

DOCKETED	
Docket Number:	21-SPPE-02
Project Title:	STACK Trade Zone Park
TN #:	243096
Document Title:	STACK Data Requests Set 1
Description:	N/A
Filer:	Lisa Worrall
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/16/2022 3:20:52 PM
Docketed Date:	5/16/2022



**CALIFORNIA
ENERGY COMMISSION**



**CALIFORNIA
natural
resources
AGENCY**

May 16, 2022

STACK Infrastructure
C/O Scott A. Galati
1720 Park Place Drive
Carmichael, California 95608

Data Requests Set 1 for STACK Trade Zone Park (21-SPPE-02)

Dear Scott Galati:

Pursuant to California Code of Regulations, title 20, sections 1941 and 1716, the California Energy Commission (CEC) staff is asking for the information specified in the enclosed Data Requests Set 1, which is necessary for the staff analysis of the STACK Trade Zone Boulevard Technology Park (STACK Trade Zone Park) (21-SPPE-02). The STACK Trade Zone Park would include an Advanced Manufacturing Building (AMB), the SVY Data Center (SVYDC), the SVY Backup Generating Facility (SVYBGF), a parking garage, and related utility infrastructure, which together constitute the "project" under the California Environmental Quality Act (CEQA). This Data Requests Set 1 seeks further information in the areas of air quality and public health, biological resources, cultural resources, greenhouse gas emissions, population and housing, 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, object to providing the requested information, or need to revise the timeline, please send written notice to me and the Committee within 20 days of receipt of this letter. The written notification must contain the reasons for not providing the information, the grounds for any objections, or reason(s) for the need to revise the timeline (see Cal. Code Regs., tit. 20, § 1716 (f)).

If you have any questions, please email me at lisa.worrall@energy.ca.gov.

Lisa Worrall

Lisa Worrall
Project Manager

Enclosure: Data Requests Set 1

**STACK TRADE ZONE PARK SPPE
DATA REQUESTS SET 1**

Table of Contents

AIR QUALITY AND PUBLIC HEALTH 2
BIOLOGICAL RESOURCES..... 7
CULTURAL RESOURCES 8
GREENHOUSE GAS EMISSIONS 12
POPULATION AND HOUSING..... 14
PROJECT DESCRIPTION 15
TRANSPORTATION 17

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

AIR QUALITY AND PUBLIC HEALTH

Authors: Brewster Birdsall, Ann Chu, and Wenjun Qian

BACKGROUND: AIR DISTRICT APPLICATION

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

DATA REQUESTS

1. Please provide copies of all substantive correspondence between the applicant and the BAAQMD regarding the project, including permit application and e-mails, within one week of submittal or receipt. This request is in effect until staff publishes the initial study or the environmental impact report.
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: MANUFACTURERS' SPECIFICATION SHEETS

There are inconsistencies in the description of the proposed emergency standby generators (gensets) in the SPPE application (TN 240910). Page 16 of the SPPE application states that each of the 36 large gensets (CAT 3516E) would be equipped with selective catalytic reduction (SCR) and diesel particulate filters (DPF) to comply with Tier 4 emissions standards. Page 84 of the SPPE application states that the proposed engines will comply with the applicable federal Tier 2 and Tier 4 emissions standards for emergency standby electrical generation CI engines. Page 88 of the SPPE application states that the gensets proposed for installation are made by Caterpillar, with a certified Tier 4 rating. Appendix AQ-1 indicates that Miratech Catalyst and DPF would be used to meet a Tier 4 rating.

Page 88 of the SPPE application also states that Appendix AQ-2 contains the manufacturers specification sheets for the engines and the air pollution control systems. However, only the performance data for the smaller CAT C32 engines are included in Appendix AQ-2. The SPPE application does not show manufacturer guarantees for the CAT 3516E or the control efficiencies for add-on controls, such as SCR or DPFs. Staff needs the manufacturer specification sheets for the engines and the air pollution control systems to verify the emissions for the proposed CAT 3516E and CAT C32 engines.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

DATA REQUESTS

3. Please clarify whether all the engines would be certified with Tier 4 rating or use a SCR and DPF emissions control system to meet a Tier 4 rating. Please clarify which engines would not meet a Tier 4 rating, if any, and how they would comply with BAAQMD Best Available Control Technology (BACT) requirements.
4. Please provide the vendor guarantees and performance data for the larger engines (CAT 3516E) and guarantees for the control systems on the larger engines (CAT 3516E) and smaller engines (CAT C32), including the SCR system and DPF specifications. This information should identify potential emissions for a foreseeable range of engine load settings and documentation substantiating the effectiveness of the proposed SCR and DPF systems.

