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**CALIFORNIA
ENERGY COMMISSION**



**CALIFORNIA
natural
resources
AGENCY**

June 28, 2021

Vantage Data Centers
C/O Scott A. Galati
1720 Park Place Drive
Carmichael, California 95608

Data Requests Set 2 for CA3 Backup Generating Facility (21-SPPE-01)

Dear Mr. Galati:

Pursuant to Title 20, California Code of Regulations, sections 1941 and 1716, California Energy Commission (CEC) staff is asking for the information specified in the enclosed Data Requests Set 2, which is necessary for staff analysis of the CA3 Backup Generating Facility (CA3BGF) and associated CA3 Data Center (CA3DC), collectively the "project" under the California Environmental Quality Act (CEQA). This Data Request Set 2 seeks further information in the areas of air quality, biological resources land use, project description, and transportation, based on the contents of the application submitted thus far. Staff may submit subsequent data requests in these and other resource areas, based on further information received or as necessary for a complete analysis of the project.

Responses to the data requests are due to staff within 30 days. If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send written notice to me and the Committee within 20 days of receipt of this letter. Such written notification must contain the reasons for not providing the information, the need for additional time, or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions, please email me at eric.veerkamp@energy.ca.gov

Eric Veerkamp
Project Manager

Enclosure: Data Requests Set 2

**CA3 BACKUP GENERATING FACILITY SPPE
DATA REQUESTS SET 2**

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AIR QUALITY and GREENHOUSE GAS EMISSIONS

BACKGROUND

The proposed project would require a permit from the Bay Area Air Quality Management District (District or BAAQMD). For purposes of inter-agency consistency, staff needs copies of all correspondence between the applicant and the District in a timely manner to stay up to date on any issues that arise prior to completion of the environmental document.

DATA REQUESTS

1. Please provide copies of all substantive correspondence between the applicant and the District regarding the project, including application and e-mails, within one week of submittal or receipt. This request is in effect until staff publishes the environmental document.
2. Please identify the current schedule for the BAAQMD permit application submittal. Please submit a copy of that application to the docket when it is submitted to BAAQMD.

BACKGROUND

The Project Description (p.2-7) states that manufacturer specification sheets for the proposed generators and ratings-related evidence would be provided in SPPE Application Appendix A-1. Staff cannot locate this information in Appendix A-1, the NOx Modeling Report [TN# 237423]. Engine manufacturer and emissions control device specifications sheets should be provided.

DATA REQUEST

3. Please provide up-to-date manufacturer specification sheets showing engine-generator and emissions control system performance specifications. This information should identify potential emissions for a foreseeable range of engine load settings, and documentation substantiating the effectiveness of proposed selective catalytic reduction (SCR) and diesel particulate filter (DPF) systems.

BACKGROUND

Staff needs additional information to clarify the Potential To Emit (PTE) of the project in the context of the District's June 3, 2019 policy for emergency backup power generators.

DATA REQUEST

4. Please provide emission calculations to disclose the PTE for the project, considering the 2019 District policy to include emissions resulting from

CA3 BACKUP GENERATING FACILITY SPPE DATA REQUESTS SET 2

emergency operation of 100 hours per year per standby generator, in addition to the proposed levels of permitted emissions for readiness testing and maintenance.

BACKGROUND: AMBIENT AIR QUALITY IMPACT ANALYSIS FOR CONSTRUCTION

The applicant estimated construction-phase emissions (p.4-25 and in Appendix A-2 of the SPPE Application) and concluded the discussion of construction-phase impacts without quantifying criteria pollutant ambient air quality impacts. The evaluation indicates that construction sources are represented as a single area source (p.9 of Appendix A-2); however, the analysis does not include supporting calculations to show how the project construction emissions were translated into the single area source nor does the analysis show the concentrations of criteria air pollutants resulting from the analysis of the area source.

DATA REQUESTS

5. Please provide an ambient air quality impact analysis that confirms whether the construction-phase criteria pollutant emissions would comply with the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS).
6. Please support the analysis of construction-phase criteria pollutant impacts by demonstrating how the construction sources are represented in the dispersion model and how concentrations of criteria air pollutants during different averaging times are derived. This information should demonstrate how daytime-only construction activities are represented in the consideration of 1-hour and daily impacts.

