

**DOCKETED**

<b>Docket Number:</b>	03-AFC-02C
<b>Project Title:</b>	Los Esteros Phase II Compliance
<b>TN #:</b>	225546
<b>Document Title:</b>	Cooling Tower Amendment to Los Esteros Critical Energy Facility License, Staff's Data Requests, Set 1, A1 Through A8
<b>Description:</b>	Letter
<b>Filer:</b>	Marichka Haws
<b>Organization:</b>	California Energy Commission
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**CALIFORNIA ENERGY COMMISSION**

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SACRAMENTO, CA 95814-5512  
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October 30, 2018

Ms. Barbara McBride  
Director of Environmental Services  
Calpine Corporation  
4160 Dublin Blvd.  
Dublin, CA 94568

**COOLING TOWER AMENDMENT TO LOS ESTEROS CRITICAL ENERGY FACILITY  
LICENSE (03-AFC-02C), STAFF'S DATA REQUESTS, SET 1, A1 THROUGH A8**

Dear Ms. McBride,

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

These data requests, numbered A1 through A8, are being made in the technical areas of Air Quality, Soil and Water Resources, and Visual Resources. Written responses to the enclosed data requests are due to the Energy Commission staff on or before November 30, 2018.

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 me within 20 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 653-8236 or email me at [John.Heiser@energy.ca.gov](mailto:John.Heiser@energy.ca.gov).

Sincerely,

A handwritten signature in black ink that reads "John Heiser".

John Heiser  
Siting Project Manager

Enclosure (Data Request Packet)  
cc: Docket (03-AFC-02C)  
POS List

**COOLING TOWER AMENDMENT TO LOS ESTEROS  
CRITICAL ENERGY FACILITY LICENSE  
(03-AFC-02C)**

**Energy Commission Staff's Data Requests Set 1, A1 – A8**

**OCTOBER 30, 2018**

**Technical Area:** Air Quality  
**Author:** Jacquelyn Record

## **BACKGROUND**

The Petition to Amend (PTA) proposes to increase the cooling tower water circulation rate from 73,000 to 90,000 gallons per minute (gpm). The project owner states that “the impacts on air quality will be slightly increased for PM10/PM2.5 and HAPs as a result of the proposed cooling tower modification.” Staff notes that the amendment application indicates that there would be about 1.14 tons per year (tpy) PM10/PM2.5 increase. However, the amendment application also states that the facility owner already provided PM10 mitigation through the surrender of “SO<sub>2</sub> offsets at a 3:1 ratio” at the time of original permitting and therefore no additional mitigation is required.

### **Data Request:**

- A1. Please provide a more detailed explanation discussing why the potential emissions increase is already accounted for in past mitigation surrendered by numerically detailing and accounting for actual emissions and expected potential to emit emissions.

## **BACKGROUND**

The project owner states that “LECEF proposes to conform the conditions of certification to the terms set forth in the Project’s Bay Area Air Quality Management District (BAAQMD) issued Title V Operating Permit.” The project owner is requesting approval to rely on quarterly natural gas sulfur content data from vendor analysis available on PG&E’s website rather than the currently required monthly onsite sulfur testing.

### **Data Request:**

- A2. To assist in our consideration of this request, please provide your monthly sulfur testing data over the past 5 years and compare your test results to corresponding PG&E data.

**Technical Area:** Soil & Water Resources  
**Author:** Mike Conway

## **BACKGROUND**

The Petition to Amend (PTA) proposes to increase the cooling tower water circulation rate from 73,000 to 90,000 gallons per minute (gpm). The project owner states that the purpose of the modification is to optimize the current cooling tower design and increase the circulation rate to the design capacity. They also state no physical modification is necessary in order to achieve the increase in the circulation rate because all the necessary equipment needed to accommodate increased flow rates is in place. The project owner provides no additional detail about why the modification is needed now rather than at the time Phase 2 of the project was implemented. There is also insufficient information or analysis of changes in water quantity and quality that may result from the change.

Staff expects the proposed modification to result in increased consumption of recycled water and increased discharge of process wastewater. The PTA however does not provide any detail about how the proposed modification would change the operational water balance.

Condition of Certification **SOIL & WATER 6** specifies that any significant changes in the water supply shall be noticed in writing to the CPM at least 60 days prior to the effective date of the proposed change.

Condition of Certification **SOIL & WATER 7** requires the owner to provide the compliance project manager (CPM) with a copy of the User Agreement for recycled water under the South Bay Water Recycling (SBWR) Program. The condition also requires the owner to submit details about any “planned modification affecting recycled water use rates.”

Condition of Certification **SOIL & WATER 8** requires the owner to provide the CPM with information necessary to satisfy the Industrial Wastewater Discharge Permit from the San Jose/Santa Clara WPCP.

Staff is concerned that this PTA has not adequately addressed whether compliance with these conditions can be achieved. Staff needs additional information to evaluate whether any changes to the conditions of certification are necessary.

### **Data Requests:**

- A3. Please provide a more detailed explanation discussing why the modification is needed now rather than at the time Phase 2 of the project was implemented. Include a discussion of conditions or circumstances that may have affected the decision to wait until now, such as performance improvements or regulatory requirements.
- A4. Please provide estimates of how much the proposed modification would change water consumption and discharge rates.

- A5. Please provide estimates of how the proposed modification would change wastewater discharge quality.
- A6. Please discuss whether any change in quantity and quality of wastewater would require a change to the Industrial Wastewater Discharge Permit.
- A7. Please provide details about any necessary changes to the recycled water User Agreement.

**Technical Area:** Visual  
**Author:** Scott Polaske

## **BACKGROUND**

Condition of Certification **VIS-6** of the Los Esteros Critical Energy Facility Phase II October 2006 Final Decision requires the project owner to reduce the six-cell cooling tower visible vapor plumes through the use of a dry-cooling section that has a stipulated plume abatement design equivalent to or better than that depicted in the Data Request Response No. 53 Attachment **VIS-3** Fogging Frequency Curve, dated April 2004. The water circulation flow rate is a variable in modeling the Fogging Frequency Curve, previously modeled at 73,000 gallons per minute.

### **Data Request:**

- A8. Please provide evidence that the project would continue to comply with VIS-6 with the increased water circulation rate through the cooling tower to a level of 90,000 gallons per minute.