

**DOCKETED**

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**CALIFORNIA ENERGY COMMISSION**

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March 28, 2019

MECP1 Santa Clara 1, LLC  
c/o Jeffery Harris  
2600 Capitol Ave., Suite 400  
Sacramento, CA 95816

**Re: Data Requests for the Laurelwood Data Center (19-SPPE-01)**

Dear Mr. Harris:

Pursuant to Title 20, California Code of Regulations, sections 1941 and 1716, the California Energy Commission staff is asking for the information specified in the enclosed Data Requests Set 1 to more fully understand the project.

The requested information covers the project description and the technical areas of Air Quality, Biological Resources, Cultural Resources, Tribal Cultural Resources, and Utilities and Service Systems. Responses to the data requests are due to staff within 30 days. To facilitate an expedited review, staff requests written responses to the enclosed data requests on or before April 11, 2019.

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 call me at (916) 651-0966, or email me at [leonidas.payne@energy.ca.gov](mailto:leonidas.payne@energy.ca.gov).

Original Signed By:

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Leonidas Payne  
Siting Project Manager

Enclosure

**LAURELWOOD DATA CENTER  
(19-SPPE-01)  
DATA REQUESTS**

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## PROJECT DESCRIPTION

### BACKGROUND: UPS AND DIESEL BACKUP GENERATOR OPERATION

Staff needs to understand the various strategies that would be used by Laurelwood Data Center (LDC) to ensure continuous operation of the facility to serve clients storing data at LDC. Page 2-2 of the project description states that the standby generator system includes a 5-to-make-4 design configuration. Page 2-2 also states that there would be a total of 56 standby generators, but only 33 generators operating at 100 percent of their maximum rated output are required to support the operation of LDC under peak summer-time ambient conditions (99 MW of backup generator output). However, the 5-to-make-4 design could mean there could be a total of about 45 (rounded from  $56 \times 4/5$ ) generators operating at the same time. Staff needs to understand whether only 33 backup generators would run at 100 percent of their maximum rated output or more engines would be operated at partial loads.

### DATA REQUESTS

1. Please explain the strategies planned to keep LDC grid connected and data customer's servers operating and in adequately conditioned space.
  - a. What grid transient, outage or power quality events would trigger isolation from the grid?
  - b. What equipment redundancies would LDC install to maintain grid connection, and how and when would they be relied on to avoid loss of grid connection?
  - c. Could the UPS allow the LDC to "ride through" some grid transient, outage or power quality events?
2. If connection to the grid is lost, what are the sequence/timing of responses that occur at LDC:
  - a. How quickly is isolation of LDC and the UPS from the grid?
  - b. How does LDC rely on the UPS for the data servers and bays?
  - c. What is the sizing of UPS relative to server bay demand?
  - d. What is the reliance on the UPS for building conditioning and emergency equipment?
  - e. When do the diesel-fueled emergency generators start?
  - f. What is the amount of time needed for the emergency generators to reach their specific operating load, and how is that load determined or adjusted?
  - g. Does the UPS condition power output from the emergency generators and does the UPS recharge from the emergency generators?

- h. Does the UPS condition power from the emergency generators for building loads?
3. Please clarify whether only 33 backup generators would be needed to run at 100 percent of their maximum rated output or whether more engines would run at partial loads.
4. Please describe any other strategies entities that would rent space at LDC might employ to ensure their own continued operation or data integrity, such as possibly using a “mirror site” located off-site that their data/operations would migrate to, allowing shutdown of their server bays at LDC due to a short-term loss of power from SVP.
5. Please describe any strategy or plan for refueling the dfuel tanks during emergency operation if the diesel-fueled emergency generators were to operate more than 48 hours, which is the capacity of each fuel tank (shown on page 2-19).

### **BACKGROUND: INTERCONNECTION**

The Laurelwood Data Center (LDC) application Section 2.1 indicated that LDC includes an onsite 60 kV substation with an electrical supply line that would connect to a Silicon Valley Power (SVP) 60 kV line. Understanding the proposed interconnection to SVP would assist staff in determining the likelihood that back-up generators would be needed to operate and thus what the potential impacts could be if they are. Staff needs more detailed information on the 60 kV substation, 60 kV interconnection line, and pole information, than was provided in the project description.