BACKGROUND: AMMONIA EMISSIONS

With the use of SCR to control oxides of nitrogen (NOx) emissions from the proposed engines, unreacted ammonia would also be emitted. Staff needs the ammonia emissions estimate to complete the analysis.

DATA REQUEST

5. Please provide engine ammonia emission rates and total emissions due to the use of SCR.

BACKGROUND: CONSTRUCTION AND OPERATION EMISSIONS CALCULATIONS

Appendix AQ-1 (Engine Emissions Data) and Appendix AQ-4 (Construction Emissions CalEEMod) in the SPPE application Appendices A and B document (TN 240911-1) are used to document emissions calculations. Staff needs the spreadsheet files of the emissions estimates with live, embedded calculations to complete the analysis.

DATA REQUEST

6. Please provide the spreadsheet versions of the worksheets in Appendix AQ-1 and Appendix AQ-4 with the embedded calculations live and intact.

BACKGROUND: CONSTRUCTION MITIGATION MEASURES

Pages 56 and 94 of 163 in the SPPE Appendices A and B document (TN 240911-1) state that all off-road construction equipment are assumed to be Tier 4 final. However, the proposed mitigation measure MM AIR-1 does not include this requirement.

In addition, in its comment letter on the Draft Environmental Impact Report for the CA3 Backup Generating Facility (TN 242229), the BAAQMD recommended the following

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

mitigation measures, in addition to the standard best management practices, to further address construction-related impacts:

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

DATA REQUEST

7. Please indicate if any mitigation measures or assumptions, other than those proposed in MM AIR-1, were used in CalEEMod to estimate construction emissions.

BACKGROUND: ROAD DUST EMISSIONS PARAMETERS

Pages 20, 38, 58, and 95 of 163 in the SPPE Appendices A and B document (TN 240911-1) show that material moisture content, material silt content, and mean vehicle speed were set to zero in CalEEMod for road dust emissions estimation. Staff would like to understand the reason for setting these values to zero.

DATA REQUEST

8. Please provide the justification for setting material moisture content, material silt content, and mean vehicle speed to zero for the road dust emissions estimation. If the approach cannot be justified, please revise CalEEMod using site appropriate parameters.

BACKGROUND: READINESS TESTING AND MAINTENANCE LIMITS

Page 89 of the SPPE application states that the maximum daily emissions were estimated assuming only eight of the CAT 3516E engines would be tested on any day. However, page 97 of the SPPE application states that each engine was assumed to operate up to 10 hours per day to conservatively represent 10 different engines operating for one hour each in any one day. The engines were assumed to be tested anytime from 7 AM to 5 PM. Staff would like to verify the maximum number of engines

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

to be tested on any day and whether these assumptions would be made enforceable by permit conditions.

Additionally, recent (3/30/2022) noise studies for the project include a design recommendation in TN 242507 that would cause operations outside of the hours assumed in the air quality impact analysis, as follows: "...full-load testing of generators shall be limited to the hours of 5 PM to 7 PM." This newer project design change would conflict with the assumptions used in prior air quality analyses.

