

DOCKETED

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Submitter Role:	Intervenor
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Docketed Date:	8/10/2020

State of California
State Energy Resources Conservation and Development Commission

In the matter of:

Mission College Data Center

Docket 19-SPPE-05

Robert Sarvey's Comments on the Proposed Decision

The PD recognizes that, *"The Project Site is within the jurisdictional boundaries of the Bay Area Air Quality Management District (BAAQMD), which regulates the stationary sources of air pollution in counties that include Santa Clara County."* The analysis in the proceeding is based on the BAAQMD's 2017 CEQA Guidelines. BAAQMD sent a comment letter on the IS/MND issued for the Mission College Data Center.¹ In the comment letter BAAQMD urged the Commission to require backup generation that did not include diesel fuel. BAAQMD provided similar comments on the Sequoia Data Center urging the commission to not allow diesel fuel use for backup generation.² In the Walsh Data Center BAAQMD also provided a letter requesting no diesel use for backup generation at the facility.³

Despite BAAQMD urging the commission to not allow diesel fuel for backup generation for the last three data centers permitted by the CEC the CEC continues to ignore BAAQMD's recommendation.

All of the air quality impacts from the project are related to the use of diesel fuel in the backup generators. The current every day use of diesel engines continues to degrade the project area which currently hosts 49 data centers. CEC Staff's IS/MND states that the project area is in the upper 90% of communities impacted by diesel particulate in the State of California. The CEC has now approved an additional four new data centers with 178 diesel generators totaling over 489 MW. The CEC approved the

¹ Attachment 1

² Attachment 2

³ Attachment 3

McLaren Data Center on November 7th 2018 with its 47- 2.5 Mw diesel generators. On February 4th 2020 the CEC approved the Laurelwood Data Center with its 56- 3 MW generators. The Walsh Data Center up for approval on August 12 has 32 - 3MW generators. The Commission now proposes to approve the Mission college Data Center on August 12, 2020 with its 43 - 2.5 MW generators. Total generators approved by the commission with this project would be 178 diesel generators totaling 489 MW. The Sequoia Data Center approved by CEC Staff proposes for approval 54 - 2.25 MW diesel generators.

All of these projects are a few thousand feet from each other in an environmental justice community but the PD fails to even mention the other projects much less require any analysis of their cumulative impacts.

Emergency Operations are reasonably foreseeable and must be modeled.

As stated in the PD on page 19, *"The IS/PMND does not contain an analysis of air quality impacts caused by the use of the Backup Generators for providing power in the event of an interruption of electrical service from SVP."* The PD also states on page 22, *"In sum, we find there is evidence supporting the IS/PMND conclusion that the Backup Generators would operate very infrequently, if at all, for emergency operations."*

The PD also states that, *"The IS/PMND stated that the historical probability of an outage of a data center in SVP's service territory is 1.6 percent per year."* If the project operates for 20 years the probability of an outage is 32%. The PD's conclusion that, *"the Backup Generators would operate..... if at all, for emergency operations."* is not supported by the evidence in the record.

The PD then states, *"Mr. Sarvey also claimed that there are other reasons why backup generators operate in emergency mode at data centers, including uninterruptible power supply failures, human error, weather impacts, and other emergency conditions and that these events should have been evaluated in the IS/PMND."*¹⁴¹ Mr. Sarvey states in support of his claim that Staff's analysis relied exclusively on power curtailment by SVP to determine the probability of the Backup Generators operating. Mr. Sarvey offered no examples of outages to data centers that Staff did not consider." That statement is also not supported by the evidence in the

record as the record reflects staff did not consider any examples of an outage of data centers outside of power curtailment by SVP.

The PD also dismisses an outage at the data center due to a PG&E PSPS shutoff. The PD claims that, *“Further, there is no evidence that the potential for future increases in the number and severity of wildfires will lead to SVP or Project outages.”* The evidence shows that SVP’s generating assets outside of Santa Clara including their geothermal resources were impacted in 2019. There is absolutely no evidence that future PSPS events will not affect SVP operations.

Under the PD’s significance determination, no amount of GHG emissions is significant.

