at an on-site or off-site location or simply leave the area for the rest of the day.

Applicant's Response: The full statement from the applicant during the November 28, 2023 Scoping Workshop was, "A few examples of important resource protection efforts include the development of a fire prevention plan that will require construction work stoppages during higher risk fire conditions as well as operational coordination with Cal Fire." This commitment stems from the June 22, 2021 Shasta County Planning Department CEQA Staff Report (TN # 248293-2) which includes thirty four total Conditions of Approval ("COAs") from CAL FIRE / Shasta County Fire (see COA No.'s 77 through 111). Specifically, COA 104, 105, and 106 pertain to the creation of a Fire Prevention Plan as well as the associated Hazardous Operations requirements and associated construction work stoppages. CAL FIRE / Shasta County Fire COA #106 states the following:

Hazardous operations (as defined above) shall not be permitted in during (sic) the following periods:

1. Anytime flammable ground vegetation exists and if any one of the following conditions exist:

a. The air temperature is 90 degrees Fahrenheit or greater.

b. The wind speed is 8 miles per hour (mph) or greater.

c. The relative humidity is 20% or less.

d. Exceptions:

i. When the wind speed is 15 mph or less and the relative humidity is 60% or greater.

ii. When the wind speed is 15 mph or greater and the relative humidity is 80% or greater.

Note: Weather readings shall be taken on site on a regular basis. Logs of the regular weather readings shall be kept and provided to the Fire Marshal or its designee(s) upon request.

2. Anytime during the declared fire season when the wind speed is 25 mph or greater.
3. Anytime during the declared fire season when the relative humidity is 10% or less.
4. Anytime the National Weather Service, Sacramento Office declares Red Flag Warning.

Additionally, COA 107 states that "Permittee shall provide a "Risk Manager" to be available on site whenever construction activities are in progress. The Risk Manager shall have oversight authority and shall be the point of contact for the CAL FIRE / SCFD." It is anticipated that the designated Risk Manager would monitor the aforementioned weather conditions and make the decision. The duration of the work stoppage, and where the workers would stand-down, would likely be dictated by the weather forecast, predicted duration of the weather events outlined in COA 106 as well as the procedures outlined in the project Fire Prevention Plan that will be created in coordination with CAL FIRE / Shasta County Fire prior to commencement of construction.

2. Staff is unaware of the need for workers or contractors to gain access to the turbines and safety measures to be followed during commissioning and operations.

Data Request: Please provide specific details on the necessity of gaining access to the turbines, frequency of need, how access would be gained and safety measures to be followed.

Applicant's Response: Access inside the wind turbines will be required at different times through the construction, commissioning and operation of the facility. Access to the turbine is through a locked door located at the base of the tower. During construction workers must access the inside of the turbine to make the bolted

connections for the tower sections, nacelle and the blades. Entry into the wind turbines is also frequently required during construction to perform QA/QC inspections and complete any punch list work to ensure the construction is complete. The commissioning of the wind turbines requires technicians to enter the turbine to perform tests to confirm the turbine is operating correctly and that the internal systems are properly installed. During the operation of the facility maintenance of the wind turbines takes place at predetermined intervals, usually once or twice a year whereby all important mechanical and electrical assemblies are checked.

Before a worker can access and climb up to the nacelle of a wind turbine they must be trained and certified. When climbing to the nacelle of the turbine, they will utilize a climb assist, which is a sophisticated pulley system integrated into the ladder structure of the turbine. A motor installed at the tower's base places tension on a cable loop running to a pulley, or sheave, at the top of the ladder. The motor provides enough lift to take 40-60% of the climber's weight. The climber, not the motor, determines the speed of the climb. The climber wears a step-in harness that goes around the waist and each leg, as well as over the shoulders. In the event a climber begins to fall, the separate fall arrest system will engage and safely arrest the fall so the climber can get back under control. There are multiple platforms in the wind turbine tower. A climber going up a turbine will enter the platform through a safety hatch. Once on the platform, the climber closes the safety hatch and can perform work and/or rest.

WILDFIRE:

Data Request: Are the 5000-gallon tanks on the project site that will be used for construction and operation fire suppression gravity fed or will they have a pump system to dispense the water? Is it correct to assume these would be steel tanks, not plastic?

Applicant's Response: The commitment to install 5000-gallon water tanks the stems from the June 22, 2021 Shasta County Planning Department CEQA Staff Report (TN # 248293-2) which includes thirty four total Conditions of Approval ("COAs") from CAL FIRE / Shasta County Fire (see COA No.'s 77 through 111). Specifically, COA No. 103 pertains to water storage facilities and states the following:

Water storage facilities of not less than 5,000 gallons shall be provided for firefighting purposes in strategic locations within the site. Such locations shall be noted on the road map plan. The number and location of such water supplies shall be determined in cooperation with CAL FIRE / SCFD and the Permittee. The risk of freezing shall be considered when determining the type and location of water storage facilities.

Preferably, the applicant would consult with CAL FIRE / Shasta County Fire as to the type of tank and associated water dispensing method before a final decision is made. Absent of a recommendation directly from CAL FIRE / Shasta County Fire it is assumed that the tanks would most likely be gravity fed steel tanks.