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Project Title:	Mission Rock Energy Center
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<b>Document Title:</b>	Data Requests, Set 2A (Nos. 134-153)
Description:	N/A
Filer:	Mike Monasmith
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#### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



December 29, 2016

Mitch Weinberg Calpine Company 4160 Dublin Boulevard, Suite 100 Dublin, CA. 94568

RE: MISSION ROCK ENERGY CENTER (15-AFC-02) DATA REQUESTS, SET 2A (Nos. 134 – 153)

Dear Mr. Weinberg;

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified herein. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the project will result in significant impacts, 3) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 4) assess potential mitigation measures.

This request is being made in the areas of Noise and Vibration (Nos. 134-138), Project Description (Nos. 139-143) and Soil and Water Resources (Nos. 144-153). Written responses to the enclosed data requests are due to the Energy Commission on or before January 30, 2017.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to both Commissioner Karen Douglas, Presiding Committee Member for the Mission Rock Energy Center, and me, within 20 days of receipt of this letter. The notification should contain the reasons for not providing the information, the need for additional time, or the grounds for any objections. If you have any questions, please call me at (916) 654-4894, or E-mail me at: <a href="mailto:mike.monasmith@energy.ca.gov.">mike.monasmith@energy.ca.gov.</a>

Sincerely,

Mike Monasmith Siting Project Manager

Enclosure: Data Requests, Set 2A

# MISSION ROCK ENERGY CENTER (15-AFC-02) DATA REQUESTS SET 2A (Nos. 134 – 153)

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**Technical Area:** Noise and Vibration Author: Christopher Dennis

#### Background

The Application for Certification (AFC) for Mission Rock Energy Center (project) describes that the project would operate during the day and remain completely shutdown at night (AFC § 2.1.17). Nighttime operation of the project, while it may occur, would be relatively rare and full-load nighttime operation would be even less frequent (AFC § 5.7.3.3). However, it is not clear in the AFC, if the project's combustion turbine generators (CTGs) would need to operate at night for the purpose of recharging the battery storage system or to spin their generators into the synchronous condenser mode. In these instances, the project may create potentially significant noise impacts during the operation of the CTGs. Thus, to fully analyze the project's nighttime noise impacts at the nearby residences, staff needs to know the following information.

### **Data Requests**

134. Please explain how many CTGs (combustion turbine generators), if any, would be expected to operate between 10 p.m. and 7 a.m., and for what purpose(s) (i.e., energy production, voltage support, grid reliability, recharge of the battery storage system, load following, etc.).

### **Battery Storage System**

- 135. Please explain how many CTGs, if any, would be expected to operate between 10 p.m. and 7 a.m. in order to recharge the battery storage system.
- 136. Under this scenario, please provide the project's expected noise level at noise receptors R1a, R1b, and R2, and explain how often this event is anticipated to occur between 10 p.m. and 7 a.m. on an annual basis.

# Synchronous Condenser

- 137. Please explain how many CTGs, if any, would be expected to operate between 10 p.m. and 7 a.m. in order to spin Mission Rock generators into the synchronous condenser mode.
- 138. Under this scenario, please provide the project's expected noise level at R1a, R1b, and R2, and explain how often this event is anticipated to occur between 10 p.m. and 7 a.m. on an annual basis.

**Technical Area:** Project Description

Author: Lisa Worrall

# **Background: Pull and Tensioning Sites**

Staff received responses to staff's Data Request (DR) No. 123 from Set 1b on November 7, 2016 (TN 214394). Staff submitted clarifying questions to the applicant's consultant but did not receive all of the clarification needed. The applicant's response to staff's DR No. 123 included a table (DR123, Generator tie-line disturbance area) indicating the project would have a temporary disturbance of 2.75 acres for the staging area, with a note in the comment column, "staging within the right-of-way plus pull and tensioning sites". Staff requested clarification from the applicant's consultant to confirm the location of the pull and tensioning sites so that staff knows where the pull and tensioning sites are within the right-of-way, and where they would extend beyond the right-of-way (how many sites, where each would be located, and the total area of temporary disturbance for each). The most recent communication on this subject on November 23, 2016 indicated that the consultant would check with the transmission construction engineers regarding the pull and tensioning sites; however, staff has not received further communication on the subject.

Staff cannot identify where the staging or pull and tensioning site(s) are from the figures at DR121-1 (on Pages 1-3). Staff requests the following necessary information to assess cultural resource and biological resource impacts.

