

DOCKETED

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SUPPLEMENTAL RESPONSES TO CEC STAFF DATA REQUEST SETS 1 AND 2

STACK Trade Zone Park (21-SPPE-02)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION

SUBMITTED BY: **STACK Infrastructure**

October 2022



INTRODUCTION

Attached are STACK Infrastructure's (STACK) supplemental responses to California Energy Commission (CEC) Staff Data Request Set No. 1 (1-59) and Set No. 3 (60-for the Trade Zone Park (TZP) Application for Small Power Plant Exemption (SPPE) (21-SPPE-02). The following contains supplemental responses to Data Requests

- Air Quality DRs 4, 11-13;
- Cultural Resources DRs 24, 15; 27 through 32; 62 and 63;
- Greenhouse Gas Emissions DRs 33 and 37;
- Project Description DRs 54-56 and 58; Responses from PG&E; and
- Transportation DRs 80-82.

The Data Responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as Staff presented them and are keyed to the Data Request numbers. Additional tables, figures, or documents submitted in response to a data request (e.g., supporting data, stand-alone documents such as plans, folding graphics, etc.) are found in Attachments at the end of the document and labeled with the Data Request Number for ease of reference.

GENERAL OBJECTIONS

STACK objects to all data requests that require analysis beyond which is necessary to comply with the California Environmental Quality Act (CEQA) or which require STACK to provide data that is in the control of third parties and not reasonably available to STACK. Notwithstanding this objection, STACK has worked diligently to provide these responses swiftly to allow the CEC Staff to prepare the Draft Environmental Impact Report (DEIR).

AIR QUALITY AND PUBLIC HEALTH

DATA Requests

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.

Supplemental Response to Data Request 4

See Attachment AIR DR-4.

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?).

Supplemental Response to Data Request 11

The purpose of the limitation proposed by STACK was to ensure compliance with the City of San Jose's noise ordinance and to limit operations during business hours as a mitigation related to the nearby commercial property. STACK completed and docketed additional noise modeling (TN244212) and revised air quality modeling (TN246369). The noise modelling resulted in additional noise mitigation barriers which were incorporated into the design to further minimize noise at the adjacent commercial property. See Revised Project Description (TN246142) which describes and shows the noise mitigation features. The addition of these noise mitigation features reduced the number of generators for which an hourly restriction (testing to take place from 5 pm to 7pm) is proposed to three specific generators for building SVY06 (Generator Numbers 19, 20, and 21 shown of Figure 1 of the revised noise assessment, TN244212). This restriction should not be enforced by the BAAQMD, but instead should be a mitigation measure enforced by the City of San Jose and therefore, STACK is not proposing this restriction in its applications to the BAAQMD.

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.

Supplemental Response to Data Request 12

See Response to Data Request 11.

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.

Supplemental Response to Data Request 13

See Response to Data Request 11.

CULTURAL RESOURCES

Responses to Cultural Resources DRs 24, 15; 27 through 32; 62 and 63 were provided by Paleowest and are included in Attachment CUL-Paleowest Responses.

GREENHOUSE GAS EMISSIONS

33. Please provide a table showing GHG emissions from energy use, mobile sources, and building operation with assumptions used for the emissions estimation.

Supplemental Response to Data Request 33

The initial response to Data Request 33 had an arithmetic error in the Project indirect emissions from electricity consumption. The previously reported calculation of 73,668 MT/yr has been corrected in Table 4.8-1 below to 76,124 MT/yr to account for the 3 MW of estimated electricity consumption from the AMB.

Table 4.8-1: Annual Project GHG Emissions (CO₂e) in Metric Tons/Yr	
Source Category	Project Emissions
Direct Emissions¹	
Mobile	156.9
Waste	114.2
Area Source	0.015
Water	8.5
Generator Testing and Maintenance	4,328
Subtotal	4607.6
Indirect Emissions²	
Energy Consumption (Maximum Data Center and AMB Electricity Demand)	76,124
Reduction from Mitigated Energy Consumption (Maximum Data Center and AMB Electricity Demand)*	-76,124
Subtotal	0
Total	4607.6
¹ Source: Atmospheric Dynamics. Air Quality Impact Assessment. December 2021. ² Based on PG&E's 2018 carbon intensity factor of 206 lbs. CO ₂ /MWh. Assumes a conservative scenario where the project operates at maximum capacity (90 MW for Data Center Buildings plus 3 MW for AMB) 24 hours a day 365 days per year. * All electricity emissions will be offset by the Project Design Measure PD GHG-1.	