DATA REQUESTS

9. Please clarify the maximum number of engines to be tested on any day.
10. Please confirm whether the applicant would request from the BAAQMD an enforceable limit that would allow the maximum number of engines to be tested on any day for the CAT 3516E engines.
11. Please confirm that the applicant would request from the BAAQMD an enforceable limit that would allow the testing of engines only between 7 AM to 5 PM daily (or is it 5 PM to 7 PM?).
12. Please confirm whether the noise mitigation in TN 242507 that prescribes testing after 5 PM could be accommodated by changing the proposed hours of operation assumed in the air quality analysis.
13. If the applicant proposes this for noise mitigation, please re-evaluate short-term (1-hour) air quality impacts to consider the potential for air emission testing occurring between the hours of 5 PM to 7 PM.
14. Please confirm that the applicant would request from the BAAQMD an enforceable limit on concurrent testing of engines so that only a single engine operates for maintenance and testing at any given time.

BACKGROUND: SCREENING FOR LOW-LOAD CONDITIONS

The air quality impact analysis (SPPE application, p. 97) indicates that testing can occur over a range of load conditions. However, the analysis says that "an air quality screening analysis was not performed," and "...the worst-case stack condition and the worst-case engine location could be determined from the screening analysis" (SPPE application, p. 97). Staff needs a detailed description of the types of testing and maintenance scenarios, the frequency of full-load tests and low-load tests, and confirmation of impacts at various standby engine load points to verify the assumptions used in the SPPE analysis.

DATA REQUESTS

15. Please provide a detailed description of the testing and maintenance frequencies and standby engine load points for the CAT 3516E and CAT C32 engines. The

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

description should include the length and engine load points for each weekly, monthly, quarterly, and annual testing and maintenance event.

16. Please provide a screening review of short-term (1-hour) ambient air quality impacts during testing for a representative range of engine load points (SPPE Appendix AQ-2 defines performance at 100, 75, 50, 25, and 10 percent load) to confirm that full-load testing would produce the highest ground-level concentrations.

BACKGROUND: SCREENING FOR CHANGES IN BUILDING DESIGN

Recent noise studies for the project include a design recommendation in TN 242507 that could change how wind flows around the buildings to the nearest receptors, as follows: "...[add] rooftop parapet walls ... at a height of 16 feet to shield the nearby uses from operational noise." Staff needs to confirm if installing 16-foot-high parapets would change the results of the previously filed air quality impact analysis as a result of downwash influences.

DATA REQUEST

17. Please provide a screening evaluation of short-term (1-hour) and annual air quality impacts with the recommended parapet in place to determine whether adding noise mitigation in TN 242507 would cause maximum fence-line concentrations to increase above those previously presented.

BACKGROUND: CONSTRUCTION-PHASE DISPERSION MODELING

Project construction-phase emissions from off-road equipment are represented as 59 individual point sources in the AERMOD dispersion model electronic files uploaded by the applicant for staff review. The applicant uses a similar arrangement in modeling "crossover" impacts when partial site operation could overlap with the second phase of construction. Staff reviewed the discussion for information on the point sources, and the application indicates that: "The exit temperature and stack velocity were based on an average sized construction engine that could be used for the project." (SPPE application, p. 99) Staff has not been able to find information in the SPPE application to support the construction modeling stack parameters.

DATA REQUEST

18. Please provide a reference or citation supporting the assumed release temperatures and velocities in the stack parameters for the construction-phase point sources modeled.

BACKGROUND: HEALTH RISK ASSESSMENT (HRA)

The applicant conducted HRA for construction, overlap (construction + operation), and operation, but staff finds the presentation of results to be unclear.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

DATA REQUESTS

19. Please confirm that the risk results of Table 4.3-21 on page 105 of the SPPE application is for Construction Health Risk Assessment Summary, Table 4.3-23 and 4.3-24 is for Operation Health Risk Assessment Summary, and Table 4.3-28 is for Overlap (Construction + Operation) Health Risk Assessment Summary.
20. Please explain why the risk numbers in Table 4.3-28 on page 112 (Overlap of Construction + Operation) is lower than the risk numbers of Table 4.3-23 and 4.3-24 (Operation) on page 106. For example, the cancer risk at the point of maximal impact (PMI) in Table 4.3-23 (Operation) is 2.29E-05, higher than the cancer risk at PMI (i.e., 4.16E-6) in Table 4.3-28 (Overlap of operation and construction). Is it reasonable that the overlap of construction and operation should be higher than operation alone?