#### **DATA REQUEST**

- 139. Does the 2.75-acre staging area include the area for the pull and tensioning sites, or is the area for the pull and tensioning sites an additional temporary disturbance to the 2.75-acres?
- 140. Is the 2.75-acre staging area included entirely within the transmission right-of-way?
- 141. Are the pull and tensioning sites completely within the transmission right-of-way, or do they extend beyond the right-of-way?
- 142. If the pull and tensioning sites extend beyond the right-of-way, please describe how much of the sites are inside versus outside of the right-of-way.
- 143. Please identify on an aerial map, the location(s) and size(s) of the staging areas and pull and tensioning sites, both inside and outside of the 75-foot wide transmission right-of-way.

**Technical Area:** Soil and Water Resources

Author: Marylou Taylor

The applicant has not yet responded to Data Requests Nos. 74, 75, 83, and 84. In addition to these pending requests, staff has new and follow-up data requests regarding previously submitted responses for the Mission Rock Energy Center (Mission Rock), shown below.

### **Background**

The applicant's response to Data Request No. 73 did not provide enough information for staff to evaluate the potential impacts of filling and raising the project site. Potential impacts during both construction and operation can occur from erosion and sedimentation where fill is placed in the floodplain. Fill slopes can be particularly vulnerable if they are inadequately protected and managed. Staff needs information demonstrating how the site and its 2:1 fill slopes would be protected from erosion and sedimentation.

#### **DATA REQUESTS**

- 144. Describe how side slopes would be protected from erosion during placement of imported fill material. Provide a topographic site map that identifies the location of preliminary, site-specific best management practices (BMPs) that would protect side slopes from erosion during placement of imported fill material.
- 145. Describe any temporary soil disturbance outside the property line prior to and during placement of imported fill material. Disturbance includes, but is not limited to: removal of existing drainage structures, installation of construction BMPs, demolition of existing pavement, and access of equipment or vehicles. Include on the topographic site map (from Data Request No. 144 above) the boundaries of these soil disturbance activities.
- 146. Describe how side slopes would be protected from erosion and scour during Mission Rock construction (when imported fill material is placed and after it is compacted). Provide a topographic site map that identifies the location of preliminary site specific BMPs for soil stabilization that would be appropriate for the size of soil disturbance, slope steepness, slope length, and soil erodibility.
- 147. Describe how onsite storm water would be managed prior to installation of the final grouted rip rap drainage outfall.
- 148. Describe how side slopes would be protected from erosion after Mission Rock construction is complete. Indicate whether stabilization is vegetative or non-vegetative (or both) and approximate time needed for stabilization to be fully effective (e.g. curing time or mature growth).

### **Background**

Section 5.11.2 and Appendix 5.11A of the AFC discuss soil erosion during construction. Staff notes that the applicant's calculations to estimate soil loss do not account for the project's 2:1 side slopes.

#### **DATA REQUESTS**

- 149. Please update soil loss estimates during construction to include potential erosion of proposed 2:1 side slopes.
- 150. Also estimate the amount of soil erosion per year after construction is complete, comparing results with and without mitigation. If stabilization methods need time to be fully effective (as indicated above in Data Request No. 148), discuss maintenance required to reach full effectiveness.

### **Background**

The applicant's response to Data Request No. 78 stated that construction activities would use recycled water from Limoneira that would be delivered and stored in a tank at the Mission Rock site. The recycled water tank would be mounted on supports and filled with water by water tanker truck deliveries as needed. The response to Data Request No. 76 indicates that recycled water from Limoneira would not be available until initial commissioning of Mission Rock (estimated March 2020).

#### **DATA REQUESTS**

- 151. Please clarify whether recycled water from Limoneira would be used for construction.
- 152. If recycled water from Limoneira is not available for construction, please identify an alternative supply and provide all information demonstrating there is an adequate supply available and the applicant has the necessary approvals to use the supply.

#### **Background**

The applicant objected to Data Requests Nos. 80 and 81 regarding the availability and reliability of the recycled water to be supplied by Limoneira. Based on the discussion at the August 26, 2016 staff workshop, the applicant does not believe this information is required to evaluate the proposed project. Staff verified with the Los Angeles Regional Water Quality Control Board (LARWQCB) that Limoneira's wastewater treatment plant is allowed to use this recycled water to irrigate Limoneira's alfalfa fields, but their permit would need to be revised to allow new end uses at Mission Rock. Although staff has no specific reason to believe that Limoneira would not obtain LARWQCB approval, their current permit does not allow uses alternative to application on the alfalfa fields. If no alternate or back-up source of recycled water is evaluated and approved, Mission Rock would not be able to operate if and when recycled water from Limoneira is not available.

## **DATA REQUESTS**

153. Please provide information about any alternate or back-up source of recycled water and provide all information demonstrating there is an adequate and reliable supply available and the applicant has the necessary approvals to use the supply.