DOCKETED	
Docket Number:	21-SPPE-01
Project Title:	CA3 Backup Generating Facility-Vantage
TN #:	244261-1
Document Title:	Committee Proposed Decision - Part 1 of 4
Description:	N/A
Filer:	Ngoc Tran
Organization:	California Energy Commission
Submitter Role:	Committee
Submission Date:	7/29/2022 3:50:49 PM
Docketed Date:	7/29/2022

CA3 BACKUP GENERATING FACILITY SMALL POWER PLANT EXEMPTION

Committee Proposed Decision

Part 1 of 4

CALIFORNIA
ENERGY COMMISSION
Gavin Newsom, Governor

JULY 2022
DOCKET NUMBER 21-SPPE-01

CALIFORNIA
ENERGY COMMISSION
715 P Street
Sacramento, CA 95814

https://www.energy.ca.gov/powerplant/reciprocating-engine/ca3-backup-generating-facility

COMMISSIONERS-

SIVA GUNDA
Vice Chair & Presiding Member

KOURTNEY VACCARO
Commissioner & Associate Member

SUSAN COCHRAN
KRISTEN DRISKELL
Hearing Officers

CALIFORNIA ENERGY COMMISSION
715 P Street
Sacramento, California 95814

energy.ca.gov

IN THE MATTER OF:

CA3 Backup Generating Facility

Docket No. 21-SPPE-01

COMMITTEE PROPOSED DECISION

The Committee assigned to conduct hearings and render a Proposed Decision on the Application for a Small Power Plant Exemption for the CA3 Backup Generating Facility hereby submits the attached "Decision" as its Proposed Decision to the California Energy Commission pursuant to the requirements of California Code of Regulations, title 20, section 1945(a).

Dated: July 29, 2022

APPROVED BY:

_____

Siva Gunda
Vice Chair and Presiding Member
CA3 Backup Generating Facility Committee

Dated: July 28, 2022

APPROVED BY:

_____

Kourtney Vaccaro
Commissioner and Associate Member
CA3 Backup Generating Facility Committee

CALIFORNIA ENERGY COMMISSION
715 P Street
Sacramento, California 95814

energy.ca.gov

CEC-70 (Revised 11/2021)

IN THE MATTER OF:

CA3 Backup Generating Facility

Docket No. 21-SPPE-01

DECISION

I. INTRODUCTION

In April 2021, Vantage Data Centers, LLC (Applicant) submitted to the California Energy Commission (CEC) an application for a small power plant exemption (SPPE) for the CA3 Backup Generating Facility (Application)[1] in the City of Santa Clara, Santa Clara County, California (Application). The Applicant proposes to install 44 Tier 4 diesel-fired backup generators, each with a maximum peak rating of 2.75 megawatts (MW), located on the Project Site. Forty of the generators would provide backup power to the CA3 Data Center (Data Center) in case of emergency, and four would support redundant critical cooling equipment and other general building and life safety services (collectively, the Backup Generators).[2]

[1] Information about this proceeding, including a link to the electronic docket, may be found on the CEC's web page at https://www.energy.ca.gov/powerplant/reciprocating-engine/ca3-backup-generating-facility. Documents related to this proceeding may be found in the online docket at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01. The Application and related addenda are Exhibits (Exs.) 1-5, 9, and 10.

[2] Ex. 200, p. 3-2. For additional details on the Data Center, Backup Generators, and other Project features, please see section II, "The Proposed Project" of this Decision, below.

The Backup Generators would not generate more than 96 MW of electricity collectively, even though their nameplate capacity would exceed 96 MW for redundancy,[3] as discussed below in section V.A., "The Backup Generators Have a Combined Generating Capacity of 96 MW."