### **DATA REQUESTS**

6. Please provide the name(s) of the existing SVP 60 kV line(S) that would supply power to the LDC.
7. Please describe the interconnection to the SVP system. Is the LDC connecting through a single radial 60 kV line? Is the connection through a looped system where either of two connections could supply 100-percent of the LDC site load?
8. Please provide a complete one-line diagram for the new 60 kV LDC 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 LDC project.
9. Please provide the conductor type, current carrying capacity, and conductor size for the tie-line that would be required for interconnecting the LDC to the SVP 60 kV system.
10. Please provide pole configurations which support the tie-line from LDC to the SVP 60 kV system. Show proposed pole structure configurations and measurements.

11. Please provide a map showing the proposed tie-line route.
12. Please provide the expected frequency of outages of the 60 KV system that would serve the LDC. If this 60 kV line has experienced any historical SVP power supply outage, what was the associated cause, duration and recovery process?
13. Please identify all other data centers using the 60 kV line proposed to interconnect to LDC.
14. If there are any other data centers on the 60 kV line that LDC proposes to interconnect to, have any of the data centers experienced an SVP power supply outage(s)?
  - a. What was the cause, duration, recovery process from the outage(s)?
  - b. Are there breakers on the 60 kV line or disconnect switch(es) and did they isolate the faults?
  - c. What was the response to the outage(s) by the data centers to the outage (i.e., initiated operation of some or all back up generation equipment, data off-shoring, data center planned shutdown, etc)?

## **AIR QUALITY**

### **BACKGROUND: AIR QUALITY DISTRICT APPLICATION**

The Laurelwood Data Center (LDC) applicant is or will be processing a permit application with the Bay Area Air Quality Management District (BAAQMD or district). Staff will need copies of all correspondence between the applicant and the district in a timely manner in order to stay up to date on any issues that arise before the Commission Decision has been recorded.

### **DATA REQUEST**

15. Please provide copies of all substantive district correspondence regarding the application to the district, including e-mails, within one week of submittal or receipt. This request is in effect until the Commission Decision has been recorded.

### **BACKGROUND: NO<sub>x</sub> EMISSIONS OFFSETS**

Table 3.3-4 on page 3.3-9 of the application shows that the annual NO<sub>x</sub> emissions of the project would be 99.4 tons per year (tpy), based upon operating the backup generators up to 50 hours per year of non-emergency operation. The application states that NO<sub>x</sub> emissions will be fully offset through the air permitting process. Staff needs to understand how the applicant would get any required offsets. If the project's NO<sub>x</sub> potential to emit (PTE) could be limited to 35 tpy, the project should qualify for offsets provided from the BAAQMD's Small Facility Banking Account according to BAAQMD Rule 2-2-302.

### **DATA REQUESTS**

16. Please provide evidence showing that the NO<sub>x</sub> emissions of the project would be fully offset.
17. Please discuss whether the project's NO<sub>x</sub> PTE could be limited to 35 tpy, so that it may qualify for offsets provided from the BAAQMD's Small Facility Banking Account.

### **BACKGROUND: NO<sub>x</sub> EMISSION FACTOR**

Appendix 3.3B, Table 2 shows that the calculated NO<sub>x</sub> emissions using the emission factor as 7.28 grams per horsepower-hour (g/hp-hr), which is much higher than the EPA and ARB Tier 2 diesel engine emission standard of 4.8 g/hp-hr (NMHC + NO<sub>x</sub>) according to the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI) Engines (Title 17, California Code of Regulations, section 93115.6, Table 1). The Caterpillar specification sheet says the engine is a Tier 2 engine and also lists the emissions factor at 7.28 g/hp-hr for nominal operations at potential site variation conditions. Staff needs to know under what operating conditions would the emission factors be higher than the Tier 2 emission standard. Staff needs to understand how the proposed engines meet Tier 2 emission standards.