BIOLOGICAL RESOURCES

Author: Tia Taylor

BACKGROUND: SPECIAL STATUS SPECIES

The Biological Resources Section 4.4 of the SPPE application mentions that the site is highly urbanized, devoid of sensitive habitat, and special-status species are not present on the site. However, the section acknowledges nesting raptors could potentially use the trees onsite for nesting or as a roost. The SPPE site is near several dedicated open space/nature preserve areas containing wetlands, riparian woodlands, and aquatic habitats: Sierra Vista Open Space Preserve, Guadalupe River corridor, and Baylands Park. These communities support multiple special-status species.

DATA REQUEST

21. Please provide a copy of any biological survey performed as well as any plant/animal species research conducted, such as results from a California Natural Diversity Database search.

BACKGROUND: TREES AND ARBORIST REPORTS

The Biological Resources Section 4.4 of the SPPE application presents information from the November 2021 and June 2021 Arborist Reports included in Appendix B and Appendix C, respectively. Section 4.4 outlines that there are 156 trees to be removed with an additional 54 trees along the transmission line route and 26 neighboring trees that all might be negatively impacted by the construction activities.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

DATA REQUESTS

22. There are inconsistencies with the numbers of trees to be removed and those being counted for mitigation. For example, only 10 native onsite trees are mentioned for removal when it specifies that there are 13 native trees onsite. Also, from the arborist report in Appendix B, there are two native trees that meet the 38-inch city ordinance threshold that require mitigation but were not counted as part of the total for native trees to be mitigated. Please double check the accuracy of and confirm the exact numbers for trees that will be removed and mitigated.
23. Please update Figure 4.4-1 and Figure 4.4-2 to clearly show which trees will be removed and which trees will be protected and possibly removed later. Try to match Figure 4.4-1 to the figure titled TPZ Map on page 11 of the arborist report in Appendix C. Also, please clearly show the 26 neighboring trees as there are only 19 trees labeled A-S adjacent to the project site shown on the TPZ Map, so it is not clear where the other seven trees are.

BACKGROUND: SANTA CLARA VALLEY HABITAT CONSERVATION PLAN

The Biological Resources Section 4.4 of the SPPE application, and more specifically section 4.4.2.1, acknowledges that the project would be subject to the Santa Clara Valley Habitat Conservation Plan, including nitrogen deposition fees.

DATA REQUESTS

24. Please specify in more detail what is required for the project to comply with the guidelines of the habitat plan.
25. The operation of the proposed emergency diesel backup generators would result in NOx emissions that could, depending on the height and velocity of the emission plume from the generators, negatively impact the neighboring special-status plant and wetland communities. Since the project will need to pay nitrogen deposition fees per the Santa Clara Valley Habitat Conservation Plan guidelines, please provide a more thorough discussion of nitrogen deposition from the project along with pertinent data and figures.

CULTURAL RESOURCES

Authors: Lauren DeOliveira and Roger Hatheway

BACKGROUND

Staff has reviewed the results of the Archaeological Resources Assessment (ARA) written by PaleoWest (2022) and the March 8, 2022, SPPE Application Supplement – Section 4.5 Cultural Resources (TN 242219). In reviewing these documents, staff has determined that additional information is required to complete staff's analysis. The built

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

environment windshield survey does not include a one-building band surrounding the project Study Area (see PaleoWest 2022, Figures 2 and 4). This is the primary means by which visual impacts of a proposed project may be readily assessed on any potentially significant 45+ year-old districts, buildings, structures, or objects.

