

DOCKETED

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Data Request Response

Sutter Energy Center

Petition to Amend #6

Response to Informal Data Requests 1–9

Submitted to
California Energy Commission

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Contents

Section	Page
Introduction	1
Water and Soil (1)	2
Land Use (2)	3
Traffic and Transportation (3–9).....	4

Table

IDR1-1	Soil and Water – Estimated Water Consumption for Construction Activities
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Introduction

Attached are Calpine Construction Finance Company, L.P.'s (CCFC or the Applicant) responses to the California Energy Commission (CEC) Informal Data Requests (IDR) 1 through 9 for the Sutter Energy Center (SEC) (97-AFC-2C) Petition to Amend (PTA) #6, received via email on May 16, 2013. The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as the CEC presented them and are keyed to the Informal Data Request numbers (1 through 9).

New or revised graphics or tables are numbered in reference to the Informal Data Request number. For example, the first table used in response to informal Data Request 2 would be numbered Table IDR2-1. The first figure used in response to Informal Data Request 42 would be Figure IDR42-1, and so on. Figures or tables from the SEC PTA that have been revised have "R1" following the original number, indicating revision 1.

Additional tables, figures, or documents submitted in response to a data request (for example, supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of each discipline-specific section and are not sequentially page-numbered consistently with the remainder of the document, though they may have their own internal page numbering system.

Water and Soil (1)

Construction Water Use

1. Staff needs estimated water-use data for the activities associated with building the proposed new plant equipment and substation. Please expand the table to include all categories of water use that would pertain during construction and then fill in the water-use data for all categories.

Response: As requested, please see Table IDR1-1, which identifies the estimated water consumption anticipated during construction activities.

TABLE IDR1-1

Soil and Water – Estimated Water Consumption For Construction Activities

Construction Activity	Maximum Daily Water Usage (gallons)	Total Water Usage (gallons)	Water Source	Assumptions
Hydrostatic Testing	10,000	100,000	Existing Plant System	—
Dust Suppression	20,000	1,800,000	Existing Plant System	If needed.
Soil Compaction	800	20,000	Existing Plant System	—
Concrete Pour	2,700	110,000	Existing Plant System	—
Fire Suppression	—	—	Existing Plant System (for plant area only)	If fire suppression is required, flow rate is estimated to be 500 gpm. As fire suppression use is unpredictable, it is not included in the Total Water Usage.
TOTAL	33,500	2,030,000	Existing Plant System	—

Land Use (2)

Williamson Act Contract

2. *Staff needs to know if the parcel proposed for the PG&E substation is under a Williamson Act contract. If so, please provide a copy of the recorded Williamson Act contract for the parcel. If the parcel is under the Agricultural Preserve resolution, please also provide a copy of the contract and/or resolution for the parcel.*

Response: There are no parcels that are under Williamson Act contract along the generator tie-line route or at the substation site. The land is classified as “non-enrolled land.” This is documented by the map available on the Sutter County government internet site:

ftp://ftp.consrv.ca.gov/pub/dlrp/WA/sutter_12_13_WA.pdf

Traffic and Transportation (3-9)

Aviation Hazard, Form 7460-1

Staff has identified a private airport, Vanderford Ranch Company Airport, approximately 2.9 miles northwest of the proposed PG&E substation and 2.7 miles from the Sutter Energy Center. Consequently, staff needs to determine whether Federal Aviation Administration (FAA) Form 7460-1, Notice of Proposed Construction or Alteration, would need to be filed with the FAA for the proposed modifications to the plant. To make that determination, staff needs the information requested in numbers 3-5, below.

3. *Please provide the height above ground level of the tallest substation structure and the height of the tallest crane that would be used to install the tallest structures in the PG&E substation.*

Response: The substation will be designed and constructed by PG&E in the future and, therefore, dimensions of equipment and construction techniques are unknown at this time. Once a design has been provided, the California Public Utilities Commission will conduct the environmental permitting review. However, the Project Owner recognizes that Staff needs to review the potential effects of the substation as a connected action to and consequence of the project. For this reason, we are providing estimates of the scale of the substation equipment. Based on similar circumstances (500 kV substation) it is estimated that the tallest structure will be approximately 90 feet in height. Crane height is estimated to be approximately 150 feet.