BACKGROUND: AMBIENT AIR QUALITY IMPACT ANALYSIS SCOPE

The applicant provides a one-page summary of the Air Quality Impact Analysis for normal operations and dispersion modeling results (p.4-30 and in Table 4.3-9 of the SPPE Application). The applicant only presents potential impacts for 1-hour NO₂ concentrations. Modeling and ambient air quality impact analyses for other criteria pollutants (e.g., namely CO, PM₁₀, PM_{2.5} and SO₂) and annual-average NO₂ impacts are also needed to show compliance with all the CAAQS and NAAQS.

DATA REQUEST

7. Please provide an ambient air quality impact analysis for CO, PM₁₀, PM_{2.5} and SO₂, and for annual average NO₂ impacts during typical readiness and maintenance testing to demonstrate compliance with the CAAQS and the NAAQS.

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BACKGROUND

The SPPE application shows certain assumptions for air quality impact analyses of the typical readiness and maintenance testing emissions (p.4-30) that need to be verified. Assumptions in the analysis appear to include having no more than a specific group of eight generator-engines in use at any one time, during any given hour of testing, and no more than 35 hours per year per engine for testing (p.4-26). The modeling assumes engines would be tested at 0% load. The modeling also presumes that routine readiness testing would be limited to occur within certain hours of the day, although this is not explicit in the application. Additionally, for impacts to be consistent with those predicted by the modeling files, the stacks should not have horizontal releases or rain-caps. Staff would like to verify that these project features and/or analytical assumptions can be made enforceable.

DATA REQUESTS

8. Please confirm that the applicant would request the District to require an enforceable limit on concurrent operation of standby engines during all readiness and maintenance testing scenarios so that no more than the prescribed groups of eight generators would operate for maintenance and testing at any given time.
9. Please confirm that the applicant would request the District to require an enforceable limit that would allow no more than 35 hours per year per engine, averaged over all engines, and no more than 50 hours per year for any single engine, for readiness and maintenance testing.
10. Please confirm that the applicant would request the District to require an enforceable limit that would allow testing of standby engines only between the hours of 7 AM to 6 PM daily.
11. Please confirm that all standby engine exhaust stacks would not have horizontal releases or rain-caps.

BACKGROUND

The impact analysis for NO₂ (in Table 4.3-9 of the SPPE Application; and in Appendix A-1) appears to address only one operational mode at 0% load (zero-load settings) for typical readiness and maintenance testing of the diesel backup generators. The proposed average daily NO_x emissions of 193 lb/day (in Table 4.3-6) would be equivalent to 8 lb/hr NO_x. However, the NO₂ modeling files appear to assume only 3.44 lb/hr of NO_x per engine, at stack conditions that reflect lower-temperature and lower-velocity releases than assumed in health risk modeling files. As such, the NO₂ modeling may not reflect maximum potential hourly emissions or worst-case stack conditions.

The applicant does not provide evidence to demonstrate that a “zero-load” scenario of engine use would cause the highest concentrations of NO₂ or other pollutants because

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the NO₂ impact analysis is not supported by any screening analysis for other scenarios or modes of engine use at different load levels. The application does not tabulate the range of potential hourly emission rates per engine or the different stack temperature and velocity conditions needed to assess the impacts of the full range of expected engine loads.

To screen for worst-case hourly NO₂ impacts due to a full range of engine loads, NO_x emissions from each of the engines at different loads and stack conditions would require evaluation using the ozone limiting method (OLM) to account for the contribution of background ozone and NO₂ levels that vary depending upon the hour of the impact.

DATA REQUESTS

12. Please tabulate the potential hourly emission rates per engine for each pollutant and tabulate the different stack conditions anticipated to occur at different engine loads representing a full range of engine loads up to 100%.
13. Please provide a screening evaluation of the ambient air quality impacts to identify the worst case engine load-settings and tabulate the results of the screening results for each pollutant during use of the engines at a range of reasonably foreseeable load levels, including 100% load.
14. Please screen all engines and different load levels of engine use for worst-case hourly NO₂ impacts using OLM.
15. Please provide the results of the screening evaluation in a manner that lists the modeled source or source-groups, and the modeled years, that correspond with the worst-case modeled concentrations for each pollutant and each load-setting

BACKGROUND

The applicant's modeling files indicate that the evaluation the project's compliance with the 1-hour NO₂ CAAQS uses a default federal processing procedure for 1-hour NO₂ concentrations, which is automatically enabled in AERMOD through the setting "POLLUTID NO2." Staff is concerned that this setting that is for federal NO₂ processing may have underestimated the highest 1-hour NO₂ concentrations in the evaluation of exceedances against the 1-hour NO₂ CAAQS. The background concentrations of NO₂ in the evaluation of the 1-hour NO₂ CAAQS should capture the maximum single-hour background concentration or the maximum seasonal hour-of-day values (SEASHR) for the most recent three years available.

