



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

October 27, 2021

Ms. Katherine Ramsey
Sierra Club
Email: katherine.ramsey@sierraclub.org

Re: Response to Public Comments for the Russell City Energy Center Temporary Simple Cycle Operation Project

Dear Ms. Ramsey:

On August 30, 2021, the Air District received Sierra Club’s comments along with a petition signed by 661 members of the San Francisco Bay Chapter of the Sierra Club on the Temporary Simple Cycle Operation Project proposed for the following facility:

Application	Facility	Facility Name	Address, City	Type of Operation
31198	B8136	Russell City Energy Center	3862 Depot Road Hayward, CA 94545	Power Plant

The following is a summary of each comment topic area and the Air District’s response.

- **Comment #1:** The commenter stated that Russell City Energy Company has proposed no legal or policy reason why BAAQMD should approve its application to remove the greenhouse gas efficiency requirement in the plant’s current permit. The commenter further stated that the context surrounding the plant’s explosion, in addition to the current climate crisis, provide ample reason why the application should be denied.
- *Response to Comment #1: As discussed in the Engineering Evaluation for this application, the applicant has demonstrated that it satisfies all Air District regulations and is entitled to a permit revision to allow for simple-cycle operation. This will require removing the 7,730 Btu/kWhr heat rate limit in Part 53 of permit condition 26117, as the plant’s power output will be lower in simple-cycle mode and it will be producing fewer kWhr of electricity per Btu of fuel burned. The legal basis for approving the application is that the applicant has satisfied all legal requirements for an alteration to its permit conditions to allow for simple-cycle operation. The policy basis for operating in simple-cycle mode is that there will be no increase in emissions compared to combined-cycle mode, and it will allow the facility to provide power when needed to support stability of the electrical grid and to provide “black start” capability in the event of a major system-wide outage. These policy reasons were discussed in more detail in the California Energy Commission proceeding that authorized the simple-cycle operation. (See <https://efiling.energy.ca.gov/GetDocument.aspx?tn=238943&DocumentContentId=72362> and <https://efiling.energy.ca.gov/GetDocument.aspx?tn=238292&DocumentContentId=71587>.) The Air District shares the commenter’s concerns about the steam turbine explosion and ensuring that this facility operates safely. It is the Air District’s understanding that the California Energy Commission and the California Public Utilities Commission are awaiting the results of a root cause analysis that is being conducted by Structural Integrity Associates, Inc. and will*

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use the results of this root cause analysis to complete their investigations into the probable cause(s) of the explosion.

- Comment #2: The commenter stated that the operational characteristics of the facility suggest that there would be significant greenhouse gas emissions impacts from simple-cycle operation.
- *Response to Comment #2: During the proposed simple-cycle operation, the greenhouse gas emissions from the gas turbines will not exceed the hourly, daily, or annual greenhouse gas emission limits specified in the permit. In addition, the gas turbines will only operate when called upon to do so by the California Independent System Operator to mitigate periods of high demand and to support the stability of the electrical grid. The temporary simple-cycle operation is therefore expected to have less emissions overall compared to combined-cycle operation, as combined-cycle plants are called on to operate more frequently than simple-cycle plants. A comparison showing GHG emissions from recent combined-cycle operation and projected emissions from simple-cycle operation is provided in Table 2 in the Engineering Evaluation.*
- Comment #3: The commenter stated that the Air District should not grant an exemption from the GHG efficiency requirement, and the facility should not be allowed to operate until the steam turbine is repaired. The commenter stated that the facility is a danger to the community, public health, and the climate.
- *Response to Comment #3: As stated earlier, the Air District shares the commenter's concerns about the steam turbine explosion and ensuring safe operation of the facility. The Air District looks forward to the results of the root cause analysis and the findings of the CEC's and CPUC's investigations into the explosion. The Air District is approving this application because operation in simple-cycle mode will not cause any increase in emissions of greenhouse gases or any other air pollutants. Emissions resulting from the simple-cycle operation of the gas turbines will continue to comply with all hourly, daily, and annual greenhouse gas emission limits in the permit to operate. These emissions limits will ensure that air quality and public health are protected.*

If you have any questions regarding this matter, please contact Xuna Cai at (415) 749-4788 or xcai@baaqmd.gov.

Very truly yours,



Dennis Jang
Supervising Air Quality Engineer
Engineering Division
BAAQMD