## **DATA REQUESTS**

18. Please explain under what operating conditions the diesel-fueled engines would emit pollutants at a higher rate than the Tier 2 emission standard.
19. Please justify that the proposed engine meets Tier 2 emission standards.
20. Please justify the use of the higher NOx emission factor in the NOx emissions estimates.
21. If necessary, please re-calculate the NOx emissions based on emission factors that are representative of actual emissions and engines, and the testing and maintenance events expected for the project.

## **BACKGROUND: EMERGENCY GENERATOR ENGINE TESTING AND MAINTENANCE**

Table 2-4 on page 2-24 of the project description shows the annual expected testing and maintenance events. Table 2-4 shows that the monthly testing would be 8 times per year and the quarterly testing would be 3 times per year. Staff needs to understand why monthly and quarterly testing is not needed for the remaining 4 months and 1 quarter. Staff needs to know how quickly the engines would reach the testing or maintenance loads of 50 percent or 100 percent.

The applicant modeled impacts of the engines for the 100-percent load case. However, 100-percent load does not always result in worst-case ground-level impacts. During lower load testing or maintenance operations, differences in emission rates, exhaust temperatures, and exhaust velocities could lead to lower plume rise and less dispersion, which could result in higher ground-level impacts. Staff needs to know whether the engines would be required to stay at certain load points other than those shown in Table 2-4 for substantial time (more than half an hour). Staff needs to know the impacts of the engines at these load points.

Table 2-4 shows hourly fuel consumption rate of 160 gallons/hour (gal/hr) for both 50 percent load and 100 percent load cases. Page 3 of 4 of the Caterpillar specification sheet for C175-16 Diesel Generator Sets provided by Jerry Salamy of Jacobs on March 18, 2019 in response to a staff email shows different fuel consumption rates. For example, for standby operation, the fuel consumption rates for 50 percent load with fan and 100 percent load with fan are shown as 130.4 gal/hr and 214.2 gal/hr respectively.

## **DATA REQUESTS**

22. Please explain why monthly testing would only be needed for 8 times per year and quarterly testing would only be needed for 3 times per year, instead of 12 times per year and 4 times per year respectively.



23. Please explain why the hourly fuel consumption rates shown in Table 2-4 are not consistent with those shown in the Caterpillar specification sheet.
24. Please provide detailed (e.g., minute-by-minute) engine testing and maintenance profile for each event shown in Table 2-4.
25. Please provide impacts analysis of the engines at 50 percent load during the monthly testing events.
26. Please provide impacts analyses of the engines at intermediate load points if they would be required to stay at these load points for more than half an hour.
27. When conducting readiness testing and maintenance, what is the load served by the electricity generated by the diesel-fueled generators? Please explain how the electricity produced during testing or maintenance would be used.

### **BACKGROUND: STANDBY CONDITION**

Note “a” under Appendix 3.3B, Table 3 states that the hourly emission rates are for the diesel generator in standby operation only (i.e., excludes startup or shutdown emissions from normal operation). Page 3 of 4 of the Caterpillar specification sheet for C175-16 Diesel Generator Sets provided by Jerry Salamy of Jacobs on March 18, 2019 in response to a staff email includes emission factors for standby, mission critical, prime, and continuous operation scenarios. The NOx emission factors for prime operation (6.33 g/hp-hr for nominal condition and 7.59 g/hp-hr for potential site variation conditions) would be higher than those for standby operation (6.07 g/hp-hr for nominal condition and 7.28 g/hp-hr for potential site variation conditions). Staff needs to understand whether the emissions during standby operation would be representative of those during the testing and maintenance events shown in Table 2-4.

### **DATA REQUESTS**

28. Please explain the meanings of standby, mission critical, prime, and continuous operation scenarios defined on page 4 of 4 of the Cat specification sheet as they would apply to LDC.
29. Please provide emissions during startup and shutdown to compare with the standby operation emissions.
30. Please explain whether the emission rates during standby operation shown in Appendix 3.3B, Table 3 would be representative of the testing and maintenance events shown in Table 2-4.

### **BACKGROUND: STACK EXIT VELOCITY**

Staff noticed that the applicant used the stack exit velocity of 121.75 meters per second (m/s), stack diameter of 0.36 m (14 inches [in]), and stack height of 12.19 m (40 feet [ft]) in the impacts analyses. The modeled stack exit velocity is much higher than the

normally expected upper bound of 50 m/s in AERMOD. Using higher stack exit velocity would lead to lower modeled ground-level impacts.