DATA REQUEST

26. Please revise the built environment windshield survey to include a one-building band of parcels directly adjacent to the project Study Area.
 - a. Please provide dates of construction for buildings within a one-building band of the Study Area that appear in a 1979 aerial photograph as compared to buildings that appear in a 1974 aerial photo in the EDR Aerial Photo Decade Package in the Ramboll US Consulting, Inc. October 2020, *Phase I Environmental Site Assessment* (DJP 2021, Appendix H, Appendix C.2). Several buildings may require evaluation in accordance with the CEQA Guidelines depending on their date of construction. Preliminary research conducted by staff indicates that at least two of these buildings may require evaluation: the building located at 2001 Fortune Drive (Parcel Id: 24417003) immediately to the east of the project Study Area, which appears as built in 1976, and a building located at 1700 Montague Expressway (Parcel Id: 24424004), which appears as built in 1968. These buildings may be 45+ years in age. Staff is requesting confirmation of these preliminary findings and additional research to determine if any other buildings within a one-building band of the project Study Area are 45+ years in age. If any buildings within a one-building band of the Study Area are confirmed to be 45+ years in age, please provide an evaluation of those parcels, including all structures, buildings, and objects that are 45 years or older on California Department of Parks and Recreation 523 series forms, evaluating their eligibility for listing on the California Register of Historical Resources (CRHR), or as a local landmark. Also, when evaluating these buildings please include a consideration of existing City of San Jose historical and architectural context statements.
 - b. Please include a statement in accordance with California Office of Historic Preservation Technical Assistance Series #1: CEQA Historical Resources, Special Considerations, regarding historical resources achieving significance within the past 50 years. The great majority of buildings within the project Study Area or adjacent to the project area appear to be less than 45+ years in age, and a brief statement regarding their significance in accordance with "Special Considerations" as outlined in OHP Technical Series #6 for historical resources having achieved significance within the past 50 years is requested (OHP 2011, page 3).

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

BACKGROUND

The ARA does not include the identification of or a discussion of staging areas, which can involve ground disturbance. The identification of staging areas is necessary to ensure that all potential project impacts are assessed.

DATA REQUEST

27. Please identify project staging areas.

- a. If staging areas are within the current project Study Area and will not have an impact on cultural resources, please state this clearly in the ARA.
- b. If staging areas are off-site, or not within the currently defined project Study Area, please revise the ARA and Cultural Resources Section 4.5 of the SPPE Application Supplement (TN 242219) to include updated records searches, surveys, and findings for both archaeology and built environment as necessary.

BACKGROUND

The ARA does not include prehistoric, ethnographic, or historic contexts/setting sections, which are standard in cultural resources technical reports. These contexts help place the Project area in time and assist in assessing the probability of encountering subsurface archaeological deposits.

DATA REQUEST

28. Please revise the ARA and Cultural Resources Section 4.5 of the SPPE Application Supplement (TN 242219) to include prehistoric, ethnographic, and historic context information.

BACKGROUND

The record search results in the ARA are unclear. The records search results text in the ARA indicates that there are two tables showing previously conducted investigations and previously recorded cultural resources; however, there are four tables total in the ARA, some of which are misnumbered. There is also one report number, author, year, and title that is in bold in Table 2 of page 7 of the ARA. Staff is unclear as to what the bold report represents. The record search results text indicates there are four previously recorded cultural resources within the Study Area, but there is no table showing the resource numbers, descriptions, or any known National Register of Historic Places (NRHP)/CRHR eligibility. This section should clearly indicate the results of the record search along with corresponding tables. Lastly, no record search results map(s) was provided to the CEC staff.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

DATA REQUESTS

29. Please revise the previous cultural resources investigation table(s) to clearly indicate if previous investigations cross into the Project area.
30. Please revise the previous cultural resources table in the ARA. This table should include a Primary number, Trinomial, a description of the resource, the date(s) it was recorded or updated, and any known NRHP/CRHR eligibility.
31. Please provide record search results maps to the CEC staff. The map(s) should include the locations of all previous cultural resources reports and resources in relation to the Project area and 0.25-mile record search buffer.

BACKGROUND

It is unclear as to whether the Native American representatives, identified by the Native American Heritage Commission, were consulted with as part of tribal outreach and data gathering for the ARA. Neither the ARA nor any appendices indicate that the Native American representatives were contacted. However, page 5 of section 4.5-Cultural Resources of the SPPE Application Supplement (TN 242219) indicates the Native American representative were contacted.

DATA REQUEST

32. Please revise the ARA and/or Cultural Resources Section 4.5-of the SPPE Application Supplement (TN 242219) to clearly indicate whether Native American representatives were contacted as part of the ARA, including copies of any letters sent and the results of the outreach effort.