The Backup Generators would provide an uninterrupted power supply to the Data Center in the event of an interruption of the electrical supply delivered to the facility by Silicon Valley Power (SVP), the local utility.[4] The power generated by the Backup Generators could not be distributed off-site and could only be used to support the maximum demand requirements of the Data Center, which would be up to 96 MW.[5]

The Application was submitted to the CEC pursuant to Public Resources Code section 25541. The Warren-Alquist State Energy Resources Conservation and Development Act (Warren-Alquist Act)[6] grants the CEC the exclusive jurisdiction to approve or deny applications for the construction and operation of thermal powerplants that have the capacity to generate 50 MW or more of electricity.[7] Section 25541 creates an exemption to this exclusive jurisdiction that is referred to as a Small Power Plant Exemption (SPPE).

To grant an exemption, the CEC must make three distinct findings:

- the proposed powerplant has a generating capacity up to 100 MW;
- no substantial adverse impact on energy resources will result from the construction or operation of the powerplant; and
- no substantial adverse impact on the environment will result from the construction or operation of the powerplant.[8]

In addition, the CEC is required by law to serve as the "lead agency" under the California Environmental Quality Act (CEQA)[9] for SPPE applications.[10] Under CEQA,

[3] Ex. 203, Appen. A, pp. 6-7.
[4] Ex. 200, p. 1-1.
[5] *Ibid.*; Ex. 203, Appen. A, p. 1.
[6] Pub. Resources Code, § 25000 *et seq.*
[7] See Pub. Resources Code, §§ 25110, 25120, 25500.
[8] Pub. Resources Code, § 25541.
[9] The CEQA statutes (Pub. Resources Code, § 21000 *et seq.*), and the Guidelines for the Implementation of CEQA (Cal. Code Regs., tit. 14, § 15000 et seq.) (Guidelines), detail the protocol by which state and local agencies comply with CEQA requirements. We refer to the statute and the Guidelines collectively as "CEQA." We will cite to the Guidelines as "Guidelines, § ___."
[10] Pub. Resources Code, § 25519(c).

"project" means the "whole of an action."[11] Accordingly, we evaluated the entire proposed project, i.e., the Data Center, Backup Generators, and other project features (collectively, the "Project") under CEQA.

Based on the record of this proceeding,[12] we find that the Backup Generators constituting the thermal powerplant at issue would have a combined maximum generating capacity of 96 MW and that no substantial adverse impact on the environment or energy resources would result from the construction or operation of the Project. The latter two findings are also made in our capacity as lead agency under CEQA.

II. THE PROPOSED PROJECT

A. Location

The Data Center is proposed to be built on 6.69 acres at 2590 Walsh Avenue in Santa Clara, California (Project Site).[13] The Project Site is currently developed with an approximately 115,000 square foot office and warehouse building and associated paved surface parking and loading dock; the buildings would be demolished in order to construct the proposed project.[14] The Project Site is zoned Light Industrial (ML) in the City's General Plan.[15] Nearby land uses include another data center, the Caltrain corridor, and existing office and research and development uses.[16] Adjacent to the site to the west is the SVP Uranium Substation.[17]

The Norman Y. Mineta San Jose International Airport is approximately 1.75 miles east of the Project Site.[18] As shown in the Comprehensive Land Use Plan for the Norman Y. Mineta San Jose International Airport, the Project Site is outside of the Airport Influence Area.[19]

---

[11] Guidelines, § 15378.
[12] Under the CEC's regulations, the hearing record consists of: (1) all documents, filed comments, materials, oral statements, or testimony received into evidence by the committee or commission at a hearing; (2) public comment, including comments from other government agencies, offered orally at a hearing, or written comments received into the record at a hearing; (3) any materials or facts officially noticed by the committee or commission at a hearing; and (4) all transcripts of evidentiary hearings. (Cal. Code Regs., tit. 20, § 1212(b)(1).)
[13] Ex. 200, p. 3-1.
[14] Ex. 202, p. 4.14-4.
[15] *Id.* at p. 4.11-1.
[16] *Ibid.*
[17] *Ibid.*
[18] *Id.* at p. 4.11-2.
[19] *Id.* at pp. 4.11-2, 4.11-4.