37. Please provide an estimate of annual refrigerant leakage, reported as carbon dioxide equivalent (CO₂e) emissions, from the cooling system proposed for the project.

Supplemental Response to Data Request 37

STACK has worked with its design team and potential chiller suppliers to provide annual leakage estimates for purposes of GHG emissions calculation. The table below presents the data on the proposed chiller units and the estimated emissions of R-134a.

Parameter	Data
Refrigerant Used	R-134a
# of Chiller Units	78
R-134a Charge Amount/Unit	750 lbs
Leak Rate	0.5%/yr
R-134a Emissions/Unit	3.75 lbs/yr
R-134a Total Annual Emissions	292.5 lbs/yr
GWP (CARB AR4)	1430
Total CO ₂ e	189.7 Mtons/yr

GWP Values: <https://ww2.arb.ca.gov/ghg-gwps>

Leak rate sources:

1. https://www.trane.com/Commercial/Uploads/PDF/11612/Related_Literature/Refrigerant/HVAC_Refrigerants.pdf
2. [https://www.trane.com › content › dam › Trane › Commercial › global › products-systems › education-training › industry-articles › ENV-APN001A-EN_2015_refrigerants.pdf](https://www.trane.com/content/dam/Trane/Commercial/global/products-systems/education-training/industry-articles/ENV-APN001A-EN_2015_refrigerants.pdf)

PROJECT DESCRIPTION

Responses to DRs 54-56 and 58 were provided by PG&E and are included in Attachment PD-PG&E Responses.

TRANSPORTATION

80. Please perform thermal plume modeling of the emergency standby generators and the equipment used to reject heat from the building and data servers.

Supplemental Response to Data Request 80

The Thermal Plume Analysis was docketed on October 23, 2022 (TN246326).

81. Please describe the equipment used to reject heat from the building and data servers with enough detail so that staff can confirm the thermal plume modeling.

Supplemental Response to Data Request 81

The information requested in this data request is contained in the Thermal Plume Analysis (TN246326).

82. Where not already included in the SPPE application, please provide at least the following to support the thermal plume modeling of the emergency standby generators and the equipment used to reject heat from the building and data servers (provide equivalent data if necessary):
- a. Stack (or cooling tower fan cowl) height (m) above ground level (agl)
 - b. Exhaust Temperature (degrees K)
 - c. Exit Velocity (m/s)
 - d. Stack Diameter (m)

Supplemental Response to Data Request 82

The information requested in this data request is contained in the Thermal Plume Analysis (TN246326).

APPENDIX AIR DR-4

Vendor Guarantee



clean essential energy

MANUFACTURER'S EMISSIONS DATA

Date: June 15, 2022

Safety Power model number: 8 Series ecoCUBE® (9580-H4D31)

Engine Model: CAT 3516E [EM4716] dated September 14, 2020

GENERAL ENGINE PERFORMANCE DATA

Engine Type:	CAT 3516E
Application	Stand-by
Engine Power	3,000 ekW
Exhaust Temperature	901.9 °F
Design Exhaust Flow Rate	22,803 (CFM)
Fuel Type	Diesel

Note: the above data was obtained at full (100%) engine load.

D2 CYCLE EMISSIONS

Engine Model	Emissions	Engine Potential Site Variation D2 Values *	Emissions Requirement	Catalyst Outlet **
CAT 3516E (3,000 ekW)	NOx (g/bhp-h)	6.64	0.50	0.50
	CO (g/bhp-h)	2.00	2.60	< 2.60
	VOC (g/bhp-h)	0.10	0.14	< 0.14
	PM (g/bhp-h)	0.12	0.015	0.015

*Engine Potential Site Variation D2 emission values calculated from each D2 load point published on CAT 3516E EM4716 datasheet.

** Notes

- Gaseous emissions data measurements must be consistent with those described in EPA 40 CFR 1065 and ISO 8178 or using the appropriate stack testing method for measuring NMHC, CO, and NOx
- The stated catalyst outlet PM level assumes the same PM measurement methods used by CAT for certification are also used during the stack test (40 CFR 89 & 1065 / ISO 8178), OR the EPA/CARB Method 5 test is limited to the "front half" (as per CARB recommendation), sampling durations are sufficiently long such that an adequate & measurable sample of PM is captured on the filter, and the sample-weighting lab is capable of measuring extremely low mass of PM.
- The ecoCUBE emission control performance guarantee is valid provided that the exhaust temperature entering the SCR system is above 260 deg C (500 deg F).
- NOx is calculated as NO2.