REFERENCES

- DayZenLLC 2021e – DayZenLLC (DayZenLLC). (TN 240912). STACK Backup Generating Facility Application for SPPE Appendices H I J and K, dated December 10, 2021. Available online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-02>
- DayZenLLC 2022a – DayZenLLC (DayZenLLC). (TN 242219). SPPE Application Supplement – Cultural Resources, dated March 8, 2022. Available online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-02>
- OHP 2011 – Office of Historic Preservation, California Register and National Register: A Comparison (for the Purposes of Determining Eligibility for the California Register). Technical Assistance Series #6, Sacramento, CA, 2011 Update. Electronic document. Accessed on: April 20, 2022. Available online at:
<https://ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

PaleoWest 2022 – PaleoWest, LLC (TN242319), Letter Report Regarding Results of the Archaeological Resources Assessment in Support of the 1849 Fortune Drive and 2400 Ringwood Avenue (Project), City of San Jose, Santa Clara County, CA. Submitted to David J Powers & Associates, Inc., Oakland, CA. Prepared by PaleoWest, LLC, Walnut Creek, CA, February 2, 2022.

GREENHOUSE GAS EMISSIONS

Authors: Brewster Birdsall and Wenjun Qian

BACKGROUND: GREENHOUSE GAS EMISSIONS FROM ENERGY USE, MOBILE SOURCES AND BUILDING OPERATION

The SPPE application does not provide a table showing greenhouse gas (GHG) emissions from energy use, mobile sources, and building operation with assumptions used for the emissions estimation. Staff is not able to match the assumptions used in CalEEMod for operational emissions estimation with the Project Description Section 2. Page 21 of the SPPE application states that Building SVY05 will be approximately 220,300 square feet and Building SVY06 will be approximately 306,500 square feet. Page 37 of the SPPE application states that the Advanced Manufacturing building (AMB) will comprise a four-story building of approximately 135,000 square feet. However, Appendix AQ-4 shows that the total floor surface area in CalEEMod was assumed to be 500,100 square feet for first phase of construction, which includes 225,000 square feet for SVY05, 135,000 square feet for AMB, and 140,100 square feet for a parking garage. The floor surface area for SVY06 was assumed to be 288,000 square feet in CalEEMod. Staff needs to confirm the floor surface area for each building.

In addition, staff needs to verify the number of emergency backup generators and electricity needed for each data center building. Page 11 of the SPPE application states that SVY05 will be supported by 16 generators and SVY06 will be supported by 22 generators. However, the air quality modeling files show that there would be 17 generators (16 larger generators and one smaller generator) for SVY05 and 21 generators (20 larger generators and one smaller generator) for SVY06.

DATA REQUESTS

33. Please provide a table showing GHG emissions from energy use, mobile sources, and building operation with assumptions used for the emissions estimation.
34. Please verify the floor surface area for each building.
35. Please verify the number of emergency backup generators and electricity in megawatts (MW) needed for each data center building.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

BACKGROUND: BUILDING SERVER ROOMS COOLING

The SPPE application 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

36. Please provide a description of the cooling system design for the data center and identify the refrigerant proposed.
37. Please provide an estimate of annual refrigerant leakage, reported as carbon dioxide equivalent (CO₂e) emissions, from the cooling system proposed for the project.

BACKGROUND: SULFUR HEXAFLUORIDE LEAKAGE RATE

The project would include electrical equipment such as circuit breakers and transformers. Staff needs an estimate of the leakage of sulfur hexafluoride (SF₆) from the electrical equipment to include in the GHG analysis.

DATA REQUEST

38. Will SF₆ be used as the electrical insulator for any electrical equipment for the project? If yes, please provide an estimate of the quantity used and the amount of annual SF₆ leakage.

BACKGROUND: LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) CERTIFICATION

The project would be subject to the city of San Jose Private Sector Green Building Policy (Council Policy 6-32), which establishes baseline green building standards for new private-sector construction and provides a framework for the implementation of these standards. This policy requires that applicable projects achieve minimum green building performance levels using the City Council-adopted standards. Since the proposed commercial/industrial project would be greater than 25,000 square feet, the proposed data center buildings would be required to achieve LEED Silver certification, at a minimum. Staff needs to verify that the project would comply with the city of San Jose Private Sector Green Building Policy (Council Policy 6-32).