The Project is within the jurisdictional boundaries of the Bay Area Air Quality Management District (BAAQMD), which regulates the stationary sources of air pollution in counties in the San Francisco Bay Area Air Basin, including Santa Clara County.[20]

B. Description

The Project comprises the construction and operation of the following elements:

Data Center

The Data Center would consist of a four-story, 468,000 square foot data center building, which would provide a secure and environmentally controlled structure to house computer servers.[21] Related accessories include a new utility substation, generator equipment yard, surface parking, landscaping, and a recycled water pipeline.[22] The maximum total Data Center electricity demand is the sum of the electricity demand of its components: computer servers; the cooling demand of the computer servers; and other component electricity demands (general lighting, monitoring equipment, and miscellaneous power loads).[23] When the Data Center is at full load, its maximum combined load would not exceed 96 MW.[24]

Backup Generators

The Backup Generators will ensure an uninterrupted power source to the Data Center in the event of a loss of power,[25] and normally would operate only for testing and maintenance.[26] The Applicant proposes to install 44 Tier 4 diesel-fired backup generators, each with a maximum peak rating of 2.75 megawatts (MW), located on the Project Site.[27] Forty of the generators would provide emergency power to the computer servers, and four would support redundant critical cooling equipment and other building and life safety services.[28] The Backup Generators would generate up to 96 MW, the maximum building load of the Data Center.[29] None of the generators will be interconnected to the electrical transmission system, and therefore no electricity can be

[20] Ex. 201, pp. 4.3-2, 4.3-14.
[21] Ex. 200, p. 3-2.
[22] *Ibid.*
[23] *Id.* at p. 3-15.
[24] Ex. 203, Appen. A, p. 6.
[25] Ex. 200, p. 3-8.
[26] Ex. 203, p. 4.15-5.
[27] Ex. 200, p. 3-7.
[28] *Id.* at p. 3-2.
[29] Ex. 203, Appen. A, p. 7.

delivered off site.[30] The Backup Generators would supply power only to the Data Center.[31]

Applicant is proposing an annual readiness testing and maintenance schedule not to exceed 35 hours per year averaged over all engines for a total of 1,540 hours.[32]

New Substation

The Project includes construction of a new, on-site switching station to SVP specifications and an on-site Vantage-Data-Services-owned substation that would provide 60 kV service to the site. The switching station would be located adjacent to and across the property line from the existing SVP Uranium Substation and cut-in to the existing 60 kV line passing nearby. The switching station would ultimately become part of SVP's infrastructure as part of its 60 kV loop system.[33]

C. Objectives

Applicant states that its primary objective for the Project is to develop a state-of-the-art data center providing greater than 99.999 percent reliability for its customers, with mission-critical space to support their servers, including space conditioning and a steady stream of high-quality power supply.[34] In order to meet those objectives, computer servers must have appropriate reliability, requiring uninterrupted power.[35] Applicant seeks to incorporate the most reliable and flexible form of backup generation that is extremely reliable, commercially available and feasible, and technically feasible.[36] The Project objectives set forth in the Final Environmental Impact Report mirror the objectives set forth in the Application.[37]

III. PROCEDURAL HISTORY

In April 2021, Applicant applied to the CEC for an SPPE for the Backup Generators.[38] The CEC appointed a Committee consisting of Commissioner Karen Douglas, Presiding

[30] *Id.* at Appen. A, p. 2.
[31] Ex. 200, pp. 3-7 – 3-8.
[32] Ex. 201, p. 4.3-30.
[33] Ex. 200, p. 3-9.
[34] Ex. 1, p. 1-2.
[35] Ibid.
[36] *Id.* at pp. 1-2 – 1-3.
[37] Ex. 203, pp. 5-2 – 5-3.
[38] See Exs. 1-5, 9-10.