For commercial/industrial land use development projects, BAAQMD recommends a numerical significance threshold of 1,100 MTCO₂e/yr. The CEC Staff, applicant and the PD fail to use this numerical significance level arguing that it is based on AB 32 and the emissions from this project will not occur until 2021. Therefore, that significance level is not applicable. The projects emissions are estimated to be 133,721 MTCO₂e/year or 121 times the current BAAQMD land use GHG significance level. AB 32 requires the state board to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020. Newer legislation requires the state to lower GHG emission by 40% over 1990 levels. Despite that the CEC would replace BAAQMD’s current GHG land use significance of 1,100 MTCO₂e/yr with no significance level even though the projects emissions are 121 times BAAQMD’s current significance level. Under the PD’s reasoning there is no level of GHG emission that would be significant.

The PD fails to mention that the environmental analysis does not consider the Cumulative Impacts from six Santa Clara Data Centers

A “cumulative impact” is the environmental impact resulting from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions that can result from individually minor but

collectively significant actions taking place over a period of time (40 CFR 1508.7). The analysis should define and justify the geographic scope of the area affected by the cumulative impact (14 CCR § 15130(b)(3)). The evidence does not support the PD's conclusion that there is no significant GHG impact because it fails to consider the cumulative impact from the six Santa Clara Data Centers being permitted by the CEC which is never even mentioned in Staff or applicant's analyses. Energy Commission staff has already determined there is no significant impacts from any of these data centers as it has issued IS/MND's for all of them. The only evidence concerning cumulative impacts in the proceeding is contained in Exhibit 300 pages 5-7 and is completely ignored in the decision, As stated in exhibit 300:

"The projects GHG emissions combined with the estimated GHG emissions from just the other CEC Santa Clara Data Center projects is 833,803 MTCO₂e/yr.⁴ Those cumulative emissions of 833,803 MTCO₂e/yr from just the data centers alone would be 1.8 times higher than SVP's high 2030 GHG target of 485,000 MTCO₂e/yr and 3.2 times higher than the SVP low 2030 target of 275,000 MTCO₂e/yr.

⁴ Table 1 Santa Clara Data Centers Before the CEC.

Table 1 Santa Clara Data Centers Before The CEC

Project	CEC #	Testing	Construction	Other	Electricity
Mission College	19-SPPE-05	3,875 ⁵	1,231 ⁶	2,663 ⁷	136,384 ⁸
Laurelwood	19-SPPE-01	2,583 ⁹	1,043 ¹⁰	1,600 ¹¹	170,170 ¹²
Sequoia	19-SPPE-03	4,301 ¹³	1,395 ¹⁴	5,640 ¹⁵	170,865 ¹⁶
McLaren	17-SPPE-01	5,044 ¹⁷	2539	1,048 ¹⁸	116,848 ¹⁹
Walsh	19-SPPE-02	2,313 ²⁰	970 ²¹	756 ²²	108,396 ²³
Lafayette	20-SPPE-02	5,000 ²⁴	762 ²⁵	1,813 ²⁶	131,140 ²⁷
Total MTCO2e/yr		23,116	7,940	20,520	833,803

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The six Santa Clara Data centers before the Commission have the potential to emit 833,803 MTCO2e/yr. The combined potential emissions from these data centers represents almost 3% of the electricity sectors low 30 MMTCO2e a year 2030 target and about 1.6% of the electric sectors high GHG 2030 emission target of 53 MMTCO2e.”²⁹ The PD and the analysis in the proceeding ignore the large GHG impacts from the agency’s actions approving multiple data centers which emit up to 833,803 MTCO2e/yr representing up to