DATA REQUESTS

16. Please confirm that use of the setting "POLLUTID NO2", as in the applicant's refined 1-hour NO₂ CAAQS analysis, provides a conservative result that matches or exceeds the result that would otherwise be obtained by setting "POLLUTID

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NO₂ H1H.” If not, please reevaluate 1-hour NO₂ impacts using “POLLUTID NO₂ H1H.”

17. Please ensure that the screening and refined evaluation of 1-hour NO₂ impacts in relation to the CAAQS captures either the maximum single-hour background concentration or the maximum seasonal hour-of-day values for the most recent three years available.
18. Please support the selection of background NO₂ concentration values by submitting a copy of historical NO₂ monitoring data and the worksheet used in developing the seasonal hour-of-day values.

BACKGROUND: ELECTRONIC FILES INCONSISTENCIES

The SPPE application includes two technical reports related to air quality in Appendix A-1 (NO_x Modeling Report [TN# 237423]) and Appendix A-2 (Technical Report AQIA [TN# 237381]). Both air quality reports were dated “March 2021” and prepared by Ramboll US Consulting, Inc. Portions of these reports appear to have been prepared before the final dispersion modeling results were completed. Electronic modeling output files submitted to staff by the applicant indicate that AERMOD runs were executed on and timestamped 4/27/21.

Staff is concerned that modeling output files produced by AERMOD seem to be missing or transferred incorrectly into Ramboll’s “March 2021” reports.

- The technical report in Appendix A-2 claims that for CA3BGF operation, generators were modeled as if they could operate at any hour of the day (p.9), but the output files produced by AERMOD show testing limited to between 7 AM and 6 PM. The applicant’s proposed hours of testing should be clarified.
- Inconsistent building structure assumptions appear in the consideration of downwash effects, and these may lead to incompatible results among the different modeling runs. Operational phase modeling for health risks indicate 179 buildings were processed for downwash effects (BPIP.SUM file dated 2/16/2021); however, operational phase modeling for NO₂ indicates 223 buildings were processed for downwash effects (in BPIP.SUM file dated 3/15/2021). All operational phase modeling should reflect the same built environment.
- Emergency generator stack parameters (exit temperatures, exit velocities) appear to be inconsistent between the modeling of NO₂ (Appendix A-1, Table B-2) and health risks (Appendix A-2, Table 15). The rationale for assuming different stack parameters is not clear.
- The output file for 1-hour NO₂ impacts in folder “aermod.monthly.no2.8eg” shows the highest result related to the NAAQS for source-group “GROUP2AB,”

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but the March 2021 NO_x Modeling Report does not identify this source-group. The report should identify the source-group causing the maximum impact.

- The output file for 1-hour NO₂ impacts in folder "aermod.monthly.no2.LSG" shows a result for source-group "G1LSG_BG" that doesn't appear in the March 2021 NO_x Modeling Report, where the result for "GROUPLSG" related to the NAAQS is 186.35 µg/m³ (Table B-5 of Appendix A-1, SPPE application). In contrast, "GROUPLSG" does not exist in the output file. The report should summarize the impacts of the modeled source-groups.
- The 1-hour NO₂ impact of 175.84 µg/m³ for "GROUPLSG" related to the CAAQS (Table B-6 of Appendix A-1, SPPE application) is presented with a background concentration of 161.87 µg/m³. However, according to Table 3 of Appendix A-1 the CAAQS analysis includes the maximum 1-hour concentration plus the maximum hourly background concentration (168.87 µg/m³). With the higher background, the sum of modeled result plus background would exceed the CAAQS of 339 µg/m³. The report should provide a consistent presentation of 1-hour NO₂ modeled concentrations plus background concentrations for consideration against the CAAQS.

