

DOCKETED

Docket Number:	19-SPPE-02
Project Title:	Walsh Data Center
TN #:	232611
Document Title:	Staff Responses to Comments Received on the Initial Study
Description:	CEC Staff's responses to comments received on the Walsh Backup Generating Facility (19-SPPE-02) Initial Study/Proposed Mitigated Negative Declaration
Filer:	Lisa Worrall
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	3/30/2020 4:47:53 PM
Docketed Date:	4/1/2020

Memorandum

To: Commissioner Karen Douglas, Presiding Member
Commissioner Patty Monahan, Associate Member

Date: March 30, 2020

From: **California Energy Commission**
1516 Ninth Street
Sacramento, CA 95814-5512

Leonidas Payne
Project Manager
(916) 651-0966

Subject: **RESPONSES TO CEQA COMMENTS RECEIVED ON THE WALSH BACKUP
GENERATING FACILITY (19-SPPE-02) INITIAL STUDY**

In its Committee Scheduling Order dated January 22, 2020, the Committee set the deadline for California Energy Commission staff (CEC staff) response to comments on its environmental review document as "7 days after close of public comment period." The CEQA comment period for the Walsh Initial Study/Proposed Mitigated Negative Declaration (IS/PMND) closed on March 23, 2020, which means that responses are due today, March 30, 2020.

Staff received two comment letters on the IS/PMND, one from the County of Santa Clara Roads and Airports Department (County), and another from the Bay Area Air Quality Management District (BAAQMD). Comments are presented below in italics, followed by staff's response.

County Comment (TN 232473): *To ensure that significant disruption to roadway circulation during construction will not occur, the permitting agency should require applicant to submit all required permits to the County of Santa Clara for the movement of oversized or excessive load vehicles on County Expressways and to submit Transportation Management Plan for review prior to issuance of building permit.*

Staff Response to County: Although County of Santa Clara transportation permits and requirements were not identified in **Section 5.17 Transportation** of the IS/MND, the City of Santa Clara, as the permitting agency, would ensure that the applicant obtains all required local and state permits for the movement of oversized or excessive load vehicles associated with the project. Adherence to these permits will ensure significant disruption to roadway circulation would not occur.

BAAQMD Comments (TN 232507):

[Staff Introductory Note: It is important to put the comments provided by the BAAQMD into context. They note in the comment letter that:

"This project meets the Air District's current permit rules and regulations, yet we encourage CEC to promote the use of cleaner technologies as feasible and practical."

CEC staff and BAAQMD agree the proposed project would be able to comply with the BAAQMD's current rules and regulations, if the project were to move forward. Staff did not identify any significant impacts that would require mitigation or override by the permitting agency.

While staff supports the deployment of cleaner technologies, any discussion or implementation of additional project features that go beyond what is required to address significant project impacts is best left to the jurisdiction that will actually be approving the project. In this case, if the exemption is granted, project approval and implementation of the final set of project design features and mitigation, rests with the City of Santa Clara and the BAAQMD. Therefore, the City of Santa Clara would be in the best position to promote the use of advanced project features or cleaner technologies as suggested by the BAAQMD.

In reviewing a project for an exemption from the CEC's jurisdiction, staff follows CEQA to identify significant effects, if any, and to develop appropriate mitigation that meets nexus and proportionality requirements set forth in CEQA (See Cal. Code Regs., tit. 14, § 15126.4(a)(4)).

In this case, no significant impacts related to air quality were found and under CEQA, additional mitigation measures are not required for effects which are not found to be significant (Cal. Code Regs., tit. 14, § 15126.4(a)(3)). The following is a detailed response to the specific points raised by the BAAQMD.]

Greenhouse Gas Emissions

BAAQMD-1 (p.1-2): Consistency with Long-Term State Climate Goals. *The MND has not evaluated, disclosed, or discussed the Project's consistency with State policies requiring long-term reductions in emissions of GHGs to achieve GHG reductions equivalent to 80 percent below 1990 levels by 2050.*

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. Air District staff recommends that CEC augment its GHG discussion to include evaluation, disclosure, and discussion of whether the project will be consistent with these State policies.

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 [long-term] State policies and plans.

Staff Response to BAAQMD-1:

GHG impacts from all project emission sources would be considered less than significant if the project is consistent with the City of Santa Clara's Climate Action Plan (CAP) and applicable regulatory programs and policies adopted by the California Air Resources Board (ARB) or other California agencies.

The City of Santa Clara's CAP was adopted in 2013. The CAP includes several focus areas that the City began implementing as early as 2013 with the intention of implementing Local Government Operations to reduce the City's GHG emissions in proportion to the reductions needed to meet statewide 2020 GHG reduction goals. While several strategies deal indirectly with data centers, for example by decarbonizing the electricity used at them, three of the 19 measures deal more directly, including Measure 2.3, which calls for use of efficient data storage equipment in the data center bays, Measure 2.4, which calls for installing solar panels on buildings when possible, and Measure 5.2, which calls for use of alternative fuels for vehicles used for new construction.