⁵ Exhibit 200 Page 209 of 402

⁶ Exhibit 200 Page 208 of 402

⁷ Exhibit 200 Page 212 of 402

⁸ Exhibit 200 Page 212 of 402

⁹ TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 160 of 291

¹⁰ TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 160 of 291

¹¹ TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 163 of 291

¹² TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 163 of 291

¹³ TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 169 of 322

¹⁴ TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 169 of 322

¹⁵ TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 168 of 322

¹⁶ TN 233095 CEC Staff Responses to Committee Questions Page 16 of 39

¹⁷ TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329

¹⁸ TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329

¹⁹ TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329

²⁰ TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 173 of 352

²¹ TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 172 of 352

²² TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 176 of 352

²³ TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 176 of 352

²⁴ TN 223041-1 LBGF SPPE Application - Part 1 Page 118 of 194

²⁵ TN 223041-1 LBGF SPPE Application - Part 1 Page 118 of 194

²⁶ TN 223041-1 LBGF SPPE Application - Part 1 Page 120 of 194

²⁷ TN 223041-1 LBGF SPPE Application - Part 1 Page 120 of 194

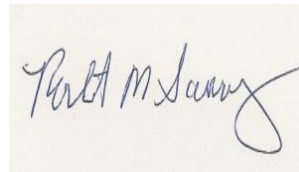
²⁸ Exhibit 300 Pages 6,7

²⁹ Exhibit 300 Pages 6,7

3% of the electrical sectors targeted 2030 emissions. The PD fails to respond to the testimony provided that demonstrates that the projects cumulative impacts are significant.

The analysis and the PD also ignore the cumulative impact of the diesel and NO₂ health and air quality impacts from the six Santa Clara Data centers.

Respectfully submitted,

A handwritten signature in blue ink, reading "Robert M. Sarvey", on a light-colored rectangular background.

Robert Sarvey
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sarveybob@aol.com
(209) 836-0277

Attachment 1 TN 233079 Bay Area Air Quality Management District Comments -
Comment Letter for Mission College Data Center MND – Mission College Data Center
Exhibit 301 Pages 1-3



**BAY AREA
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Jack P. Broadbent
EXECUTIVE OFFICER/APCO

Connect with the
Bay Area Air District:



May 21, 2020

Leonidas Payne
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: Mission College Data Center Project – Initial Study and Proposed Mitigated
Negative Declaration

Dear Mr. Payne,

Bay Area Air Quality Management District (Air District) staff has reviewed the Initial Study and Proposed Mitigated Negative Declaration (MND) for the proposed Mission College Data Center (Project). The project applicant, Oppidan Investment Company, proposes to construct two, three-story data center buildings encompassing a total square footage of 490,000, and a back-up energy generating facility with a generation capacity up to 78.1 megawatts (MW) in the City of Santa Clara. As the lead agency, the California Energy Commission (CEC) can grant the project applicant a Small Power Plant Exemption if it finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. The Project will require Air District approval of an Authority to Construct and Permit to Operate the back-up diesel generators, and, as such, the Project will be required to comply with all applicable Air District regulations. Beyond Air District regulatory requirements, however, we encourage CEC to promote the project applicant to adopt the use of cleaner, non-diesel technologies. Additionally, we are providing the following comments as suggestions on how CEC could enhance its CEQA analysis and minimize emissions from the Project and future proposed data centers.

Consistency with Long-Term State Climate Goals

The MND states that the Project's greenhouse gas (GHG) emissions would not be cumulatively considerable because the Project "would conform with all applicable plans, policies, and regulations adopted for the purpose of GHG reductions," including California's carbon neutrality goal no later than 2045 pursuant to Executive Order (EO) B-55-18 and the City of Santa Clara's 2030 Climate Action Plan (CAP). However, although the MND states that "The project's use of diesel fuel would not obstruct SVP's [Silicon Valley Power's] ability to meet the requirements of SB 100," the MND does not evaluate how the Project's use of diesel fuel would be consistent with carbon neutrality no later than 2045. The Air District does not

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believe that diesel use is consistent with carbon neutrality. If upon further evaluation CEC deems that deployment of 45 diesel back-up generators is indeed inconsistent with the State's carbon neutrality target, the Air District recommends that CEC compel the project applicant to consider alternative zero emitting technologies, commit to procuring renewable fuel, purchase offsets, or a combination of the three.

In addition, the MND states that "[t]he GHG emissions that would be generated by the project would not be a 'cumulatively considerable' contribution under CEQA" because "the operation for MCDL [Mission College Data Center] would conform to the City of Santa Clara's Climate Action Plan extended to at least 2030..." The Air District does not agree with this conclusion since the City of Santa Clara has not yet adopted its 2030 CAP, and it is unclear what measures will be included in the CAP and whether they will be mandatory.