To resolve each of these discrepancies, a close reevaluation and revision of the "March 2021" reports is recommended because staff cannot efficiently evaluate the project without relying on the information in the application, and we expect the application and supporting technical reports to accurately reflect the modeling details within the electronic files.

DATA REQUEST

19. Please verify that the air quality technical reports reflect the most up-to-date dispersion modeling results and revise the dispersion modeling and technical reports as necessary to resolve the discrepancies noted above and to reflect responses to these data requests.

BACKGROUND: HEALTH RISK IMPACTS

The application and supporting electronic files of modeling do not provide complete documentation of health risk results. This makes it difficult to determine whether the health risk results can be supported by substantial evidence. The application shows that during construction, annual average PM_{2.5} impacts (0.27 µg/m³) would approach the threshold (0.3 µg/m³), and during routine operation, the project could cause 9.48 excess cancer cases per million for residential receptors, compared to a threshold of 10 (in Tables 4.3-10 and 4.3-11, and in Appendix A-2). Staff needs supporting information to ensure transparency of the impacts as presented in the application. The following tables appear to be missing from the application: Appendix A-2, Table 20: Construction Health Risk Impacts, and Table 21: Operational Health Risk Impacts.

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For staff to validate the results, staff needs to review how the modeled concentrations were used in estimating each chemical dose and the subsequent estimates of risk factors. The applicant may provide spreadsheet files showing live, embedded calculations to complete the review.

DATA REQUESTS

20. Please provide tables or spreadsheets with the embedded calculations live and intact showing the maximum modeled concentrations of the speciated chemicals that contribute to health risks at each of the maximally exposed receptors. To substantiate the chemical intake or dose, please tabulate for each maximally exposed receptor type: the concentration ($\mu\text{g}/\text{m}^3$) of each chemical contributing to cancer risk; the concentration and chronic hazard quotient for each chemical contributing to chronic hazard index, and the concentration and acute hazard quotient for each chemical contributing to acute hazard index.
21. Please tabulate the construction and operational health risk results by listing the coordinates for each maximally exposed receptor type (residential, worker, school, daycare, and recreational).

BACKGROUND: SENSITIVE RECEPTORS

Sensitive receptors are defined as groups of individuals that may be more susceptible to health risks due to chemical exposure. Sensitive individuals, such as infants, the aged, and people with specific illnesses or diseases, are the subpopulations which are more sensitive to the effects of toxic substance exposure.

BAAQMD recommends that any proposed project including the siting of a new TAC emissions source assess associated community risks and hazards impacts within 1,000 feet of the proposed project, and take into account both individual and nearby cumulative sources (that is, proposed project plus existing and foreseeable future projects). However, the applicant did not provide a list of sensitive receptors near the project site.

DATA REQUESTS

22. Please provide the list of all the sensitive receptors within 1,000 feet of the proposed project, including their names, types, and addresses.
23. Please also provide their coordinate or UTM's.
24. Please also provide a map of these sensitive receptors.

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BACKGROUND: CUMULATIVE HEALTH RISK ASSESSMENT

The BAAQMD CEQA Guidelines for assessing cumulative health risk impacts recommend investigating all sources of toxic air contaminants (TACs) within 1,000 feet of a proposed project. The SPPE Application only analyzed the health risk impacts related to the project itself. Staff needs the cumulative health risks evaluation to complete the environmental document. Because of the nearby railroad (CalTrain) and surrounding industrial stationary sources that could present elevated existing levels of TAC, staff requests information on TAC sources within 2,000 feet of the project fence-line.

DATA REQUESTS

25. Please contact the BAAQMD for information on the potential cumulative TAC health risks for all sources of TACs including railroad, highway, and stationary sources within 2,000 feet of the proposed project boundary.
26. Please analyze the project's contribution to cumulative health risk impacts in conjunction with the impacts of the nearby sources reported by BAAQMD.
27. Please provide a cumulative TAC health risks analysis to include all sources of TACs within 2,000 feet of the proposed project.

BACKGROUND: BUILDING SERVER ROOMS COOLING

The Project Description does not include information on the cooling system design for the data center or the type of refrigerant that would be used in providing cooling to the data center and the servers.

DATA REQUESTS

28. Please provide a description of the cooling system design for the data center and identify the refrigerant proposed.
29. Please provide an estimate of annual refrigerant leakage, reported as CO₂e emissions, from the cooling system proposed for CA3DC.