APPENDIX CUL-Paleowest Responses

CULTURAL RESOURCES (Data Request #1)

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 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).

Response to Data Request 26

- a. Beyond the two Historic Period structures at 2001 Fortune Drive (APN 244-17-003) and 1700 Montague Expressway (APN 244-24-004), all structures within the Project area (i.e., the Project site and a one-building-band buffer around it) were constructed during or after 1979. The residential development north of Trade Zone Boulevard was completed circa 2015. This information can be found on **Page 19** of the revised *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* (Revision date: October 13, 2022). Additionally, please see below map showing dates of construction for the structures/parcels within the Project area.

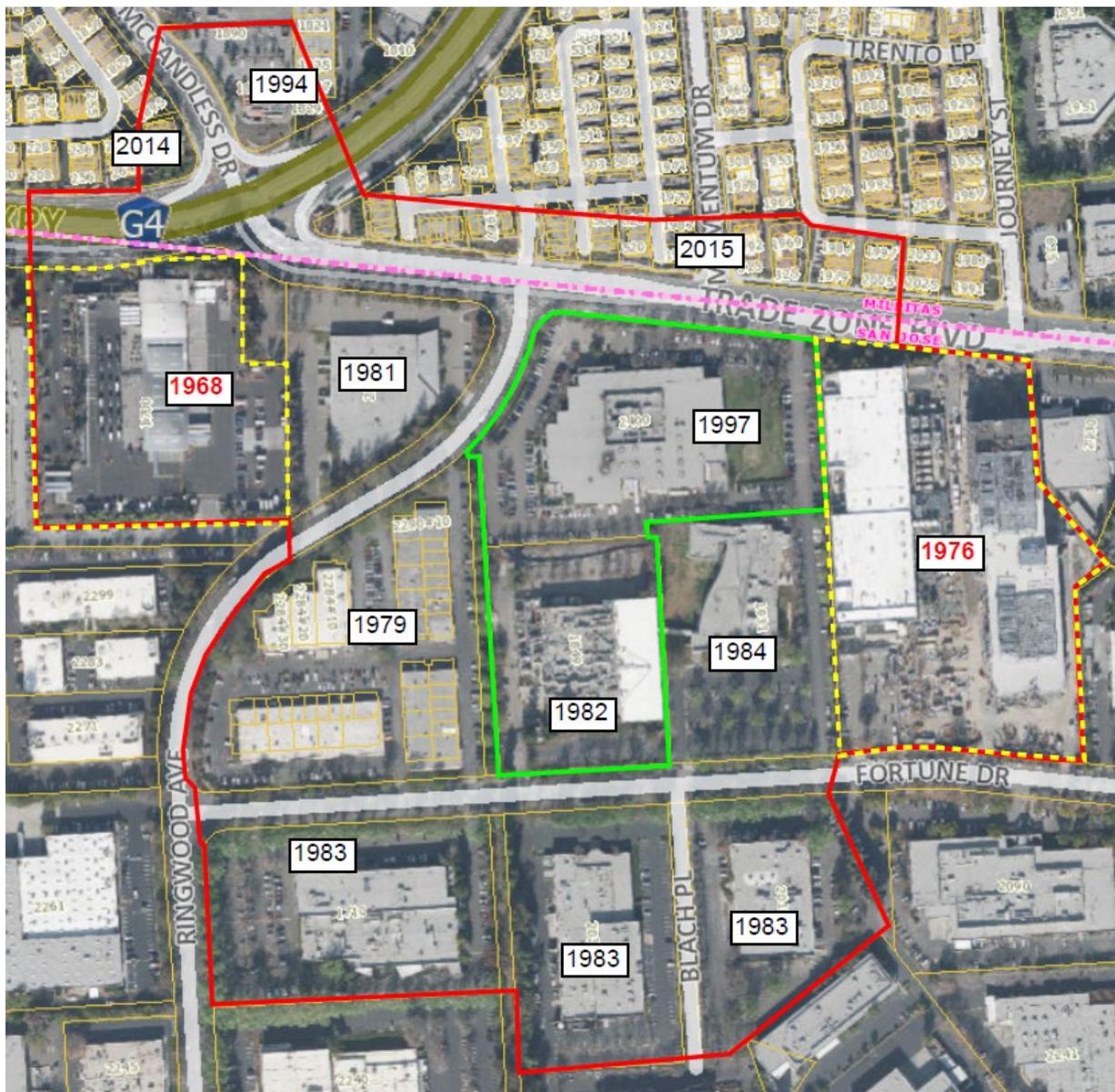


Figure 1. Dates of construction for structures/parcels within Project site (green border) and Project area (red border). Yellow dashed lines indicate structures/parcels 45+ years in age that were evaluated as part of the report.

- b. Based on the field survey and cursory research, none of the buildings within the Project area that are less than 50 years in age show potential for exceptional historical importance. This information, along with a statement regarding NRHP/CRHR historical resources achieving significance within the past 50 years, can be found on **Page 23** of the revised *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* (Revision date: October 13, 2022).

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

DATA REQUESTS

29. Please revise the previous cultural resources investigation table(s) to clearly indicate if previous investigations cross into the Project area.

Response to Data Request 29

The cultural resources investigation table has been moved to Appendix A (Confidential) in the *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* that was docketed on September 13, 2022 under a request for confidentiality. This appendix includes a map of cultural resource investigations that overlap with the Project site. This information has further been clarified to show in the table as well as the figures which investigations overlap with the and can be found in the **Confidential Appendix A** of the revised *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* (Revision date: October 13, 2022).

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.

Response to Data Request 30

The cultural resources table has been revised as none of the resources listed in the prior table were within the 0.25-mile record search area. No recorded resources are within the 0.25-mile record search area; however, two informally documented resources are in the search area. These two resources are described in full on **Page 17** of the revised *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* (Revision date: October 13, 2022).

SUMMARY OF DATA REQUEST #1