Member, and Vice Chair Siva Gunda, Associate Member, at the May 12, 2021, CEC Business Meeting.[39]

The CEC has a request for formal notification on file from the Wuksache Indian Tribe/Eshom Valley Band, a California Native American tribe that has traditional and cultural affiliation with the geographic area of the proposed Project.[40] By letter dated July 1, 2021, CEC Staff (Staff) contacted this tribe as well as eight other California Native American tribes and nations about the Project and invited their participation in consultation pursuant to CEQA[41] and the CEC's Tribal Consultation Policy.[42] The Wuksache Indian Tribe/Eshom Valley Band did not respond to the CEC's invitation to consult.[43] The CEC received a request from the Tamien Nation for formal consultation.[44] CEC staff began consultation with the Tamien Nation pursuant to that request.[45]

On July 15, 2021, Staff filed a "Notice of Receipt of an Application for a Small Power Plant Exemption for the CA3 Backup Generating Facility."[46] Staff published that notice in local newspapers on July 30, 2021, in English,[47] Spanish,[48] Vietnamese,[49]and Chinese.[50]

The Committee held a Committee Conference on August 10, 2021, to discuss the SPPE process, scheduling, and issues about the Project.[51]

On August 20, 2021, Staff filed a "Notice of Preparation of a Draft Environmental Impact Report and Agency Request for Participation" (Notice of Preparation).[52] The Notice of Preparation informed the Office of Planning and Research and responsible and trustee agencies that the CEC was preparing an Environmental Impact Report (EIR) to evaluate the potential environmental impacts associated with the Project.[53] The Notice of Preparation specifically sought the views of agencies regarding the scope and

[39] TN 237834.
[40] Ex. 202, p. 4.5-12.
[41] Pub. Resources Code, § 21080.3.1.
[42] TN 239156; see also Ex. 202, pp. 4.5-11 – 4.5-14.
[43] Ex. 202, p. 4.5-13.
[44] TN 240644; see also Ex. 202, pp. 4.5-13 – 4.5-14.
[45] Ex. 202, p. 4.5-14.
[46] TN 238898.
[47] TN 239140.
[48] TN 239121.
[49] TN 239120.
[50] TN 239122.
[51] TN 239677.
[52] TN 239401.
[53] *Id.* at p. 1.

content of the environmental information germane to the agencies' statutory responsibilities in connection with the proposed Project.[54]

In response to the Notice of Preparation, the CEC received written comments from BAAQMD.[55]

Staff released the Draft EIR for public review on January 21, 2022,[56] and issued a "Notice of Availability of a Draft EIR" (Notice of Availability).[57] Staff sent the Notice of Availability to property owners near the Project Site, responsible and trustee agencies, organizations and individuals who have requested notification, the county clerk, and the State Clearinghouse;[58] this Notice of Availability began a 45-day public review and comment period on the Draft EIR.[59] Staff also mailed notice of the availability of the Draft EIR to all occupants of property contiguous to the Project Site.[60]

On January 27, 2022, Staff filed a "Memorandum and Errata to the Draft Environmental Impact Report for the CA3 Backup Generating Facility Small Power Plant Exemption Proceeding (21-SPPE-01),"[61] which did not change any of the conclusions in the Draft EIR. Public comment on the Draft EIR concluded on March 9, 2022.[62] By the end of the public review and comment period[63] on the Draft EIR, comments had been received from Andrew Ratermann,[64] Applicant,[65] and BAAQMD.[66]

On March 24, 2022, Staff released a Final EIR,[67] consisting of the Draft EIR, the comments received on the Draft EIR prior to the close of the public comment period, and Staff's responses to those comments. The Final EIR also included a "Mitigation

[54] *Ibid*.
[55] TN 239805.
[56] TN 241264.
[57] TN 241260; the Notice of Availability was also translated into Chinese (TN 241261), Spanish (TN 241262), and Vietnamese (TN 241263).
[58] TN 241260, p. 7.
[59] *Id.* at p. 1.
[60] Ex. 200, p. 2-4.
[61] TN 241294.
[62] See TN 241590 (clarifying the comment period).
[63] Pub. Resources Code, § 21091(a); Guidelines, § 15105(a) (the public review period on an EIR submitted to the State Clearinghouse for review by state agencies shall be at least 45 days unless a shorter period is approved).
[64] TN 241398.
[65] TN 242216.
[66] TN 242229.
[67] Exs. 200 – 203.