DATA REQUEST

39. Please confirm that the project would achieve a minimum of LEED Silver certification to comply with the city of San Jose Private Sector Green Building Policy (Council Policy 6-32).

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

POPULATION AND HOUSING

Author: Ellen LeFevre

BACKGROUND: PROJECT CONSTRUCTION

Staff needs to know more about the construction of the SVY Data Center (SVYDC), the SVY Backup Generating Facility (SVYBGF), the AMB, a parking garage, and related utility infrastructure, collectively "the project." The SPPE application notes on page 45 that Phase I activities will last approximately 16 to 19 months and include a construction workforce with a peak number of workers of approximately 150 per month and an average of approximately 100 per month. "Phase II construction would begin as soon as commercially feasible, likely in late 2023 and take approximately 16 months to complete for commercial operation at the beginning of 2025. Phase II construction workforce is estimated to have a peak number of workers of approximately 200 per month with an average of approximately 80 per month." Staff has the following associated questions and requests:

DATA REQUEST

40. Provide the estimated number of workers in the construction workforce by month and occupation for Phase I and Phase II of the project.

BACKGROUND: PROJECT CONSTRUCTION AND OPERATION WORKFORCE

Staff needs to know the assumptions used for the construction and operations workforce for the project. No assumptions were discussed in the SPPE application. Staff needs to know more about the project's operational employees. The SPPE application notes on page 37, "The total employment anticipated for the entire Trade Zone Park after full site buildout is expected to be approximately 198 (70 employees for the SVYDC and 128 for the AMB)."

DATA REQUESTS

41. Where are the project construction and operation workforce expected to be derived from: locally within the Greater Bay Area or non-locally (beyond a two-hour commute of the project site for construction workers and one-hour commute for operation workers)?
42. What portion of the construction and operation workforce does the applicant anticipate would be local, and what portion would be non-local?
43. What would be the occupations of the operational employees? Provide the number of daily shifts required for operation of the project and the average number of workers by occupation for each shift.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

44. Page 5 of Section 4.11 Land Use and Planning states, “[T]he project would contribute approximately 198 jobs to the City, 125 of which would be associated with the advanced manufacturing facility and 73 of which would be associated with the data center.” Please confirm the number of operational employees for the SVYDC and AMB.

PROJECT DESCRIPTION

Author: Laiping Ng, Tia Taylor, and Lisa Worrall

BACKGROUND: CONSTRUCTION DETAILS

Section 2.2 of the SPPE application discusses the generating facility design, operation, and construction. Sections 2.2.1 and 2.3.4 specifically mention two buildings (referred to as Olympus and Fortune Drive buildings) and mention the demolition of one of the buildings during phase one of construction. Sections 2.3.3 and 2.3.4 discuss parking and project construction, including the employees needed to complete construction.

DATA REQUESTS

45. Please clarify whether the demolition of both buildings, Olympus and Fortune Drive, will be a part of this SPPE project. Also specify the estimated timing of demolition with respect to each building, and identify the phase of construction during which the demolition will take place.
46. Laydown areas for construction materials and construction worker parking are not mentioned. Please clarify whether all construction parking and material laydown would occur on the site. If not please provide details, the location, and a map of any off-site parking and laydown areas.

BACKGROUND

The SPPE application Section 2.3 indicates that the SVYBGF would deliver electricity to SVYDC. The SVYBGF includes an onsite substation with two electrical supply lines that would connect to Pacific Gas and Electric Company (PG&E). Staff requires a complete description of the both the SVYDC interconnection to the PG&E transmission grid and the reliability of the PG&E grid in order to understand the potential operation of the emergency backup generators.