Measure 1.1 calls for divesting of the City's use of coal at the M-S-R San Juan coal power plant. This measure was completed by the end of 2017 and provides the majority of the GHG reductions that would occur under the CAP. Additional GHG reductions could also occur if the facility's construction includes use of alternative fuels as called for in Measure 5.2, although the amount of reductions would be much more modest because the entire construction-related GHG emissions total only 970 MTCO₂e over 21 months, or about 555 MTCO₂e per year for less than two years.

Because of the City of Santa Clara's CAP, and Silicon Valley Power's (SVP) progress towards meeting the 2030 GHG reduction goals and renewable energy goals of the CAP, the proposed project would not conflict with the region's efforts to reduce GHG emissions.

Policies outlined in the Assembly Bill (AB) 32 Scoping Plan capture much of the State's framework for reducing GHG emissions. The AB 32 programs will likely be extended beyond 2020 to address the State's 2030 GHG reduction goal set in Senate Bill (SB) 32. SB 350, which was adopted after preparation of the AB 32 Scoping Plan, will also support California's long-term climate change objectives. Senate Bill 350 extends the State's Renewables Portfolio Standard (RPS) from 33 percent in 2020 to 50 percent in 2030 and requires a doubling of statewide energy efficiency. In 2017, SVP's power mix included approximately 38 percent renewable power, which surpassed the 2020 RPS goals while California's electrical grid included approximately 29 percent renewable power.

Since the RPS goal has been increased to 50 percent of the electricity supply by 2030, the carbon intensity of California's electricity supply and the GHG emissions generated to

serve the project's electricity demand will continue to drop. These trends will be consistent with California's climate goals for 2030 expressed in SB 350. This point is particularly relevant to the project since the majority of the estimated GHG emissions during operation would come from electricity consumption by the data center building.

The City of Santa Clara's CAP provides a comprehensive emissions reduction strategy that will allow the City to achieve its fair share of statewide emissions reductions through 2020, consistent with AB 32. Consistency with the CAP framework is a relevant consideration in the analysis of the significance of the project's GHG impacts because many of the policies are expected to be carried forward by the City to address post-2020 emissions in its next CAP update.

Executive Orders B-55-18¹ and S-3-05² express the State's intent to achieve carbon neutrality by 2045 and GHG emissions reductions equivalent to 80 percent below 1990 levels by 2050. The facility could be required to implement any specific regulations established by these Executive Orders, if promulgated in state or local regulations adopted to implement these policies. However, to date, specific requirements remain unidentified.

BAAQMD-2 (pp.2-3): Recommendations for Achieving Additional Emission Reductions. *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. These mitigation measures are summarized as follows:*

BAAQMD-2a. 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.

BAAQMD-2b. Air District staff recommend 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). Air District staff also recommend that the project applicant install solar photovoltaic (PV) panels paired with battery storage, which also aligns with CAP Measure 2.3 and could replace some of the diesel back-up generators.

BAAQMD-2c. Air District staff recommend that the project applicant use the cleanest available technologies such as solar power, batteries, fuel cells, or Tier 4 generators.

BAAQMD-2d. 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.

¹ <https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>

² [http://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+\(June+2005\).pdf](http://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf)

Staff Responses to BAAQMD-2a through BAAQMD-2d:

There are several measures the BAAQMD staff recommended that would reduce project's emissions, regardless of whether they are legally required to mitigate a significant adverse impact. In general, CEC staff's task in preparing an IS/PMND is to determine whether a project would cause a significant impact. If such an impact is identified, staff works with the applicant to incorporate mitigation measures. If such an impact is not identified, or if the applicant incorporates additional mitigation measures, the applicant can proceed to the local level for permitting and at that time, further design improvements could be incorporated to further reduce GHG emissions.

Each BAAQMD comment is addressed below:

Staff Response to BAAQMD-2a: In response to the comment that advocates for the project applicant to purchase Santa Clara Green Power from SVP, it is important to understand that the Walsh Data Center (WDC) would be a multi-tenant data center. Normally, the data center owner purchases power from SVP and then passes these costs along to each tenant using separate sub-meters for each tenant. As with other data centers that have already been permitted through the City of Santa Clara, project applicants such as McLaren confirmed (based on comment letters from the City of Santa Clara³) that for its own offices and building support spaces, the applicant would purchase Santa Clara Green Power, while also encouraging its tenants to participate in the Santa Clara Green Program.

The project owner of WDC has stated they would incorporate additional energy efficiency measures specified by the City of Santa Clara during the design review process to ensure compliance with applicable energy efficiency laws, ordinances, regulations, and standards. CEC staff agrees it would be beneficial for the applicant and the City of Santa Clara to come to a similar agreement as McLaren and not only to commit to purchase Santa Clara Green Power for its own building support space, but also to encourage WDC tenants to participate in the Santa Clara Green Program as well. McLaren also agreed to install solar panels.