Monitoring and Reporting Program" (MMRP) for the design features and mitigation measures described in the Draft EIR.[68]

At the March 24, 2022, Business Meeting, the CEC amended its Committee assignments, appointing Vice Chair Gunda as Presiding Member and Commissioner Kourtney Vaccaro as Associate Member for the Committee assigned to this proceeding.[69]

On April 14, 2022, Applicant[70] and Staff[71] filed Opening Testimony.

On April 20, 2022, the Presiding Member issued a "Notice of Prehearing Conference and Evidentiary Hearing, Revised Scheduling Order, and Further Orders" (April 20 Notice and Orders).[72] The April 20 Notice and Orders established a date of May 10, 2022, for both the Prehearing Conference and the Evidentiary Hearing.[73] The April 20 Notice and Orders also required the parties to respond to an issue regarding the cumulative health risk assessment in the Final EIR; the answer to this question was to be included in the parties' rebuttal testimony to be filed on April 25, 2022.[74]

On April 22, 2022, Applicant filed its rebuttal testimony, including its response to the question contained in the April 20 Notice and Orders.[75] Staff filed its rebuttal testimony on April 26, 2022.[76]

On April 29, 2022, Staff submitted a letter from the City of Santa Clara in which the city agreed to act as the enforcement agency for the MMRP.[77]

On May 6, 2022, the Committee filed a "Notice of Continuance of Evidentiary Hearing, Notice of Intent to Take Official Notice of [BAAQMD]'s Justification Report, and Related Orders" (May 6 Notice of Continuance).[78] The May 6 Notice of Continuance expressed the Committee's wish to further explore the exceedances of cancer risk and annual emissions of PM2.5 at the Evidentiary Hearing.[79] The May 6 Notice of Continuance

[68] Ex. 203, pp. 8-1 – 8-32.
[69] TN 242447.
[70] See Exs. 8, 39.
[71] See Ex. 204.
[72] TN 242815.
[73] *Id.* at p. 1.
[74] *Id.* at pp. 7, 14.
[75] Ex. 42.
[76] Ex. 206.
[77] Ex. 205.
[78] TN 242971.
[79] *Id.* at pp. 2 – 3.

therefore continued the Evidentiary Hearing to May 24, 2022, and stated that the start of the Prehearing Conference would be delayed on May 10, 2022.[80] Finally, the May 6 Notice of Continuance informed the parties and the public that the Committee intended to take official notice of BAAQMD's recently published *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (Justification Report), which explained modifications to BAAQMD's 2017 CEQA Guidelines, and provided opportunity to respond to the Committee's intended action.[81] The May 6 Notice of Continuance also included a question about the effect of the Justification Report on Mitigation Measure GHG-1.[82]

On May 9, 2022, Applicant filed its response to the second Committee question and objected to the Committee taking official notice of the Justification Report.[83] Staff likewise filed a response, in the form of supplemental testimony, to the notice of intent to take official notice on May 9, 2022.[84]

On May 10, 2022, the Prehearing Conference and Evidentiary Hearing were cancelled due to unforeseen circumstances.[85]

On May 13, 2022, the Committee issued a "Revised Notice of Prehearing Conference and Evidentiary Hearing and Revised Scheduling Order" (Revised Notice).[86] The Revised Notice scheduled the Prehearing Conference for May 24, 2022, and the Evidentiary Hearing for May 27, 2022.[87]

The Committee held a Prehearing Conference on May 24, 2022.[88] The parties stated that there were no contested issues.[89] However, the Committee stated that, after considering the responses to its question by Staff and Applicant in their rebuttal testimony, the Committee was not persuaded that the Final EIR was compliant with CEQA.[90] The Committee therefore requested live testimony at the Evidentiary Hearing

