

## DOCKETED

<b>Docket Number:</b>	15-AFC-02
<b>Project Title:</b>	Mission Rock Energy Center
<b>TN #:</b>	212305
<b>Document Title:</b>	Data Requests Set 1A (Nos. 108-114)
<b>Description:</b>	CEC staff's Data Requests Set 1A (Nos.108-114) Mission Rock Energy Center (15-AFC-O2)
<b>Filer:</b>	Cathy Hickman
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	7/15/2016 8:04:04 AM
<b>Docketed Date:</b>	7/15/2016

**CALIFORNIA ENERGY COMMISSION**

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



July 15, 2016

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

**RE: MISSION ROCK ENERGY CENTER (15-AFC-02) DATA REQUESTS,  
SET 1A (Nos. 108-114)**

Dear Mr. Weinberg;

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests, Nos. 108-114). The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This request is being made in the areas of Hazardous Materials Management (Nos. 108-112) and Worker Safety/Fire Protection (Nos. 113-114).

Per our earlier mutual agreement, written responses to the enclosed data requests are due to the Energy Commission staff on or before September 1, 2016. Written responses to outstanding data requests, Nos. 1-107 are also due to Commission staff on or before September 1, 2016. If you are unable to provide the information requested, need additional time, or object to providing the requested information in Data Requests Set 1 (Nos. 1-107) and Data Requests Set 1A (Nos. 108-114), please send a written notice to both Commissioner Karen Douglas, Presiding Committee Member for the Mission Rock Energy Center, and me by August 1, 2016 and August 5, 2016, respectively. The notifications 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: [mike.monasmith@energy.ca.gov](mailto:mike.monasmith@energy.ca.gov).

Sincerely,

Mike Monasmith  
Siting Project Manager

Enclosure: Data Requests

**MISSION ROCK ENERGY CENTER (15-AFC-02)  
DATA REQUESTS SET 1A (Nos. 108 – 114)**

**Table of Contents**

**Hazardous Materials Management..... 3**  
**Worker Safety / Fire Protection..... 4**

**Technical Area: Hazardous Materials Management**  
**Author: Dr. Alvin Greenberg**

**Background**

The project would store and use various hazardous materials as described in the AFC in Tables 5.5-1, -2, and -3. The AFC includes a listing in those tables entitled “*Cleaning chemicals/detergents, periodic cleaning of combustion turbine, 3000 gallons*” without naming the chemicals and their specific volumes. The AFC (page 5.5-9) mentions that the Off-site Consequence Analysis (OCA) “*will be performed during the AFC process*” and includes a modeling protocol in Appendix 5.5A.

Additionally, because the project site currently sits in the 100-year flood plain of the Santa Clara River, the applicant is proposing to raise the level of the entire site by up to 10 feet by the application of soils to the site (AFC Appendix 5.15A). However, the engineering design of the added soils is not described nor is the degree of resistance to flood waters discussed. The specifications for the aqueous ammonia tank is also described only in a general sense in AFC Appendix 2A, page 2A-7 and the engineering controls used to safeguard chemical storage tanks during flood or massive rain events are not described.

Staff needs this additional information in order to be able to complete its assessment of the potential for on-site and off-site impacts.

**DATA REQUESTS**

108. Please list the various chemicals that comprise the “*Cleaning chemicals/detergents, 3000 gallons*” that would be used for the periodic cleaning of combustion turbines. Include chemical name, CAS number, physical state, amount, type of storage (drum or tote), and exact location on site where it will be stored.
109. Please conduct the OCA described in Appendix 5.5A and provide the input variables, the model used, and the results to staff. Please note that staff has difficulty understanding the rationale for using the SLAB air dispersion model (and the use of a separate model to generate the source term) and much prefers the use of the ALOHA air dispersion model (which generates its own source term).
110. Please provide a revised AFC section 5.5.3.5 *Fire and Explosion Risks* and include a discussion of the potential for fire, explosion, and leaks involving the twenty Lithium-ion battery units proposed to be placed on the site. Please also revise Tables 5.5-1, 5.5-2, and 5.5-3 and section 5.5.5.2 (*Operation Phase Mitigation Measures*) to include the Lithium-ion battery units.
111. Please provide a description of all on-site ammonia leak detectors and their proposed locations.
112. Please describe in greater detail how the aqueous ammonia storage tank, any other hazardous materials tanks, totes, and drums, and the Lithium-ion battery units will be protected and secured from flood waters of the Santa Clara River so that no hazardous material or battery will be swept away downriver or moved from its location on-site during a flood or massive rain event.

**Technical Area: Worker Safety/Fire Protection**  
**Author: Dr. Alvin Greenberg**

**Background**

The project would store and use various hazardous materials as described in the AFC in Tables 5.5-1, -2, and -3 and the AFC has described potential worker safety and fire hazards posed by several of these hazardous materials and other activities in Table 5.16-2 as part of an outline of an *Operation Hazard Analysis* (AFC section 5.16.2.2). This Hazard Analysis fails to include any discussion on the potential for fires, leaks, or explosions of the twenty (20) Lithium-ion battery units proposed for the power plant. In addition, the *Training and Safety Programs* discussed in AFC section 5.16.2.3 also do not include a discussion on the safety program to address failures of the Lithium-ion battery units.

Staff needs additional information in order to be able to complete its assessment of the potential for impacts to workers, the public or first responders.

**DATA REQUESTS**

113. Please provide a Hazard Analysis of the potential for fire, explosion, and leaks involving any or all of the twenty Lithium-ion battery units. Please include a brief history of known fires, explosions, and leaks involving these specific Lithium-ion batteries and those that are very similar. Please provide the manufacturer's product sheet and MSDS for the batteries.
114. Please provide an outline of a revised *Training and Safety Program* discussed in AFC section 5.16.2.3 that would include how to address the potential for fire, explosion, and leaks involving any or all of the twenty Lithium-ion battery units.