**DATA REQUESTS**

- 31. Please confer with the vendor to make sure that the modeled stack diameter and stack height would be representative of the actual stack parameters.
- 32. If necessary, please revise the impacts analysis using the stack parameters that are representative of the actual stack parameters.

**BACKGROUND: RURAL OR URBAN DISPERSION OPTION**

The air quality modeling files provided by the applicant show that the applicant used the rural dispersion option in AERMOD. However, other projects in the area have used urban dispersion option. In addition, BAAQMD may have guidance on the population to be used with the urban dispersion option for the region.

**DATA REQUEST**

- 33. Please confirm with BAAQMD about whether the project needs to be modeled using the urban dispersion option and the population to be used with the urban dispersion option. Please justify the choice of dispersion option.

**BACKGROUND: NO<sub>2</sub> NATIONAL AMBIENT AIR QUALITY STANDARD IMPACTS**

Table 3.3-11 on page 3.3-16 of the application shows comparison of modeled results to the National Ambient Air Quality Standards (NAAQS). Table 3.3-11 shows the maximum modeled 1-hour NO<sub>2</sub> impact to be 101.16 µg/m<sup>3</sup>. However, the air quality modeling CD provided by the applicant shows higher impacts than 101.16 µg/m<sup>3</sup>. The following provides an example of the higher impacts shown in the AERMOD output file 'Operation\AERMOD\NO2\5yrs\ aermod.out', as shown herein. The 1-hour NO<sub>2</sub> NAAQS of 188 µg/m<sup>3</sup> would be computed to be exceeded according to this AERMOD output file. However, the form of the federal standard is expressed as the 8<sup>th</sup> highest one-hour value averaged over three years, making it difficult to evaluate for intermittent engine operations.

\*\*\* THE 8TH-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: GEN\_15 \*\*\*

INCLUDING SOURCE(S): GEN\_15 , BACKGROUND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF NO2 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591454.00	4138103.90	152.19323	591475.90	4138103.90	214.19719
591497.80	4138103.80	269.48558	591519.70	4138103.80	250.93870

## **DATA REQUESTS**

34. Please provide the maximum modeled 1-hour NO<sub>2</sub> NAAQS impact to be consistent with the AERMOD output file 'Operation\AERMOD\NO2\5yrs\ aermod.out'.
35. Please describe how the applicant determined the 8<sup>th</sup> highest annual value averaged over three years for intermittent engine operations.
36. If necessary, please revise the 1-hour NO<sub>2</sub> modeling to show compliance with the 1-hour NO<sub>2</sub> NAAQS of 188 µg/m<sup>3</sup>.

## **BACKGROUND: EMISSION CONTROL EFFICIENCY**

Page 3.3-8 of the application indicates that all generators would be equipped with a Miratech LTR® Diesel Particulate Filter System, which is expected to control particulate matter by at least 85 percent. Note 7 under Appendix 3.3B, Table 2, shows that the control technology includes the combination of an oxidation catalyst and a diesel particulate filter. The application does not show the control efficiency or the manufacturer of the oxidation catalyst. Staff needs to understand whether or not the control efficiency drops at lower loads during short periods of testing or maintenance. Staff needs to understand how control efficiencies are maintained with intermittent operations. These effects were not quantified in the application.

## **DATA REQUESTS**

37. Please provide the EPA certificates for the Miratech LTR® Diesel Particulate Filter System and the oxidation catalyst.
38. Please describe how post-combustion control efficiencies are maintained during intermittent operations for testing and maintenance.
39. Please explain whether the control efficiency during intermittent operations was considered in the emission rates shown in the application.

## **BACKGROUND: CUMULATIVE IMPACTS ANALYSIS**

Staff needs a cumulative modeling analysis, or additional justification why an air quality cumulative modeling analysis is not needed for this project, to complete the staff analysis for cumulative air quality impacts.