[80] *Id.* at p. 3.
[81] *Id.* at pp. 3 – 4.
[82] *Id.* at pp. 4 – 5.
[83] TN 242980.
[84] Ex. 212.
[85] TN 242987.
[86] TN 243157.
[87] *Id.* at pp. 1 – 2.
[88] TN 243424. The Reporter's Transcripts of the Prehearing Conference and of the Evidentiary Hearing are cited as "date of hearing, RT page:line – page:line." For example: 5/24/22 RT 77:16 – 78:12.
[89] 5/24/22 RT 46:7 – 46:18.
[90] 5/24/22 RT 18:6 – 19:1.

to respond to questions that would be filed in advance of the Evidentiary Hearing.[91] The Committee also overruled Applicant's objection to taking official notice of the Justification Report and gave Applicant the opportunity to present additional information about whether the Justification Report affected any mitigation measures, either in writing before the Evidentiary Hearing or through live testimony at the Evidentiary Hearing.[92]

On May 25, 2022, the Committee filed "Orders Regarding Additional Committee Questions" (May 25 Questions).[93] The May 25 Questions directed Staff and Applicant to provide witnesses at the Evidentiary Hearing to address the numeric thresholds of significance for cumulative health impacts from BAAQMD's 2017 CEQA Guidelines and whether the Project's impacts were presumptively cumulatively considerable based on finding that it had exceeded those thresholds.[94] The May 25 Questions further asked the parties that if the cumulative thresholds for cancer risk and annual emissions for PM2.5 were exceeded, whether there was mitigation available to reduce the severity of the impact.[95]

On May 27, 2022, the Committee conducted an Evidentiary Hearing.[96] During the Evidentiary Hearing, the Parties moved documentary evidence into the hearing record.[97] Oral testimony was received on the issue of the cumulative health risk assessment for the Project.[98] The public had the opportunity to provide comments on the Project and the Final EIR during the Evidentiary Hearing, but no comments were provided.[99] At the conclusion of the Evidentiary Hearing, the Committee requested that Staff, working with Applicant, prepare a supplement to the Final EIR that incorporated an updated analysis of the cumulative health risk assessment for the project, based on incorporating the Caltrain Electrification Project and the appropriate radius of emission sources for the analysis and substantiating with documentation any changes made.[100]

[91] 5/24/22 RT 19:2 – 19:12.
[92] 5/24/22 RT 44:17 – 46:5.
[93] TN 243300.
[94] *Id.* at p. 4.
[95] *Ibid.*
[96] TN 243504.
[97] *Id.*, 5/27/22 RT 15:14 – 16:15.
[98] For a discussion of the evidence about the cumulative health risk assessment, please see section V.)C.i., "The Committee's Questions regarding the Health Risk Assessment," below.
[99] 5/27/22 RT 100:21 – 101:24.
[100] 5/27/22 RT 102:18 – 103:20.

On June 22, 2022, Staff filed a "Memorandum, Update to Air Quality Section of FEIR" (June 22 Update).[101] The June 22 Update contained revisions to the Air Quality section of the Final EIR in response to the Committee's direction at the Evidentiary Hearing.[102] That same day, Staff also filed "Staff and Vantage Joint Stipulation to Enter Documents into Evidence and Close the Evidentiary Record" (June 22 Stipulation), requesting to move the June 22 Update and related documents[103] into the record, and close the record.[104]

On July 15, 2022, the Committee issued a "Notice of Committee Conference (Closed Session); Notice of Public Comment Period on Updated Air Quality Analysis; Order Shortening Time; Order Regarding Updated Information on Tribal Consultation" (July 15 Notice and Orders).[105] Among other things, the July 15 Notice and Orders initiated a public comment period on the June 22 Update ending July 22, 2022. The July 15 Notice and Orders also ordered Staff to update the Cultural and Tribal Cultural Resources section of the Final EIR regarding the progress of the consultation with the Tamien Nation. No comments were received by the end of the comment period.