Recommendations for Achieving Additional Emissions Reductions

To the extent that further analysis concludes the Project's emissions would be cumulatively considerable or inconsistent with the State's climate goals and the City's current Climate Action Plan, the Project may need to incorporate mitigation measures to reduce emissions. Even if the revised analysis does not conclude the Project's emissions will be cumulatively considerable, the Air District encourages CEC to compel the applicant to incorporate additional emission reduction measures as a condition of approval of the Project. These recommended measures will help ensure that the Project's emissions impacts are reduced to the maximum extent possible to achieve the most health protective air quality for Bay Area residents and to achieve climate change goals established by the Air District.

The GHG emissions analysis in the MND estimates that the Project would generate 1,231 MTCO₂e during construction, 3,875 MTCO₂e per year for readiness testing and maintenance of the back-up generators, and 136,384 MTCO₂e per year from operation of the data center (e.g., electricity use and other non-stationary sources). The MND concludes that the Project's GHG emissions "would not be a 'cumulatively considerable' contribution under CEQA" and that the Project's emissions "...are determined to have less than significant impacts."

The MND identifies the predominant source of the Project's GHG emissions as electricity use, which would be provided by the city-operated, publicly-owned utility, Silicon Valley Power (SVP). Although SVP has a higher power mix of renewable energy sources than the Statewide power mix, the Project could significantly reduce GHG emissions by purchasing all its electricity from renewable sources. Specifically, Air District staff recommend that the Project join SVP's Santa Clara Green Power program and thus commit to purchase 100 percent renewable energy, or otherwise negotiate an electricity contract with SVP for 100 percent renewable energy.

According to the MND, the Project would include 43 Tier 2 diesel back-up generators, designed to provide 24 hours of emergency generation at full demand, in addition to two house power

diesel engines. At this time, data center projects using Tier 2 diesel back-up generators may be permitted by the Air District, as long as the project complies with all air quality rules and regulations. However, to meet State and regional climate goals, the Air District encourages projects go above and beyond permitting requirements. In September 2018, the Air District launched Diesel Free by '33 to eliminate diesel emissions from our communities. Mayor Lisa Gillmor of the City of Santa Clara signed Diesel Free by '33 to pledge the City's commitment to cut diesel use to zero by the end of 2033. To this end, the Air District recommends that CEC compel the project applicant use the cleanest available technologies such as solar battery power, fuel cells, or Tier 4 generators.

Air District staff understands that several data centers of similar size and accompanying back-up diesel generators are planned for development in the area. That being the case, Air District staff recommends that CEC assess how power plant projects such as the back-up generators associated with these data centers will meet the electricity sector's share of the statewide goals in the Scoping Plan.

Lastly, Air District staff strongly recommends that CEC work with SVP, the City of Santa Clara, the Air District, and the project proponents for this and similar proposed data center projects to explore alternative options to reducing GHG emissions. For example, the Air District awarded a Climate Protection Grant of \$300,000 to SVP to conduct a pilot project to demonstrate the viability of replacing data center back-up diesel generators with electric energy storage systems, and CEC has previously provided Electric Program Investment Charge (EPIC) awards for data center microgrids. We also encourage proponents of the Project and future data centers to seek available grant funding for zero-emitting alternatives to diesel back-up generators.

Air District staff is available to assist CEC in addressing these comments. If you have any questions or would like to discuss Air District recommendations further, please contact Jakub Zielkiewicz, Advanced Projects Advisor, at (415) 749-8429 or jzielkiewicz@baaqmd.gov.