## **DATA REQUESTS**

40. Please provide a list from the BAAQMD of large stationary source projects with permitted emissions, for projects with greater than 5 tons per year of permitted emissions of any single criteria pollutant, located within six miles of the project site, including projects that have been recently permitted, or are in the process of being permitted and are reasonably foreseeable.
41. Please provide a cumulative impacts modeling analysis in consultation with Energy Commission staff, if necessary, based on the project list provided by BAAQMD.

## **BACKGROUND: CONSTRUCTION IMPACTS ANALYSIS**

The applicant provided ground-level impacts analysis for criteria pollutants during operation of the project. The applicant did not provide ground-level impacts analysis for criteria pollutants during construction of the project. Staff needs justification for not doing ground-level impacts analysis for criteria pollutants during construction.

### **DATA REQUESTS**

42. Please justify why ground-level impacts analysis was not done for criteria pollutants during construction of the project.
43. Please provide ground-level impacts analysis for criteria pollutants during construction of the project to show compliance with the California Ambient Air Quality Standards (CAAQS) and NAAQS.

## **BACKGROUND: SEASONAL HOUR NO<sub>2</sub> BACKGROUND DATA**

Page 3.3-14 of the application states that the NO<sub>2</sub> impacts analysis includes the seasonal hour (SEASHR) background data. The application states that this background profile was developed conservatively using the high-first-high seasonal background concentrations observed from the EPA Air Quality System station in San Jose, California (Site ID 060850005). The application also states that a copy of the SEASHR profile and its development is included in Appendix 3.3-C. Staff was only able to find the SEASHR profile in the spreadsheet version of the Appendix 3.3-C. Staff was not able to verify how the SEASHR profile was developed. Staff needs more information to verify the development of the SEASHR profile.

### **DATA REQUEST**

44. Please provide the original data files and programming to verify the development of the seasonal hour background NO<sub>2</sub> data.

## **BACKGROUND: METEOROLOGICAL DATA PROCESSING**

The application describes how the AERMOD-ready meteorological data were processed. The applicant provided these files in the air quality modeling CD. However, the applicant did not provide the input data files used in AERMET to verify the development of the AERMOD-ready meteorological data. Staff needs these files to verify the development of the AERMOD-ready meteorological data. Staff needs to verify the reference height for surface wind measurement of 7.9 m shown in the AERMOD-ready meteorological data files, instead of the normal height of 10 m. In addition, staff needs to know whether the BAAQMD has accepted the use of the AERMOD-ready meteorological data provided by the applicant.

### **DATA REQUESTS**

45. Please provide the input data files used in AERMET to verify the development of the AERMOD-ready meteorological data.

46. Please verify that the reference height for surface wind measurement of 7.9 m is correct.
47. Please consult with BAAQMD to make sure the AERMOD-ready meteorological data used in the application are acceptable.

## **BIOLOGICAL RESOURCES**

### **BACKGROUND: DEVELOPMENT AND DESIGN DETAILS**

The SPPE Application lacks specificity for some components of the on- and off-site improvements for the LDC. Energy Commission staff requires the following information listed below to analyze potential impacts of proposed project improvements on biological resources.

### **DATA REQUESTS**

48. The Project Description Overview section (2.1) of the SPPE Application, mentions a public easement along the southern edge of the project site and an approximately 600-foot-long electrical supply line supported by three distribution poles to be located within this easement. Please provide more information about this offsite improvement area, including the alignment and boundaries of the easement relative to property boundaries, and a detailed figure showing exact placement of these three poles and the 600-foot-long electrical supply line.
49. Please provide more descriptive information and detailed figures for the following:
  - a. Bioswales, including the landscape planting and the impervious surface areas that will drain to these structures. Also, clarify if the bioswales will function as retention ponds during flood events.
  - b. Staging and Laydown areas for all on- and off-site improvements, including the parking areas and wire pull sites.

## CULTURAL RESOURCES

### BACKGROUND

Staff has noted areas of text in the Cultural Resources section of the application (MECP1 2019:Section 3.5) for small power plant exemption (SPPE) that possess unclear source citations or references. Some portions of the cultural resources inventory (Alonso and Castells 2019) have similar problems. Unambiguous supporting documentation and citations would permit staff to assess the information contained in the application and complete its independent analysis of the application.

### DATA REQUESTS

Staff requests the following information to complete their analysis.

