



**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

March 8, 2022

Lisa Worrall
Senior Environmental Planner
California Energy Commission
715 P Street, MS 40
Sacramento, CA 95814

RE: CA3 Backup Generating Facility - Vantage Draft Environmental Impact Report

Dear Ms. Worrall,

Bay Area Air Quality Management District (Air District) staff has reviewed the Draft Environmental Impact Report (DEIR) for CA3 Backup Generating Facility - Vantage (Project). The Project proposes to construct an approximately 468,000-square-foot four-story data center building at 2590 Walsh Avenue, Santa Clara, California. The Project includes a total of forty-four (44) 2.75-megawatt (MW) diesel fired generators that will be used exclusively to provide up to 96 MW of backup emergency generation to support the data center. Forty (40) of the generators would be dedicated to replacing the electricity needs of the data center in case of a loss of utility power, and four (4) of the generators would be used to support redundant critical cooling equipment and other general building and life safety services. Vantage Data Services is seeking a Small Power Plant Exemption (SPPE) from the California Energy Commission's (CEC) jurisdiction to proceed with local approval rather than requiring certification by the CEC.

The Project is situated in the South 101 neighborhood, an area which CalEPA's CalEnviroScreen tool indicates experiences high levels of diesel particulate matter (DPM), a toxic air contaminant. This area also already has three large data centers and chip manufacturers located in the neighborhood. As such, the Air District is concerned about air pollution emissions or exposures impacting the nearby community.

Emission Calculation and Methodology

The DEIR discussion of the Air District's analysis of data center diesel engine operations concludes that emergency operations "...would be speculative due to the infrequent, irregular, and unplanned nature of emergency events. Emissions and impacts during emergency operation are not easily predictable or quantifiable... project's emergency operation would be unlikely to expose sensitive receptors to substantial concentrations of criteria air pollutants." The Air District remains concerned about the environmental impacts associated with using backup diesel generators in non-testing/non-maintenance operations. The Air District has previously submitted historical evidence in our [California Energy Commission - CA3](#)

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[Data Center NOP](#) letter that backup generators operate for non-testing/non-maintenance reasons, and we continue to recommend that this information should be incorporated into the emissions calculations for backup generator operations. Although the DEIR rightfully notes that emergency operations are less predictable than maintenance and testing, the evidence from historical operations should not be discounted and dismissed, but rather should be incorporated into the analysis to show various potential scenarios of backup power generation operations beyond routine testing and maintenance. Backup generators are operating more frequently than previously understood because of climate change induced crises and grid operational challenges, and as such, it is critical to consider the impacts of operating the emergency backup diesel generators. Air District staff recommend that the DEIR evaluate greenhouse gas (GHG), criteria pollutant, and toxic air contaminant (TAC) impacts due to the non-testing/non-maintenance operations of backup power generators. Various scenarios should be considered for non-testing/non-maintenance operations, including non-zero hours of operation and concurrent generator operations.

Additionally, the DEIR assumes a maximum operating limit for testing/maintenance of 35 hours per year averaged over all engines to determine the Project's operational potential to emit. To be the most health protective and transparent, the Project needs to clarify how this 35 hour per year limit will be enforced, for example through a lease agreement or voluntarily permit limits, otherwise the Project should model emissions for all of the generators assuming the 50 hour per year testing/maintenance operations limit regulated under the Airborne Toxic Control Measure for Stationary Compression Ignition Engines (CCR, Title 17, Section 93115).

The Air District does not support the use of Emission Reduction Credits to offset NOx emissions to mitigate CEQA related impacts. Such banked emissions credits may have resulted from past and/or non-local sources, and do not reduce current local impacts. The use of Emission Reduction Credits is allowed in the Air District's New Source Review program, which is intended for no net emission increase in the whole Bay Area air basin. As CEQA mitigation for a specific project, the order of priority for mitigations to reduce impacts should be: 1) onsite to the maximum extent possible; 2) off-site within the community; 3) off-site within San Jose; 4) off-site within Santa Clara County. Only if no other mitigations are available should Emissions Reduction Credits be considered.

Cumulative Impact Analysis

The DEIR concludes that the Project exceeds the District's cumulative health risk thresholds but would not cause cumulatively considerable impacts, as the Project is estimated to only make up ~8% of the cumulative risk. The Air District notes that, based on the DEIR's conclusion that the Project cumulative analysis exceeds the District's cumulative health risk thresholds, the Project would contribute to cumulative impacts. In addition to the Project's contribution, Vantage owns and operates another data center within the area, at 2625 Walsh Avenue, and the Project would be the fourth data center within a quarter mile radius. Given the accumulation of health risk from the Project, other data centers, and other nearby sources, Vantage Data Services should implement mitigations including, but not limited to:

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- Incorporate additional alternative technologies such as solar, battery storage and/or fuel cells, or utilize natural gas engines in place of diesel generators. As the DEIR concludes that Project Alternative 3, which includes natural gas engines, is feasible as well as environmentally superior to the proposed Project, the Air District recommend that these alternatives be incorporated into the Project.

Construction Emissions and Mitigations

The DEIR states that construction-related emissions were found to be less than significant with mitigations and that the Project will apply Air District best management practices (BMP) to control fugitive dust emissions. The Air District recommends that additional measures beyond the standard BMPs be added to help reduce particulate matter emissions. The following additional mitigation measures should be included into mitigation measure “AQ-1” to further address construction-related impacts:

- All off-road equipment greater than 25 horsepower (hp) shall have engines that meet or exceed Tier 4 final off-road emission standards. Use of zero-emission and hybrid-powered equipment is encouraged.
- All on-road trucks used for material delivery or hauling shall have engines that meet or exceed 2014 CARB emissions standards.
- Where grid power is available, portable diesel engines should be prohibited.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed construction areas. Wind breaks should have at maximum 50 percent air porosity.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour (mph).
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Certain aspects of the Project may require a permit from the Air District (for example, back-up diesel generators). Please contact Barry Young, Senior Advanced Projects Advisor, at (415) 749-4721 or byoung@baagmd.gov to discuss permit requirements. Any applicable permit requirements should be discussed in the EIR.

We encourage the CEC to contact Air District staff with any questions and/or to request assistance during the environmental review process. If you have any questions regarding these comments, please contact Matthew Hanson, Environmental Planner II, at mhanson@baaqmg.gov (415) 749-8733 or Amy Dao, Senior Environmental Planner, at adao@baaqmd.gov (415) 749-4933.

Sincerely,



Greg Nudd
Deputy Air Pollution Control Officer

cc: BAAQMD Director Margaret Abe-Koga
BAAQMD Director Cindy Chavez
BAAQMD Director Rich Constantine
BAAQMD Director Rob Rennie