BACKGROUND: STATE OF CALIFORNIA GHG GOALS AND PROGRAMS

This Executive Order establishes a goal for California to achieve carbon neutrality as soon as possible and no later than the year 2045 and to maintain net negative carbon emissions thereafter. It directs the California Air Resources Board (CARB) to work with other state agencies to incorporate this goal into future Scoping Plans by identifying and recommending measures to meet the goal. It also directs state agencies to work with businesses to achieve the goals.

On page 4-74 of the SPPE application Part II (TN 237423), it states:

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"Because the project would not become operational prior to the end of 2020, consistency with the CAP cannot be used to determine significance under CEQA. The project, however, would still be required to be consistent with the requirements of the CAP, and implementation of required CAP measures would reduce GHG emissions from the project. The City is embarking on a process to update the CAP to reflect 2030 GHG reduction targets in SB 32, but that process is ongoing and would not precede the subject project application."

Staff will need to describe the project and its emissions in the context of the State of California policies, programs, and long-term goals for achieving carbon neutrality.

DATA REQUESTS

30. Please explain how the proposed data center and diesel back-up generators would be consistent with the State of California's goal of carbon neutrality no later than 2045?
31. Has the project applicant explored the procurement of renewable diesel and/or carbon offsets as a means of contributing to the State's goal of carbon neutrality? Please explain.
32. What currently available options have the applicant evaluated to contribute to this goal?
33. What additional options may become available in time for the project to contribute to this goal?

BACKGROUND: ELECTRIC VEHICLE CHARGING SPACES

Page 4-77 of the SPPE application Part II (TN 237423) states that the project proposes to implement a few efficiency measures including electric vehicle (EV) parking without providing further details. City of Santa Clara's 2013 Climate Action Plan (CAP) Measure 6.3 recommends 5 percent of all new parking spaces be designated for electric vehicle charging. Staff needs to confirm whether the project would comply with the City of Santa Clara's 2013 CAP Measure 6.3. Staff needs to confirm whether the project would comply with the City of Santa Clara's 2013 CAP Measure 6.3.

DATA REQUEST

34. Please confirm whether the project would comply with the City of Santa Clara's 2013 CAP Measure 6.3 and provide details for the number of electric vehicle charging spaces to be built for the project.

BACKGROUND: CONSISTENCY WITH GHG REDUCTION STRATEGY

The SPPE application Part II (TN 237423) includes discussion of consistency with some of the GHG reduction measures. However, the application failed to demonstrate consistency with the following control measures or policies from City of Santa Clara CAP, City of Santa Clara General Plan, and Bay Area 2017 Clean Air Plan.

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a. City of Santa Clara CAP:

Measure 7.2 Urban cooling

Require new parking lots to be surfaced with low-albedo materials to reduce heat gain, provided it is consistent with the Building Code.

Staff needs to know whether the project would implement this control measure.

Solar panels

The City adopted a 2035 reduction target of 834,400 MT CO₂e/yr, to be met by additional measures beyond those proposed for 2020. These include customer-installed 10,000 kW of solar on about 2,000 residential homes, nonresidential buildings, parking garages, parking lots, and other feasible areas (Page 59 of the CAP).

Staff needs to know if the project would install solar panels and how much capacity would be installed to help the City to meet its 2035 GHG reduction target.

b. City of Santa Clara General Plan:

Air Quality Policy 5.10.2-P4

Encourage measures to reduce greenhouse gas emissions to reach 30 percent below 1990 levels by 2020.

Page 4-84 of the SPPE application Part II (TN 237423) states that water conservation and energy efficiency measures included in the project would reduce GHG emissions associated with the generation of electricity. Staff needs detailed description of the measures that are going to be included in the project to demonstrate consistency with the Air Quality Policy 5.10.2-P4 in the City's General Plan.

Energy Policy 5.10.3-P1

Promote the use of renewable energy resources, conservation and recycling programs.

Staff needs to know whether the applicant would purchase all its electricity from Santa Clara Green Power, which is available through SVP.

Water Policy 5.10.4-P6

Maximize the use of recycled water for construction, maintenance, irrigation and other appropriate applications.

