

DOCKETED

Docket Number:	19-SPPE-03
Project Title:	Sequoia Data Center
TN #:	235936
Document Title:	Staff's Response To Committee Questions
Description:	N/A
Filer:	Lisa Worrall
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	12/14/2020 3:57:27 PM
Docketed Date:	12/14/2020



**State of California
State Energy Resources Conservation and
Development Commission**
1516 Ninth Street, Sacramento, CA 95814
1-800-822-6228 – www.energy.ca.gov

**APPLICATION FOR SMALL POWER PLANT
EXEMPTION FOR THE:**

***SEQUOIA BACKUP GENERATING
FACILITY***

Docket No. 19-SPPE-03

STAFF'S RESPONSE TO COMMITTEE QUESTIONS

In its Notice of Committee Conference (Notice) docketed on December 4, 2020 (TN235857), the Committee included the following direction:

Based on the written comments filed by CARB [the California Air Resources Board] and the parties' filed responses, the Committee wishes to resolve the issues raised by CARB and BAAQMD [the Bay Area Air Quality Management District] during the CEC's initial consideration of the Proposed Decision and adoption of the Motion to Remand. To that end, the Committee directs the parties and requests that CARB and BAAQMD respond to the following questions and request for information no later than 5:00 p.m. on December 14, 2020.

1. The parties are directed to meet and confer, and invite participation by CARB and BAAQMD, to determine whether any of the outstanding issues identified in the Order can be resolved among the parties and what issues remain in dispute. The parties are encouraged to prepare a joint statement setting out their positions as to the identified issues, as well as responses to the questions set forth below. If the parties are unable to prepare a joint statement, then they are to submit individual statements.

a. Is the Applicant's modeling, relied upon by Staff in the IS/PMND, adequate for the analysis of NO₂ impacts from routine testing and maintenance operations? If not, describe why the analysis is not adequate and what would cure the described inadequacies?

b. Can scenario modeling be used to bound a range of potential impacts from emergency operations? Are there other options to assess impacts of

emergency operations? If so, how long will it take to perform those options?

2. The Committee asks CARB or BAAQMD, respectively or jointly, to provide any additional information/data they deem relevant to resolving the outstanding issues identified by the CEC in the Order. Further, the Committee requests that CARB and BAAQMD explain the relevance of any such information/data and how the Committee should utilize such information/data.

The parties (CEC staff, applicant, and intervenor Robert Sarvey) participated in a meet and confer session on Tuesday, December 8, 2020. BAAQMD and CARB were invited to participate as directed by the Committee, with CARB being represented at the meeting by Ellen Peter, Chief Counsel and Wesley Dyer, Attorney.

The parties discussed the issues identified in the Notice, including the written questions, “to determine whether any of the outstanding issues identified in the Order can be resolved among the parties and what issues remain in dispute” and furthermore to determine whether a joint statement could be prepared to capture the parties’ respective positions. Staff attempted to establish areas of agreement on which a joint statement could be based. Intervenor Robert Sarvey indicated he preferred to author an individual statement. Staff and applicant have filed individual statements as well.

Staff continues to believe the analysis presented in the Committee’s Proposed Decision is comprehensive and accurately and adequately presents the project’s potential environmental impact as required by the California Environmental Quality Act (CEQA) and the Warren-Alquist Act.¹ Nevertheless, staff understands the Committee would like further discussion of potential impacts to try to address CARB’s and BAAQMD’s comments and staff will endeavor to help explore what this additional analysis should contain.²

With respect to the specific questions included in the Notice, staff responds as follows:

a. Is the Applicant’s modeling, relied upon by Staff in the IS/PMND [Initial Study/Mitigated Negative Declaration], adequate for the analysis of NO2 impacts from

¹ As testified during the proceeding, BACT for these engines is currently Tier 2. See Transcript of June 5, 2020 Evidentiary Hearing, p. 85.

² The Committee has alternatively referred to the following two topics as “comments raised by CARB and the BAAQMD in this proceeding” and “issues raised by CARB and BAAQMD during the CEC’s initial consideration of the Proposed Decision and adoption of the Motion to Remand.” CEC staff considers the following two topics to be “issues” in the context of the Committee’s written questions:

1) input assumptions regarding NO2 impacts from routine testing and maintenance; and
2) direct and cumulative impacts of emergency operations of the Project’s backup generators.

routine testing and maintenance operations? If not, describe why the analysis is not adequate and what would cure the described inadequacies?

Yes. The applicant and staff relied on the best available modeling guidance from U.S. Environmental Protection Agency and California Air Pollution Control Officers Association (CAPCOA) and implemented appropriate modeling assumptions based on this guidance. CARB staff agreed with CEC staff and others at the Great Oaks South Scoping Meeting that temporal pairing of project impacts with appropriate nitrogen dioxide (NO₂) background was an acceptable modeling approach. Additionally, CARB agreed that the modeling may include some of the tiers listed in the CAPCOA's tiered-guidance for modeling compliance with the federal 1-hour NO₂ standard. This is precisely how the Sequoia Backup Generating Facility was analyzed; therefore, the modeling already contained in the record should be deemed sufficient and no additional analysis required.

b. Can scenario modeling be used to bound a range of potential impacts from emergency operations? Are there other options to assess impacts of emergency operations? If so, how long will it take to perform those options?

Yes. The question is what bounding to apply to reflect impacts that are reasonably likely to occur and how to determine whether those impacts are significant. Scenario modeling can be used to bound a range of potential impacts from emergency operations. Worst-case operating assumptions could be made by analyzing the limited amount of data available for data center emergency operations to identify appropriate model inputs, such as the number of engines expected to run and the loads at which the engines are expected to run. Another matter to consider is whether impacts should be evaluated at the fence line or at the nearest sensitive receptor. Once these parameters are selected, the modeled impacts could be compared to the ambient air quality standards (AAQS). Since modeled impacts during emergency operations are not generally compared to AAQS, and since some number of modeled exceedances might be expected to occur, a joint probability of emergency operations occurring at the same time an exceedance of the AAQS would be expected to occur is reasonable to apply to the analysis. The remaining question, then, is how to evaluate the results. No air agency has established a threshold of significance for emergency operations. It might be informative for the CEC to look at instances where other agencies have modeled emergency operations and reached a conclusion on such impacts; these instances are sparse, but staff is attempting to gather such information as is available to help guide the Committee in its evaluation.

To address cumulative impacts during emergency operations, staff would add diesel backup engines from other nearby facilities to the modeling domain using appropriate assumptions and parameters, like those described above.

This quantitative modeling approach and subsequent writeup would likely take a few weeks to complete.

The only other option to assess impacts during emergency operations staff can think of would be to rely on the utility's reliability data and determine the likelihood of the facility having to operate during emergency operation, the approach presented in the Initial Study. The Proposed Decision concluded that "the number of assumptions required for assessing the impacts of emergency operation of the Backup Generators render the results too speculative to be meaningful," and "the Backup Generators would operate very infrequently, if at all, for emergency operations." Staff believes this conclusion is still valid.

Staff has reviewed a draft of the individual statement of the applicant and agrees that it is feasible to conduct some additional modeling to put into the record in time to support consideration of a revised Proposed Decision at the February 10, 2021 Business Meeting.

DATED: December 14, 2020

Respectfully submitted,

APPROVED BY:

Shawn Pittard, Deputy Director
Siting, Transmission, and Environmental Protection Division