Sincerely,



Greg Nudd
Deputy Air Pollution Control Officer

cc: BAAQMD Director Margaret Abe-Koga
BAAQMD Vice Chair Cindy Chavez
BAAQMD Director Liz Kniss
BAAQMD Chair Rod G. Sinks

Attachment 2 - TN 232242 Bay Area Air Quality Management District Comments -
Comment Letter for Sequoia Data Center MND Sequoia Data Center Exhibit 301



February 27, 2020

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EXECUTIVE OFFICER/APCO

Connect with the
Bay Area Air District:



Leonidas Payne
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: Sequoia Data Center Project – Initial Study and Proposed Mitigated Negative Declaration

Dear Mr. Payne,

Bay Area Air Quality Management District (Air District) staff has reviewed the Initial Study and Proposed Mitigated Negative Declaration (MND) for the proposed Sequoia Data Center (Project). The project applicant, C1-Santa Clara, LLC, proposes to construct a four-story, 703,450 square foot data center building and a back-up energy generating facility with a generation capacity up to 96.5 megawatts (MW) in the City of Santa Clara. As the lead agency, CEC can grant the project applicant a Small Power Plant Exemption if it finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. Although this project meets the Air District's current rules and regulations to obtain a permit, we encourage CEC to promote the use of cleaner technologies. Additionally, we are providing the following comments as suggestions on how the CEC could enhance its CEQA analysis and minimize emissions from the Project and future proposed data centers.

Calculation of Greenhouse Gas Emissions

The greenhouse gas (GHG) emissions analysis in the MND estimates that the Project would generate 1,395 MTCO₂e during construction, 4,301 MTCO₂e per year for readiness testing and maintenance of the back-up generators, and 88,646 MTCO₂e per year from operation of the data center (e.g., electricity use and other non-stationary sources). The MND concludes that the project's GHG emissions associated with construction and the back-up generators "would not have a significant direct or indirect impact on the environment," and that the GHG emissions associated with the data center operations "...are determined to have less than significant impacts."

While Air District permitting rules for generators focus on emissions from testing and maintenance, a comprehensive environmental assessment should also consider operational emissions in the significance determination. Based on a

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review of the operational emissions calculations, the GHG emissions associated with the maximum possible electricity use appear to be underestimated in the MND. The MND states that "...the data center would consume up to a maximum electrical usage of 867,240 MWh per year," yet the calculation in Appendix F uses an applicant estimate of 655,633 MWh per year. In addition, the CO₂e intensity factor referenced in the MND (i.e., 430 pounds of CO₂e/MWh) is different from the CO₂e intensity factor used in Appendix F (i.e., 271 pounds of CO₂e/MWh). Air District staff recommends that CEC revise the GHG analysis, include GHG emissions from the maximum electrical usage associated with the data center, and coordinate with the Air District on best practices for quantifying GHG emissions.

Consistency With Long-Term State Climate Goals

The MND states that the Project's GHG emissions would not be cumulatively considerable because the Project "would conform with all applicable plans, policies, and regulations adopted for the purpose of GHG reductions." But the MND does not evaluate the project's consistency with State policies and plans requiring reductions in emissions of GHGs beyond 2020, including the SB 32 requirements to achieve GHG emissions reductions equivalent to 40 percent below 1990 levels by 2030, and direction in Executive Orders B-55-18 and S-3-05 to respectively achieve carbon neutrality by 2045 and to achieve GHG emissions reductions equivalent to 80 percent below 1990 levels by 2050. *See Cleveland Nat'l Forest Foundation v. San Diego Ass'n of Governments* (2017) 3 Cal.5th 497, 516 (CEQA analysis should "compare the [project's] projected greenhouse gas emissions ... from 2020 through 2050 with the Executive Order's goal of reducing emissions to 80 percent below 1990 levels by 2050."). To address the Project's impacts on GHG emissions beyond 2020, Air District staff recommends that CEC augment its greenhouse gas discussion to include an analysis of whether the project will be consistent with these State policies and plans.

Health Risk Assessment and Cumulative Toxic Air Contaminant Impacts

The Air District's CEQA Guidelines for assessing cumulative health risk impacts recommend that a lead agency evaluate all sources of toxic air contaminants (TACs) within 1,000 feet of a proposed project to ensure that the cumulative health risk from the project plus other nearby sources will not exceed a chronic Hazard Index of 10 or a carcinogenic risk of 100 additional cancers per million exposed population. Although Appendix F includes a health risk assessment (HRA) of the Project, it does not account for the cumulative health risk impacts associated with all nearby sources. In particular, the San Jose International Airport (SJC) is within 1,000 feet of the Project and includes multiple sources. Although the Air District provided emissions for SJC via the Project's submitted Stationary Source Inquiry Form, the emissions for SJC are not included in the cumulative analysis. Staff recommends that CEC revise the TAC analysis to include these additional nearby sources and contact the Air District to obtain updated data.