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Staff needs to confirm whether recycled water would be used for construction, maintenance, irrigation, or other appropriate applications.

c. Bay Area 2017 Clean Air Plan

ECM-1 Energy Efficiency

Decrease the amount of energy consumed in the Bay Area through increased efficiency and conservation to reduce the amount of fossil fuel needed to produce the electricity that the region uses.

Page 4-85 of the SPPE application Part II (TN 237423) states that due to the relatively high electrical demand of the data center uses on the site, energy efficiency measures have been included in the design and operation of the electrical and mechanical systems on the site. Staff needs detailed description of the energy efficiency measures that are going to be included in the project to demonstrate consistency with the control measure ECM-1 Energy Efficiency in the Bay Area 2017 Clean Air Plan.

DATA REQUEST

35. Please provide detailed analysis of the effectiveness and likely implementation for each component of the control measures/policies mentioned above.

BIOLOGICAL RESOURCES

BACKGROUND: COMPENSATION FOR PALLID BAT ROOSTS

The applicant proposed measures to reduce impacts to special-status bats from removal of bat roosts, if present, as part of **PD-BIO-2**. **PD-BIO-2** states "a mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation." Compensation includes mitigation undertaken to replace lost or adversely impacted habitat with habitat having similar functions of equal or greater ecological value. The method for determining the adequate amount of compensation was not defined in **PD-BIO-2** and therefore staff is unable to determine if the mitigation is adequate to compensate for potential impacts to pallid bats from loss of roosting habitat. In addition, staff has proposed changes to the existing language so that it more accurately reflects the type of impacts associated with the proposed project. Therefore, CEC staff is proposing changes to the applicant's design measure **PD-BIO-2**.

DATA REQUEST

36. Staff proposes the following modifications to the language of **PD BIO-2**. New language is in **bold underline text** and deleted language is in ~~strike-through~~

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~~text~~) Please provide the final version of **PD BIO-2** with a statement that the applicant will accept these changes and incorporate the revised version of **PD BIO-2** into the project. If the applicant disagrees with any of these changes, please propose alternate language using **bold underline text** for new language and ~~strike-through text~~ for deleted language.

PD BIO-2 Avoid and Minimize Impacts to Bat Species

- If suitable roosting habitat for special-status bats will be affected by Project construction (e.g., removal of ~~fr~~-buildings, **removal of trees** ~~modification of bridges~~), a qualified wildlife biologist will conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning **tree removal and/or demolition** ~~ground disturbance and/or construction~~. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat, etc.). Visual surveys will include trees within 0.25 mile of Project construction activities. The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.
- If evidence of bat use is observed, the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts.
- If roosts are determined to be present and must be removed, the bats will be excluded from the roosting site before the **tree or structure** ~~facility~~ is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).
- **If roosts cannot be avoided or it is determined that construction activities may cause roost abandonment, such activities may not commence until permanent, elevated bat houses have been installed outside of, but near the construction area. Placement and height will be determined by a qualified wildlife biologist, but the height of bat house will be at least 15 feet. Bat houses will be multi-chambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon**

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the size and number of colonies found, but at least one bat house will be installed for each pair of bats (if occurring individually), or of sufficient number to accommodate each colony of bats to be relocated.

BACKGROUND: CLARIFICATIONS ON TREE INVENTORY AND TREE REMOVAL

Staff needs clarifications regarding the applicant's potential impacts from loss of protected trees to complete its CEQA analysis. The 2590 Walsh Tree Inventory Report – Exhibit 2 included in SPPE application lists 66 trees as recommended for removal. In addition, the Biological Resources Assessment – Exhibit 6 depicts that 66 trees are proposed for removal. However, Section 4.4.1, page 4-41, of the SPPE application and the Biological Resources Assessment, page 25, states 65 trees would be removed. Staff requires clarifications on the tree count as there is some missing and/or inaccurate information. Please provide the following additional information:

DATA REQUESTS

37. Clarify if 65 or 66 trees are proposed to be removed as part of the project.
38. Provide a final Landscape Drawing Set that includes the Tree Disposition Plan, Tree Disposition, and Landscape Plan.
39. Update **PD-BIO-3** to reflect the correct number of trees to be removed, as necessary.