Staff Response to BAAQMD-2b: Measure 2.3 of the CAP calls for completion of a feasibility study of energy efficient practices for new data center projects with an average rack power rating⁴ of 15 kilowatts or more to achieve a PUE of 1.2 or lower. The project would have a rack power rating range of 4 kilowatts. This would be below the criteria in Measure 2.3, such that a formal feasibility study of energy efficient practices is not required. However, the project includes various design features as shown in **Table 5.8-5** (page 5.8-15), to achieve LEED standards consistent with current Title 24 requirements of the California Building Code and local green building regulations to reduce energy, water, air, and GHG impacts of the development.

The project would use lighting control to reduce energy usage for new exterior lighting and air-side economization⁵ for building cooling. If the downward trend in average PUE

³ <https://www.santaclaraca.gov/home/showdocument?id=51500>

⁴ Average rack power rating is a measure of the power available for use on a rack used to store computer servers. The higher the value of kilowatts, the greater power density per rack and generally more energy use per square foot of building area in a data center.

⁵ An air-side economizer brings outside air into a building and distributes it to the server bays.

continues, the project's PUE would decrease over time, which would further reduce GHG emissions.

The second recommendation by BAAQMD recommends the project incorporate solar photovoltaic (PV) panels paired with battery storage in order to align with CAP Measure 2.3. CEC staff agrees it would be beneficial for the applicant and the City of Santa Clara to come to a similar agreement as McLaren did with the City of Santa Clara and install solar PV. CEC staff agrees that solar power and battery technologies advocated by BAAQMD staff are expected to be a portion of the approach needed to meet the 2050 GHG goals; however, currently the technology for solar power, battery storage and fuel cell technologies on a scale of around 80 MW as required for this project are not expected to fit in the space available for this project. Also, for the fuel cell option, pipeline natural gas is not likely to have the same reliability as the liquid fuel diesel proposed for the Walsh Backup Generating Facility (WBGF). Staff is not recommending Tier IV diesel engines because we did not identify a significant impact that would need the additional mitigation that would be provided by Tier IV diesel engines.

Staff Response to BAAQMD-2c: CEC staff agrees that solar power and battery technologies advocated by BAAQMD staff are expected to be a portion of the approach needed to meet the 2050 GHG goals; however, currently the technology for solar power, battery storage and fuel cell technologies on a scale of around 80 MW as required for this project are not expected to fit in the space available for this project. Also, for the fuel cell option, pipeline natural gas is not likely to have the same reliability as the liquid fuel diesel proposed for the WBGF. Staff is not recommending Tier IV diesel engines because we did not identify a significant impact that would need the additional mitigation that would be provided by Tier IV diesel engines.

CEC staff agrees it would be beneficial for the applicant and the City of Santa Clara to come to an agreement to implement additional GHG reduction measures. However, the staff analysis did not determine that these additional measures were required to meet CAP requirements. Thus, as stated above, these additional measures are appropriately developed by these parties and do not need to include the Energy Commission.

Cumulative Health Risk Impact Assessment (HRA)

BAAQMD-3 (p.2): Health Risk Assessment and Cumulative Toxic Air Contaminants Impacts. *BAAQMD Staff recommends that CEC revise the Toxic Air Contaminant (TAC) analysis to include a cumulative HRA for all sources within 1,000 feet (or beyond 1,000 ft. if large complex sources such as the San Jose International Airport [SJC] are nearby) of the project boundary.*

Staff Response to BAAQMD-3:

Staff did not perform a cumulative HRA for the WDC or WBGF because the project is not expected to have significant impacts on Air Quality or Public Health. According to page 5-3 and 5-4 of BAAQMD CEQA 2017 Guidelines, significance thresholds are defined as:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) risk greater than 1.0 HI from a single source would be a significant cumulatively considerable contribution, and
- An incremental increase of greater than 0.3 µg/m³ annual average PM_{2.5} from a single source would be a significant cumulatively considerable contribution.

According to **Table 5.3-7** (page 5.3-22) and **Table 5.3-9** (page 5.3-29) for demolition/construction and **Table 5.3-8** (page 5.3-27) and **Table 5.3-10** (page 5.3-31) for readiness testing and maintenance in staff's IS/PMND, excess cancer risk level, the chronic health risks and annual average PM_{2.5} are all substantially below these significance thresholds. Therefore, this project would not cause a significant cumulatively considerable contribution to air quality or public health impacts.

However, per request of BAAQMD, staff is working with BAAQMD staff to understand their comments, and how the HRA and discussions of cumulative impacts could be modified to address issues being raised by BAAQMD. Staff will be able to discuss these changes and issues at the evidentiary hearing for the project.