Under 14 CFR Part 77.9, FAA requires notification of new construction if the following applies:

- Any construction or alteration that is more than 200 feet above ground level
- If construction or alteration occurs within the horizontal distances identified in 14 CFR Part 77.9 (b) at a public use, military airport, airport operated by a Federal agency or the DOD, or airport or heliport with a FAA-approved instrument approach procedure.

The SEC substation construction does not fall under these requirements in relation to the Vanderford Ranch Company Airport because the Vanderford airport is a private airport and does not have a FAA-approved instrument approach procedure. In addition, construction equipment and substation components are below the 200-foot threshold requiring FAA notification. Therefore an FAA Form 7460-1 is not required for the proposed changes to SEC.

4. *Please provide the height above ground level of the highest structure in the bank of step-up transformers proposed for installation adjacent to the new PG&E substation and the height of the tallest crane that would be used to install the highest structures.*

Response: As described in the response to IDR #3, the substation has not yet been designed. It is estimated, however, that a single step-up transformer will be 24 feet x 40 feet x 25 feet tall. Crane height is estimated to be approximately 150 feet.

5. *Please provide the height above ground level of the tallest crane that would be used to install the air-cooled condensers at the SEC plant.*

Response: As described in the response to IDR #3, the final design has not yet been determined, and contractors have not yet been selected. However, it is estimated that the crane height would be approximately 150 feet.

Access Road Weight and Width Restrictions

Staff is concerned about the capability of the local access roads to accommodate the widest and heaviest construction equipment needed to build the substation, the step-up transformer bank adjacent to the proposed substation, and the gen-tie line. Staff is also concerned about impacts that could result from the need to modify roads to facilitate construction equipment access. To assess potential impacts, staff needs the information in nos. 6-9, below.

6. *Please provide estimates of the weight of the heaviest piece of construction equipment and the width of the widest piece of construction equipment that would be used to construct the underground gen-tie line, the bank of step-up transformers, and the substation.*

Response: As described in the response to IDR #3, the final substation design will be prepared by PG&E who will design, construct, own, and operate the substation at some time in the future. Therefore, final weight and width estimates for those items are unknown. However, it is estimated that the heaviest piece of equipment for the SEC modifications onsite would be the heat recovery steam generator high-pressure drum, estimated at 112.5 tons, and the widest width of any shipment for the site would be approximately 16 feet wide. Equipment for the substation and step-up transformers are assumed to be smaller than this.

7. *Please provide a best supposition of which local and regional roads or highways PG&E might use to build and then maintain the new substation once it is operational, and include weight limits and width restrictions for these roads.*

Response: It is anticipated that PG&E would follow the same truck delivery routes presented in Figure 3.11-1 of the Petition to Amend, and as required under Conditions of Certification (COC) TRANS-4 and TRANS-5 of the Final Decision for the SEC. In addition, as required under COC TRANS-1, the project is required to comply with Caltrans and Sutter County limitations on vehicle sizes and weights. In most cases,¹ Sutter County defaults to specifications in the California Vehicle Code with a maximum width of 102 inches, and a maximum gross weight for a vehicle combination of 80,000 pounds for all roads.

8. *The two routes that roughly bound the proposed substation site are Boulton Road, a gravel county road to the east, and a levee road for the Sutter Bypass to the west. Please provide an estimate of the weight and width capacity of these roads, and of any others, over which construction equipment would be deployed to construct the transmission line and the transformer bank.*

Response: Under Sutter County code, 1137-102, a load limit is not effective on unimproved roads until appropriate signs are erected providing notice at that road of weight restrictions. Once signs are erected, transportation loads in excess of the posted weight limit are prohibited. As no signs are currently located on Boulton Road and the levee road for the Sutter Bypass, there are no load restrictions on these roads.

9. *If any roads are not capable of handling the weight and/or width of the largest equipment, please describe how this would be resolved, including any remediation that might need to be done after construction is completed to restore any impacted land bordering the roads to pre-construction condition.*

Response: As described in the response to IDR #6, it is not known at this time the exact equipment dimensions to be used during construction of the substation and step up transformers. However it is anticipated that if any roads are damaged during construction, the roads will be repaired as required by COC TRANS-7.

¹ Under Sutter County Ordinance 1137-090, Construction Hauling, the Director of Public Works can impose conditions and/or requirements upon persons who engage in the short-term intensive hauling of loads exceeding 14,000 pounds with a cumulative total haul of greater than 1,000 tons within a 90 day period for construction purposes. In this case the Project Owner may be held to additional requirements including use fees and/or repair and restoration work to mitigate the impact on local County Roads.