50. Section 3.5.1 of the application cites NPS (2007) to support its setting section (MECP1 2019:3.5-1). Section 3.5.5 (References) lacks a bibliographic entry for NPS (2007) but contains an entry for NPS (2018) (see MECP1 2019:3.5-8). Please either provide bibliographic information for NPS (2007) or correct the in-text citation.
51. Section 3.5.5 (References) contains an entry for National Park Service (NPS 2018). Section 3.5 does not appear to have cited this source in the text. Please delete or correct the entry, if applicable.
52. Section 3.5.1 of the application refers to a *geologic* map of Santa Clara County, citing USGS (2006) (MECP1 2019:3.5-1). The application describes the cited source as a *topographic* map (MECP1 2019:3.5-8). Is the bibliographic entry correct?
53. When describing the historic Pacific Gas and Electric Northern Receiving Station Scott #2, the application cites Supernowicz (2013) (see MECP1 2019:3.5-6). Section 3.5.5 (References) does not have a corresponding bibliographic entry. Please provide it or correct the in-text citation, as appropriate.
54. Section 3.5 of the application states that a records search identified 135 previously recorded cultural resource studies in the records search area (MECP1 2019:3.5-5). Alonso and Castells (2019:16) writes that the records search revealed 136 such studies. Please reconcile these two numbers.
55. Section 3.5 of the application identifies 54 previous cultural resources studies as having occurred in the project area (MECP1 2019:3.5-5; see also Alonso and Castells 2019:16). Staff counts 53 such studies in Alonso and Castells (2019:Table A-1). Please reconcile these two numbers.
56. The references section of the cultural resources investigation report (Alonso and Castells 2019:25–29) contains bibliographic entries that do not have in-text citations (Fages 1972; Font 1930; NPS 2006). Please insert text citations as appropriate or delete the entries from References.

## BACKGROUND

According to Alonso and Castells' (2019:18–19) description of the archaeological and historic architectural surveys, only limited portions of the project area were subjected to archaeological survey. Figure 1-2 in Alonso and Castells (2019) does not depict the areas surveyed. In addition, the description of archaeological survey does not describe the ground surface conditions along the proposed transmission line route.

## DATA REQUESTS

57. Please revise Figure 1-2 or provide a figure that depicts the areas subject to archaeological and historic architectural surveys. The figure shall be at 7.5-minute scale (1:24,000) and on a topographic imagery base.
58. Please provide staff with a description of methods and ground surface conditions in the proposed transmission line alignment.
59. In the event that the applicant has not surveyed the proposed transmission line alignment for the presence of cultural resources, please arrange for cultural resource professionals to survey the proposed route consistent with the standards contained in the California Code of Regulations, Title 20, Section 1704(b)(2), Appendix B(g)(2)(C). In addition, the cultural resources professionals shall provide an addendum to the Laurelwood Data Center cultural resources report (Alonso and Castells 2019) that documents the methods and results of the addendum survey.

## REFERENCES CITED

- Alonso and Castells 2019—Christina Alonso and Justin Castells.** *Cultural Resource Investigation in Support of the 2201 Laurelwood Road Project, Santa Clara County, California*. February 13. Technical Report No. 19-37. PaleoWest Archaeology, Walnut Creek, CA. Prepared for Jacobs Engineering Group, Sacramento, CA. Appendix 3.5-A in *Small Power Plant Exemption Application for the Laurelwood Data Center Santa Clara, California*, by MECP1 Santa Clara 1, with Jacobs. February. Submitted to California Energy Commission, Sacramento. 19-SPPE-01.
- Fages 1972 [1772]—Pedro Fages.** *Diary...in Search of the Port of San Francisco...Fages as Explorer, 1769-1772*. Theodore S. Treutlein, editor. *California Historical Society Quarterly* 51:338–356.
- Font 1930 [1776]—Pedro Font.** *Font's Complete Diary of the Second Anza Expedition*. Anza's California Expeditions, Vol. IV. Herbert E. Bolton, editor. University of California, Berkeley.
- MECP1 2019—MECP1 Santa Clara 1, with Jacobs Engineering Group.** *Small Power Plant Exemption Application for the Laurelwood Data Center, Santa Clara, California*. February. Submitted to California Energy Commission, Sacramento. TN 227273-1.