Recommendations for Achieving Additional Emission Reductions

To the extent that a revised analysis concludes that the project's emissions would be cumulatively considerable, the project will need to incorporate mitigation measures to reduce its emissions. The Air District provides the following recommendations for potential mitigation measures. Furthermore, even if the revised analysis does not conclude that the project's emissions will be cumulatively considerable, the Air District encourages CEC to incorporate additional emission reduction measures into its approval of the project. These recommended measures will help ensure that the project's emissions impacts are reduced to the maximum extent possible, regardless of whether they are legally required to mitigate a significant impact.

The MND identifies the predominant source of the Project's GHG emissions as electricity use, which would be provided by the city-operated, publicly-owned utility, Silicon Valley Power (SVP). Although SVP has a higher power mix of renewable energy sources than the Statewide power mix, the Project could significantly reduce GHG emissions by purchasing all its electricity from renewable sources. Specifically, Air District staff recommend that the Project join SVP's Santa Clara Green Power program and thus commit to purchase 100 percent renewable energy, or otherwise negotiate an electricity contract with SVP for 100 percent renewable energy.

Additionally, Measure 2.3 in the City of Santa Clara's Climate Action Plan (CAP) calls for data centers to achieve a power usage effectiveness (PUE) rating of 1.2 or lower. Although the MND indicates that the Project is consistent with the CAP and is not required to achieve a PUE rating of 1.2 or lower based on its average rack power rating, the Air District recommends that the Project meet this standard since industry best practices indicate that a PUE of lower than 1.2 is achievable (e.g., Google Data Centers). Achieving lower PUE can be accomplished not only through improved efficiency design, but also through onsite generation of electricity. As such, the Air District recommends that the project applicant install solar photovoltaic (PV) panels paired with battery storage, which also aligns with CAP Measure 2.4 and could replace some of the diesel back-up generators.

According to the MND, the Project would include 54 Tier 2 diesel back-up generators, designed to provide 24 hours of emergency generation at full demand. These generators would use ultra-low sulfur diesel and comply with the Air District's permit requirements and Best Available Control Technology (BACT). At this time, data center projects using Tier 2 diesel back-up generators may be permitted by the Air District. However, to meet State and regional climate goals, the Air District encourages projects go above and beyond permitting requirements. In September 2018, the Air District launched Diesel Free by '33 to eliminate diesel emissions from our communities. Mayor Lisa Gillmor of the City of Santa Clara signed Diesel Free by '33 to pledge the City's commitment to cut diesel use to zero by the end of 2033. To this end, the Air District recommends that the project applicant use the cleanest available technologies such as solar battery power, fuel cells, or Tier 4 generators.

The MND also states that the Project would use R-134a refrigerants in the cooling system. According to the MND, the industry standard leak rate is two percent per year. Refrigerants such as R-134a have a high global warming potential (GWP). The Air District recommends that the Project consider using low-GWP refrigerant alternatives.

Furthermore, Air District staff encourages the project applicant to use the most efficient GHG reduction strategies available at the time of Project approval and construction. The MND includes ten GHG mitigation measures, some of which are commitments. However, Applicant Proposed Measures (APMs) GHG-1 and GHG-6 are not commitments and it is unclear how these APMs will “reduce GHG impacts” and result in a less than significant GHG impact. The Air District recommends that all APMs be made commitments to reduce GHG emissions.

Air District staff understands that several data centers of similar size and accompanying back-up diesel generators are planned for development in the area. That being the case, Air District staff recommends that CEC assess and justify how power plant projects such as the back-up generators associated with these data centers will meet the electricity sector’s share of the statewide goals in the Scoping Plan.