CUL-26	<p>Please revise the built environment windshield survey to include a one-building band of parcels directly adjacent to the project Study Area.</p> <p>This revised Project area was updated in the <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project</i> that was docketed on September 13, 2022 under a request for confidentiality. The Project area was further revised to clarify the actual parcels included in the windshield survey and can be found on Pages 3 and 4 of the revised <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project</i> (Revision date: October 13, 2022).</p>
CUL-27	<p>Please identify project staging areas.</p> <p>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.</p> <p>No offsite staging areas are proposed; this has been updated and can be found on Pages i, 1, and 36 of the revised <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project</i> (Revision date: October 13, 2022).</p> <p>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.</p>
CUL-28	<p>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.</p> <p>Pre-Contact, Ethnographic, and Historic Period contexts have been included in the <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project</i> that was docketed on September 13, 2022 under a request for confidentiality. This revision can be found on Pages 7-17 of the</p>

Cultural Resource Assessment: 1849 Fortune Drive and 2400 Ringwood Avenue Project
 PaleoWest Project No. 21-0887

	<i>revised Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project (Revision date: October 13, 2022).</i>
CUL-29	<p>Please revise the previous cultural resources investigation table(s) to clearly indicate if previous investigations cross into the Project area.</p> <p>See response for Data Request 29 above.</p>
CUL-30	<p>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.</p> <p>See response for Data Request 30 above.</p>
CUL-31	<p>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.</p> <p>These maps been included in the Confidential Appendix A of the <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project</i> that was docketed on September 13, 2022 under a request for confidentiality. These maps can be found in Appendix A of the revised <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project (Revision date: October 13, 2022).</i></p>
CUL-32	<p>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.</p> <p>No Native American representatives were contacted as part of this investigation. This information can be found on Page 21 of the revised <i>Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project (Revision date: October 13, 2022).</i></p>

CULTURAL RESOURCES (Data Request #2)

BACKGROUND

Staff has further reviewed the results of the Archaeological Resources Assessment (ARA) written by PaleoWest (PaleoWest 2022) and the March 8, 2022, SPPE Application Supplement – Section 4.5 Cultural Resources. In reviewing these documents, staff has determined that additional missing information is required to complete staff’s analysis. The terms Project, Project Site, Study Area, Project Area, and Project Location are loosely used and/or not used consistently in the text of the ARA or depicted on figures in the ARA. By way of example, on pages 11 and 12 in section “Archival Research Results” of the ARA, the terms Project area, Project, study area, and project location are used as descriptors. This is confusing to staff.