DATA REQUESTS

47. Please provide a complete one-line diagram for the new onsite substation. Show all equipment ratings, including bay arrangement of the breakers, disconnect switches, buses, redundant transformers or equipment, etc., that would be required for interconnection of the SVYDC project.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

48. Please provide a detailed description and a one-line diagram showing how the SVYDC and AMB would be connected to the onsite substation. Please label the name and voltage of the lines and feeders that connect to the onsite substation and both of the SVYDC and the AMB.
49. Please provide the conductor name, type, current carrying capacity, and the overhead conductor size for the 115 kilovolt (kV) transmission lines that connect the existing PG&E 115 kV Newark-Milpitas #2 line to the onsite substation.
50. Please provide pole configurations that would support the 115 kV overhead line that would loop into the onsite substation.
51. Please provide the underground cable name, type, current carrying capacity, and underground cable size for the 115 kV transmission lines that connect the existing PG&E 115 kV Newark-Milpitas #2 line to the onsite substation.
52. What is the proposed AMB load?
53. Would one of the proposed transformers be able to support both of the SVYDC and the AMB loads when the other transformer is out?
54. Please provide information that reviews the frequency and duration of historic outages of the Newark-Milpitas #2 115 kV line and related facilities that would likely trigger the loss of electric service to the proposed onsite substation and could lead to the emergency operations of the diesel-powered emergency backup generators. This response should identify the reliability of service historically provided by PG&E to similar customers in this part of its service territory.
55. Please explain whether PG&E would need to upgrade its transmission system in order to reliably interconnect the SVYDC and AMB loads.
56. Please provide the following regarding Public Safety Power Shutoff events:
 - a. Would historical Public Safety Power Shutoff events have resulted in the emergency operations at the proposed SVYDC?
 - b. Have there been changes to the PG&E system around the SVYDC that would affect the likelihood that future Public Safety Power Shutoff events would result in the operation of emergency backup generators at the proposed SVYDC?

BACKGROUND

Section 4.1.2.1 page 67 of the SPPE application states that “the project would include an approximately 0.33-mile off-site aboveground 60 kV transmission line extension from the project site...”

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

DATA REQUEST

57. Please clarify if there would be a 60 kV transmission line that would loop into the proposed substation in addition to the two proposed 115 kV transmission lines. If yes, please provide a complete one-line diagram showing the 60 kV and 115 kV lines interconnection to the proposed onsite substation. Show all equipment ratings, including bay arrangement of the breakers, disconnect switches, buses, redundant transformers or equipment, etc., that would be required for the interconnection of the SVYDC project.

BACKGROUND

Page 34 in the Project Description Section 2 states that to serve the Trade Zone project, PG&E would construct a "looped" transmission interconnection involving two offsite transmission line extensions. The first extension would be supported in part on existing overhead transmission towers, located along the south side of Trade Zone Boulevard, and possibly up to three of the existing seven overhead transmission towers may need to be replaced.

DATA REQUEST

58. Please explain when a determination of if or which existing towers would need to be replaced would be known, and, if towers need to be replaced, when details about their replacement would be provided to staff.

TRANSPORTATION

Author: Ashley Gutierrez

BACKGROUND: CITY OF SAN JOSE VEHICLE MILES TRAVELED (VMT) EVALUATION SCREENING TOOL

Section 4.17.2.1 Transportation Project Impacts in the SPPE application, under question b discusses the project's VMT impact. The project's VMT was estimated as 13.57 per employee using the San Jose VMT Evaluation Tool and the Santa Clara County VMT Evaluation Tool. Staff reviewed the VMT findings and found that the square footage in both examples, San Jose VMT Evaluation Tool and the Santa Clara County VMT Evaluation Tool, was not inputted correctly. Square footage was inputted as 661,800 thousand square feet (KSF), which equates to more square footage than the proposed project. Staff ran both the Evaluation Tools using 662 KSF and 135 KSF and found that both reports result in a VMT estimate higher than the industrial threshold of 14.37 VMT.

STACK TRADE ZONE PARK SPPE DATA REQUESTS SET 1

DATA REQUEST

59. In consultation with the city of San Jose, please submit a transportation analysis using a VMT calculation methodology that is consistent with City Council Policy 5-1 and include proposed mitigation measures as necessary to reduce the project VMT below the industrial VMT threshold (14.37).