On July 21, 2022, the Committee filed an "Order Admitting Evidence; Order Regarding Justification Report; and Order Shortening Time" (July 21 Orders).[106] Among other things, the July 21 Orders partially granted the June 22 Stipulation by admitting the requested documents into the hearing record and directed Staff to file a motion or stipulation to admit the Supplemental Testimony filed by Staff regarding the Justification Report, if Staff wished to include that document in the hearing record.[107]

On July 22, 2022, Staff and Applicant filed "Staff and Vantage Data Centers' Joint Stipulation to Move Additional Documents into the Evidentiary Record" (July 22 Stipulation) requesting to move additional documents into the hearing record and requesting the Committee close the hearing record.[108] In the July 22 Stipulation, the parties agreed to include: (1) Staff's Supplemental Testimony about the Justification Report,[109] (2) Staff's declarations to sponsor the Supplemental Testimony about the

[101] TN 243672.
[102] *Ibid.*
[103] TNs 243672, 243635, 243636, 243442.
[104] TN 243676.
[105] TNs 244100 (as superseded by TN 244131), 244128 (Spanish), 244129 (Vietnamese), and 244130 (Chinese).
[106] TN 244156.
[107] *Id.* at pp. 3-4.
[108] TN 244181.
[109] Ex. 212.

Justification Report, (3) an updated Cultural and Tribal Cultural Resources section to update the consultation process with the Tamien Nation, and (4) Staff's declaration to sponsor the updated section as testimony, in the hearing record. Documents (2) through (4) were attached to the July 22 Stipulation.

In response to the July 22 Stipulation, the Hearing Officer filed a memo to the parties directing Staff to refile documents (2) through (4) of the July 22 Stipulation as stand-alone documents for the purpose of being admitted into the hearing record.[110]

On July 25, 2022, Staff complied with the Hearing Officer's direction, including filing the "Cultural and Tribal Cultural Resources Update to the FEIR" (July 25 Update) as a stand-alone document.[111]

The Committee held a Committee Conference (Closed Session) on July 27, 2022, for the purpose of conducting closed session deliberations on the decision.[112]

On July 28, 2022, the Committee granted the July 22 Stipulation, admitting the requested documents into the hearing record and closing the evidentiary record.[113]

On July 29, 2022, the Committee issued a Proposed Decision recommending that the CEC grant an exemption from the CEC's certification process for the CA3 Backup Generating Facility after making findings that it has a generating capacity of at least 50 MW but less than 100 MW and that no substantial adverse effect on the environment or energy resources would result from the construction and operation of the proposed facility.[114] The Proposed Decision also contains a finding that the Project will not cause any significant adverse environmental impacts with implementation of the Project design features and mitigation measures imposed by this Decision, which incorporates the Final EIR, June 22 Update, and July 25 Update by reference.

On July 29, 2022, the Committee filed a "Notice of Availability of the Committee Proposed Decision, Notice of Public Comment Period, and Notice of California Energy Commission Hearing" (Notice of Availability).[115] The Notice of Availability requested the parties, public, and interested public agencies submit written comments on the

[110] TN 244189.
[111] Ex. 213.
[112] TN [TBD (CITATION TO TRANSCRIPT WHEN FILED)].
[113] TN 244236.
[114] TN [TBD]
[115] TN [TBD].