As discussed in a conference call held on June 16, 2022, various determinations and/or clarifications regarding terminology were made. It was understood during the conference call that:

- *The project description (Project) is still in preparation and that a revised project description will be supplied by Scott Galati for use by PaleoWest in the revised ARA.*
- *The term Project Site is defined as an area defined by all Project related construction including the proposed new building location, and the length of and both ends of the proposed new above and below ground transmission line.*
- *The term Project Area is defined as that area including a one-building-band surrounding the Project Site.*
- *The term Study Area is defined as a 0.25-mile buffer surrounding the Project Area.*
- *Any other designators deemed necessary by PaleoWest should also be clearly defined and used consistently in the text throughout the ARA.*

DATA REQUEST

62. Please clearly define the terms Project area, Project, study area, and project location in the text of the ARA and consistently use these terms as appropriate throughout the text of the ARA. Study Area, Project Area, and Project Site appear as the most used terms, and it is requested that these terms also be applied to all figures in the report.

Response to Data Request 62

The terms **Project area, Project, Project Site, and Project location** have been clearly defined within the Management Summary and Introduction of the *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* that was docketed on September 13, 2022 under a request for confidentiality. The **Project site** is an area defined by all Project related construction, including the proposed new building location, the length of and both ends of the proposed new above and below ground transmission line, and any staging areas. The **Project area** is defined as the Project site and a one-building-band buffer around it. Within the report, **Project Location** is only found on inset maps on figures and indicates the location of the proposed Project. Please see **Pages i and 1** of the revised *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* (Revision date: October 13, 2022).

Please note: the term **Study Area** has been removed from the text to reduce confusion as not all buildings in that 0.25-mile area were studied. The term Study Area has been replaced throughout the report with **0.25-mile record search area**.

BACKGROUND

There are various issues with the figures in the ARA including terminology and descriptors used on the figures, and/or references in the text to data depicted on the figures. By way of example, Figure 1 and Figure 3 on pages 2 and 4 of ARA are both labelled Project Site Map, but they also use the descriptor Project Area and depict two different Project Areas. Additionally, there is no 0.25-mile buffer depicted on Figure 1 as referenced in the text of the ARA on page 1, paragraph 2. Figure 1 is also referenced in the text as collectively depicting the Study Area, and Figure 1

does not depict or refer to a Study Area. The reference to Figure 3 on page 1 paragraph 1 of the ARA references specific parcels and addresses. Much of this information is not depicted on Figure 3.

DATA REQUEST

63. Please revise existing figures in the ARA to include all data and all references described in the text and use the same descriptors on each figure. Also, ensure that any new figures contain information referenced in the text. Minimally, please depict the Study Area, Project Area, and Project Site on one or more figures as necessary.

Response to Data Request 63

All figures within the report have been revised to include all data and all references described in the text. The same descriptors, as appropriate, can be found on each figure. All in-text references to figures now reference the appropriate information on that figure. Additional figures have been added to the report to reflect the Project site, Project area, and 0.25-mile records search area within the revised *Cultural Resources Assessment for the 1849 Fortune Drive and 2400 Ringwood Avenue Project* (Revision date: October 13, 2022).

SUMMARY OF DATA REQUEST #2

62	Please clearly define the terms Project area, Project, study area, and project location in the text of the ARA and consistently use these terms as appropriate throughout the text of the ARA. Study Area, Project Area, and Project Site appear as the most used terms, and it is requested that these terms also be applied to all figures in the report. See response for Data Request 62 above.
63	Please revise existing figures in the ARA to include all data and all references described in the text and use the same descriptors on each figure. Also, ensure that any new figures contain information referenced in the text. Minimally, please depict the Study Area, Project Area, and Project Site on one or more figures as necessary. See response for Data Request 63 above.

APPENDIX PD-PG&E Responses

STACK Trade Zone Park

CEC Data Requests - PG&E Responses

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.

Response to Data Request 49

- Conductor name = bundled 795 ACSS "Condor"
- Type = ACSS (Aluminum Conductor Steel Supported)
- Current carrying capacity = 2 X 1542 amps = 3084 amps (summer costal emergency)
- Overhead conductor size = 2 X 795 kcmil

50. Please provide pole configurations that would support the 115 kV overhead line that would loop into the onsite substation.