BACKGROUND: TREE PROTECTIONS FOR TREES TO REMAIN

The applicant proposed measures to reduce impacts to protected trees to remain on site during demolition and construction as part of **PD-BIO-4**. **PD-BIO-4** states "project applicant will follow the Tree Protection Measures for trees that are to remain in place, as stated in the attached arborist report on pages 5-12 (Appendix B)". These measures typically would be included in the Landscape Drawing Set and approved by the City of Santa Clara. Based on prior discussions between CEC staff and City of Santa Clara staff, the City of Santa Clara has been applying specific conditions of Architectural Review Approval calling for the 2:1 tree replacement and protection of trees to be retained according to the approved landscaped plans, rather than as a mitigation measure in the Mitigation, Monitoring, and Reporting Program (MMRP). The City of Santa Clara would review and enforce tree removal and replacement ratios initially through the Architectural Review. Therefore, CEC staff is proposing changes to the applicant's design measure **PD-BIO-4**.

DATA REQUEST

40. Staff proposes the following modifications to the language of **PD BIO-4**. New language is in **bold underline text** and deleted language is in ~~strike-through text~~)

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Please provide the final version of **PD BIO-4** with a statement that the applicant will accept these changes and incorporate the revised version of **PD BIO-4** into the project. If the applicant disagrees with any of these changes, please propose alternate language using **bold underline text** for new language and ~~strike-through text~~ for deleted language.

PD BIO-4 Trees to Remain: Avoidance and Minimization of Impacts

The project applicant will follow the Tree Protection Measures for trees that are to remain in place, as **included as specific conditions by the City of Santa Clara as part of Architectural Review Approval and included on the approved landscape plans for the project.** ~~stated in the attached arborist report on pages 5-12 (Appendix B). These measures include but are not limited to fencing, erosion control, pruning, root cutting, no compaction tree protection zones, watering/irrigation considerations, etc.~~

LAND USE

BACKGROUND: REQUIRED VARIANCES FOR PROPOSED SITE PLAN

According to Section 4.11.3.2 of the SPPE application, the project would require the City of Santa Clara Zoning Administrator to permit minor modifications of height, area, and yard regulations for an ML zone. If the project would exceed a 25% threshold of any ML zone requirement, the project would require variance approval by the Planning Commission at a notified public hearing. Additional information from the SPPE application is needed to confirm the compatibility of the proposed project components relative to the ML zone requirements.

Data Requests

41. According to Section 2.3.2 of the SPPE application, the CA3DC would be set back at a minimum of 109 feet from Walsh Avenue. However, the generator yard would be located on the north side of CA3DC near Walsh Avenue, within the 109-foot setback. Please provide the distance of the generator yard from Walsh Avenue.
42. According to Section 2.3.1 of the SPPE application, the height of the elevator parapet on the CA3DC is at 117 feet above ground level. However, Section 4.11.3.2 of the SPPE application describes the height of the elevator penthouse as 112.7 feet. Please provide the correct maximum height of the elevator structures and describe the structural differences between the parapet and the penthouse.
43. What is the square footage of the CA3BGF and the substation?

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44. The switching station is not illustrated on the Architectural Site Plan. Please provide detailed information on its location within the site plan or provide an updated site plan.
45. The Architectural Site Plan indicates that perimeter fencing would be installed along Walsh Avenue. What type of fencing (i.e., type of materials) would be installed, and what would be the anticipated height of this fencing?
46. Please state:
 - a. Whether there has been any discussion with the City of Santa Clara Planning Division about required variances for the project;
 - b. Information on person(s) contacted; and
 - c. Any comments received from the City Planning Division.

PROJECT DESCRIPTION

BACKGROUND: FOLLOW-UP TO DATA REQUEST 13

In Data Request 13, staff requested that the applicant provide information about the poles that would be used to support the transmission lines from the SVP 60 kV system to the CA3DC, including proposed pole structure configurations and measurements. Photographs were provided to show the anticipated configuration of the transmission poles, but no measurements were provided.

DATA REQUEST

47. Please provide the height, exact or approximate, of the transmission line poles.

TRANSPORTATION

BACKGROUND: VMT FROM DEMOLITION TRIPS, FOLLOW UP FROM DATA REQUEST 23

The project would require demolition of the existing building and the removal of 10,000 cubic yards of soil and undocumented fill from the site. The application does not provide the locations of the expected landfills and recycling centers where demolition materials, soil spoils, and other inert construction wastes would be disposed.

DATA REQUEST

48. Please provide the names and trip distances to the expected landfills and recycling centers where construction debris is anticipated to be disposed.