**NPS 2006—National Park Service.** Santa Clara County: California's Historic Silicon Valley. Electronic document, <http://www.cr.nps.gov/nr/travel/santaclara/history.htm>, accessed May 29, 2006.

**NPS 2007—No bibliographic information provided.**

**NPS 2018—National Park Service.** *Santa Clara County: California's Historic Silicon Valley: Early History*. Electronic document, <https://www.nps.gov/nr/travel/santaclara/history.htm>, accessed January 31, 2018.

**Supernowicz 2013—No bibliographic information provided.**

**USGS 2006—United State Geological Survey.** Milpitas 7.5 Minute Topographic Quadrangle.

## TRIBAL CULTURAL RESOURCES

### BACKGROUND

The applicant's consultant conducted Native American consultation as part of the assessment. From Alonso and Castells' (2019:43–44) record of Native American contacts and comments, two California Native American tribes, Indian Canyon Mutsun Band of Costanoan and The Ohlone Indian Tribe, requested the results of the records search and the pedestrian survey. The record does not indicate whether the documents were sent to the tribes.

### DATA REQUEST

60. Did the applicant's consultant send the results of the record search and the pedestrian survey documents to Indian Canyon Mutsun Band of Costanoan and The Ohlone Indian Tribe? If the documents were not sent to them, what was the reason for not doing so? If the applicant's consultant did send the tribes the requested documents, please provide a record of communication.

### REFERENCE CITED

**Alonso and Castells 2019—Christina Alonso and Justin Castells.** *Cultural Resource Investigation in Support of the 2201 Laurelwood Road Project, Santa Clara County, California*. February 13. Technical Report No. 19-37. PaleoWest Archaeology, Walnut Creek, CA. Prepared for Jacobs Engineering Group, Sacramento, CA. Appendix 3.5-A in *Small Power Plant Exemption Application for the Laurelwood Data Center Santa Clara, California*, by MECP1 Santa Clara 1, with Jacobs. February. Submitted to California Energy Commission, Sacramento. 19-SPPE-01.

## UTILITIES AND SERVICE SYSTEMS

61. State law requires that a water supply assessment (WSA) of a project be completed when certain criteria are met. The proposed project meets the definition of a project in accordance with the applicable regulations. In addition, the City of Santa Clara requires a WSA be completed for the proposed project. Staff understands the applicant has submitted an application for a WSA. A copy of the WSA is needed for staff to complete a CEQA analysis of the projects effects on the local water supply in a dry, multiple dry, and normal year. Regulations also allow the water supplier (City of Santa Clara) 120 days and a possible extension of 60 more days to prepare a WSA, which is outside the 135-day timeline for Energy Commission staff to process the SPPE.
  - a. Please provide a copy of the WSA required by the City of Santa Clara and state law.
  - b. If a WSA has not been completed please provide a schedule showing when it will be completed.
62. A CEQA analysis should consider proposed water uses relative to the baseline. Staff needs to know the historic water use at the site to determine the total change in water use. Please provide records or data showing water use at the site for the past 20 years.
63. The City has eligibility criteria for a site to receive recycled water. Please provide information showing how the eligibility criteria apply to the proposed project.
64. The application did not include any information about natural gas consumption or telecommunication needs for the project and what demands that could place on the local infrastructure. Please provide information on what the needs would be and how they could affect local infrastructure.
65. According to the City of Santa Clara 2015 Urban Water Management Plan, the surface water supply from San Francisco Public Utilities Commission (SFPUC) might be curtailed in a multi-year drought scenario. The project is located in an area that is solely served with water from SFPUC. If the supply from SFPUC to the city is curtailed, the city would replace it with their ground water supply or surface water from the Santa Clara Valley Water District. Since groundwater accounts for more than two thirds of the city's supplies, most of the replacement water, if not all, would likely come from groundwater. The groundwater basin has been in decline for the past two decades. Relying on more water from the wells would stress the groundwater resource even further and could result in a significant cumulative impact. Please describe how the project would mitigate this potential impact to the groundwater resource.