Lastly, Air District staff strongly recommends that CEC work with SVP, the City of Santa Clara, the Air District, and the project proponents for this and similar proposed data center projects to explore alternative options to reducing GHG emissions. For example, the Air District awarded a Climate Protection Grant of \$300,000 to SVP to conduct a pilot project to demonstrate the viability of replacing data center back-up diesel generators with electric energy storage systems, and CEC has previously provided Electric Program Investment Charge (EPIC) awards for data center microgrids. We also encourage proponents of the Project and future data centers to seek available grant funding for zero-emitting alternatives to diesel back-up generators.

Air District staff is available to assist CEC in addressing these comments. If you have any questions or would like to discuss Air District recommendations further, please contact Josephine Fong, Environmental Planner, at (415) 749-8637 or jfong@baaqmd.gov, or Jakob Zielkiewicz, Advanced Projects Advisor, at (415) 749-8429 or jzielkiewicz@baaqmd.gov.

Sincerely,



Greg Nudd
Deputy Air Pollution Control Officer

cc: BAAQMD Director Margaret Abe-Koga
BAAQMD Vice Chair Cindy Chavez
BAAQMD Director Liz Kniss
BAAQMD Chair Rod G. Sinks

Attachment 3
Exhibit 503 TN # 232507

[Bay Area Air Quality Management District Comments - Comment Letter for Walsh Data Center MND](#)



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Connect with the
Bay Area Air District:



March 23, 2020

Leonidas Payne
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: Walsh Data Center Project – Initial Study and Proposed Mitigated Negative Declaration

Dear Mr. Payne,

Bay Area Air Quality Management District (Air District) staff has reviewed the Initial Study and Proposed Mitigated Negative Declaration (MND) for the proposed Walsh Data Center (Project). The project applicant, 651 Walsh Partners, LLC, proposes to construct a four-story, 435,050 square foot data center building and a back-up energy generating facility with a generation capacity up to 80 megawatts (MW) in the City of Santa Clara. As the lead agency, the California Energy Commission (CEC) can grant the project applicant a Small Power Plant Exemption if it finds that the proposed project would not create a substantial adverse impact on environment or energy resources. The Air District's comments focus on how CEC could enhance its CEQA analysis and minimize emissions from the Project and future proposed data centers. This project meets the Air District's current permit rules and regulations, yet we encourage CEC to promote the use of cleaner technologies as is feasible and practical.

Consistency With Long-Term State Climate Goals

The greenhouse gas (GHG) emissions analysis in the MND estimates that the Project would generate 970 MTCO₂e during construction, 2,313 MTCO₂e per year for readiness testing and maintenance of the back-up generators, and 109,164 MTCO₂e per year from operation of the data center (e.g., electricity use and other non-stationary sources). The MND concludes that the project's GHG emissions "would not be a 'cumulatively considerable' contribution under CEQA because they would conform with all applicable plans, policies, and regulations adopted for the purpose of GHG reductions; so, the maximum operation for [the Project's] non-stationary source GHG emissions (109,164 MTCO₂e/yr) are determined to have less than significant impacts." The MND has not evaluated, disclosed, or discussed the Project's consistency with State policies requiring long-term reductions in emissions of GHGs, including the direction in Executive Orders B-55-18 and S-3-05 to respectively achieve carbon neutrality by 2045 and to achieve GHG emissions reductions equivalent to 80 percent below 1990 levels by 2050. *See Cleveland Nat'l*

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Forest Foundation v. San Diego Ass'n of Governments (2017) 3 Cal.5th 497, 516 (CEQA analysis should "compare the [project's] projected greenhouse gas emissions ... from 2020 through 2050 with the Executive Order's goal of reducing emissions to 80 percent below 1990 levels by 2050."). To address the Project's long-term impacts on GHG emissions, Air District staff recommends that CEC augment its GHG discussion to include an evaluation, disclosure, and discussion of whether the project will be consistent with these State policies.