Response to Data Request 50

- Estimated pole height is expected to be between 70ft-130ft.
- Estimated number of poles is expected to be 4-6 TSPs
- Will include distribution under-build
- The attached photo shows a nearby pole; the new pole configuration would likely be similar. The poles have not yet been designed, so this should be considered a typical design that is preliminary and subject to change.



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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.

Response to Data Request 51

- Underground cable name – The line will be a loop of the existing Newark-Milpitas #2 115kV Line, becoming 2 separate circuits. The new circuits do not yet have names – they are to be determined (TBD).
 - Type – Cross Linked Polyethylene Insulated cable in concrete-encased duct bank
 - Current carrying capacity and underground cable size – Minimum Standard Conductor Size 2,500 Copper (app 1200 Amps), exact size and rating TBD by Ampacity Study.
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.

Response to Data Request 54

Since STACK would have two feeds (Newark – STACK and STACK – Milpitas), any potential outage that could occur on a section of the Newark-Milpitas #2 115 kV line would be isolated. If one of the feeds connected to STACK’s switching station were to go down, it would most likely not result in a service outage. The loss of both feeds would be possible but rare. A table that shows a record of historic emergency outages is provided below.

55. Please explain whether PG&E would need to upgrade its transmission system in order to reliably interconnect the SVYDC and AMB loads.

Response to Data Request 55

There are no current plans to do so.

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?

Response to Data Request 56

No PSPS events have been recorded at Milpitas. Future PSPS events that would result in an outage at the proposed substation are not likely because STACK would have two feeds (Newark – STACK and STACK – Milpitas). If one of the feeds connected to STACK’s switching station were to be taken out of service, it would most likely not result in a service outage.

Neither Newark nor Milpitas substations are located in the HFRA. Neither is the proposed project site. In the most recent PSPS lookback neither one of these substations was identified as an impact through the direct impact analysis. This direct impact analysis lookback study reviewed historical weather going back to 2008 and identified locations

that would have been impacted using today's criteria for PSPS. These particular substations were not impacted at all during the time period between 2008 and today. Based on the geographic location outside of the HFRA and the results of this study it is very unlikely for one or both of these substations to be impacted by a PSPS event. Due to the unpredictable nature of weather events, it is not impossible though.

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.

Response to Data Request 58

The tubular steel pole (TSP) on the east side of the intersection between Montague Express way and Trade Zone Blvd may need to be replaced to convert it to a riser TSP. We may be able to save it when we get into detailed design. Preliminary plans do not include replacing the pole on the west side of the intersection between Montague Express way and Trade Zone Blvd, but that could change with further, detailed design.

We do not yet have a schedule for the design targets. We typically know whether poles are being replaced at 60% design.

kV	FACILITY	Date_Out	MED	Wire_Down	Auto_Reclose_Disabled	Durn_mins	Cause_Category	Cause_Detail	Secondary_Cause	Comments	Cust_Affected
115	Newark_MilpitasNo2	5/14/2007				8	Other	Safety Clearance	RELY	Forced open Newark CB 170 to make relay setting changes, open ending this 115kV line	0
115	Newark_MilpitasNo2	9/15/2007				76	Unknown	Patrol found nothing	NONE	Relayed, did not test; no customers affected; 0313 manually tested OK; no trouble found; weather clear	0
115	Newark_MilpitasNo2	12/25/2008				1768	Work Procedure Error	Inattention	COND	Relayed, tested NG; no interruption; 1624 report of loose jumper at twr 8/125 (DDE, TSP); line cleared next day from 0725 to 1444 to repair loose jumper; eventID=6228	0
115	Newark_Milpitas	10/10/2012				264	Animal	Bird	INSL	Relayed - 10/10/12, 0122 Newark #2-115kV bus sect 'F' relayed, did not test by design due to avian (hawk) contact at Newark CB-540 T-tap; on the trouble Newark-NRS #2, Newark-AppliedMaterials, Newark-Trimble, Newark-DixonLanding & Newark-Milpitas #2, 115kV lines open-ended at Newark; Newark-Nummi 115kV de-energized; SUS Nummi & WesternDigital; 1613 bus sect ?'Â??F?â€?Æ'?Â?Æ'?â€?, CB-540 & T-tap cleared to replace flashed insulators, returned normal @ 2139	0