Health Risk Assessment and Cumulative Toxic Air Contaminant Impacts

The Air District's CEQA Guidelines for assessing cumulative health risk impacts recommend that a lead agency evaluate all sources of toxic air contaminants (TACs) within 1,000 feet of a proposed project to ensure that the cumulative health risk from the project plus other nearby sources will not exceed a PM_{2.5} concentration of 0.8 µg/m³, a chronic Hazard Index of 10, or a carcinogenic risk of 100 additional cancers per million exposed population. Air District guidance recommends expanding the project radius when large complex sources are nearby, such as the San Jose International Airport (SJC). The MND does not address cumulative health impacts, and Air District staff recommends that CEC include a cumulative TAC analysis. The CEC can contact the Air District to obtain guidance and available updated data.

Recommendations to Achieve Additional Emissions Reductions

To the extent that a revised analysis concludes that the project's emissions would be cumulatively considerable, the project may need to incorporate mitigation measures to reduce emissions. Furthermore, even if the revised analysis does not conclude that the Project's emissions will be cumulatively considerable, the Air District encourages CEC to incorporate additional emissions reduction measures into its approval of the project. These recommended measures will help ensure that the Project's emissions impacts are reduced to the maximum extent possible, regardless of whether they are legally required to mitigate a significant impact.

The Air District provides the following recommendations for potential measures to further minimize emissions:

1. The MND identifies the predominant source of the Project's GHG emissions are from electricity use. Electricity would be provided by the city-operated, publicly-owned utility, Silicon Valley Power (SVP). Although SVP has a higher power mix of renewable energy sources than the Statewide power mix, the Project could significantly reduce GHG emissions by purchasing all its electricity from renewable sources. Specifically, Air District staff recommend that the Project join SVP's Santa Clara Green Power program and thus commit to purchase 100 percent renewable energy, or otherwise negotiate an electricity contract with SVP for 100 percent renewable energy.

2. Measure 2.3 in the City of Santa Clara's Climate Action Plan (CAP) calls for data centers to achieve a power usage effectiveness (PUE) rating of 1.2 or lower. Although the MND indicates that the Project is consistent with the CAP and is not required to achieve a PUE rating of 1.2 or lower based on its average rack power rating, the Air District recommends that the Project meet this standard since industry best practices indicate that a PUE of lower than 1.2 is achievable (e.g., Google Data Centers). Achieving lower PUE can be accomplished not only through improved efficiency design, but also through onsite generation of electricity. For example, the project applicant could install solar photovoltaic (PV) panels paired with battery storage, which aligns with CAP Measure 2.4 and could reduce the number of necessary diesel back-up generators.
3. According to the MND, the Project would include 33 Tier 2 diesel back-up generators, designed to provide 24 hours of emergency generation at full demand. These generators would use ultra-low sulfur diesel and comply with the Air District's permit requirements and Best Available Control Technology (BACT). At this time, data center projects using Tier 2 diesel back-up generators may be permitted by the Air District. However, to meet State and regional climate goals, the Air District encourages projects go above and beyond permitting requirements. In September 2018, the Air District launched Diesel Free by '33 to eliminate diesel emissions from our communities. Mayor Lisa Gillmor of the City of Santa Clara signed Diesel Free by '33 to pledge the City's commitment to cut diesel use to zero by the end of 2033. To this end, the project applicant could consider using the cleanest available technologies such as solar battery power, fuel cells, or Tier 4 generators.

Lastly, Air District staff strongly recommends that CEC work with SVP, the City of Santa Clara, the Air District, and the project proponents for this and similar proposed data center projects to explore alternative options to reducing GHG emissions. For example, the Air District awarded a Climate Protection Grant of \$300,000 to SVP to conduct a pilot project to demonstrate the viability of replacing data center back-up diesel generators with electric energy storage systems, and CEC has previously provided Electric Program Investment Charge (EPIC) awards for data center microgrids. We also encourage proponents of the Project and future data centers to seek available grant funding for zero-emitting alternatives to diesel back-up generators.

Air District staff is available to assist CEC in addressing these comments. If you have any questions or would like to discuss Air District recommendations further, please contact Josephine Fong, Environmental Planner, at (415) 749-8637 or jfong@baaqmd.gov, or Jakub Zielkiewicz, Advanced Projects Advisor, at (415) 749-8429 or jzielkiewicz@baaqmd.gov.