Proposed Decision by August 8, 2022, and offered the opportunity to participate in public comment at the CEC hearing, scheduled to be held during the CEC's August 10, 2022, Business Meeting.[116]

IV. ENVIRONMENTAL IMPACT REPORT

A. Legal Requirements for an EIR; Adequacy of the Final EIR

The environmental analysis of the Project is contained in the Final EIR,[117] June 22 Update,[118] and July 25 Update,[119] attached to this Decision as Appendices A, B, and C, and hereby incorporated by reference into this Decision. Pursuant to CEQA, a final EIR shall include the following:[120]

1. The draft EIR or a revision of the draft.[121]

The Final EIR contains a revision of the Draft EIR, identifying additions and deletions with underline and strikethrough text.[122]

2. A table of contents or index.[123]

The Final EIR contains a table of contents.[124]

3. A brief summary including identification of: each significant impact along with the proposed mitigation measure or alternative that would reduce or avoid that impact; the areas of controversy; and issues to be resolved, including the choice among alternatives and how to mitigate significant impacts.[125]

Section one of the Final EIR contains a summary including an identification of each potentially significant impact with a proposed mitigation measure to reduce the

[116] TN [TBD].
[117] Exs. 200, 201, 202, 203, 207, 213. When referring to the Final EIR in this Decision, we are referring to all of these exhibits as though they were integrated into a single document.
[118] Ex. 207.
[119] Ex. 213.
[120] Guidelines, §§ 15120 *et seq.*, 15132.
[121] Guidelines, § 15132(a).
[122] See, e.g., Ex. 200, p. 1-1.
[123] Guidelines, § 15122.
[124] Ex. 200, pp. i – ii.
[125] Guidelines, § 15123.

potential impact, choice of alternatives, and discussion of known controversy and issues resolved.[126]

4. A project description including: the precise location and boundaries of the proposed project; a statement of the objectives sought by the proposed project, including the underlying purpose; a general description of the project's technical, economic, and environmental characteristics; and a statement briefly describing the intended uses of the EIR.[127]

The Final EIR contains a complete description of the Project, including a map of its precise location and its technical, economic, and environmental characteristics, Project objectives, and a statement of the intended use of the EIR.[128]

5. Description of the environmental setting.[129]

The Final EIR is divided into 21 topical sections, each section of which contains an adequate analysis of the environmental setting.[130]

6. Consideration and discussion of environmental impacts including significant environmental effects of the project and growth-inducing impacts,[131] and effects not found to be significant.[132]

The Final EIR is divided into 21 topical sections. Each section contains a checklist that adequately summarizes the potential of the Project to have environmental or energy resource impacts.[133] Each section then contains an analysis of the Project's potentially significant environmental effects, effects found not to be significant, and conclusions summarized in the opening checklist.[134] The Final EIR also contains an adequate analysis of the Project's growth-inducing impacts.[135]

---

[126] Ex. 200, Section 1 (Summary).
[127] Guidelines, § 15124.
[128] Ex. 200, Section 3 (Project Description).
[129] Guidelines, § 15125.
[130] Exs. 201-203, 207, 213, Section 4 (Environmental Setting, Environmental Impacts and Mitigation).
[131] Guidelines, §§ 15126, 15126.2, 15127.
[132] Guidelines, § 15128.
[133] Exs. 201-203, 207, 213, Section 4 (Environmental Setting, Environmental Impacts and Mitigation).
[134] *Ibid*.
[135] Ex. 202, pp. 4.14-1 – 4.14-5.

7. Consideration and discussion of mitigation measures proposed to minimize significant effects.[136]

The Final EIR is divided into 21 topical sections, which sufficiently consider and discuss mitigation measures proposed to minimize significant effects.[137] The Final EIR also summarizes the mitigation measures.[138]

8. Consideration and discussion of alternatives to the proposed project including: evaluation of a reasonable range of alternatives that would attain most of the basic project objectives and avoid or substantially lessen any significant effects of the project; evaluation and analysis of a "no-project" alternative; identification of an environmentally superior alternative; identification of alternatives that were considered but rejected and reasons for their elimination; and a discussion of any significant effects of an alternative additional to the significant effects of the Project.[139]

The Final EIR sufficiently considers, evaluates, and discusses a reasonable range of alternatives to the Project including a no-project alternative, identifies environmentally superior alternatives, and presents alternatives that were considered but rejected and reasons for their elimination.[140]

9. Discussion of cumulative impacts.[141]

The Final EIR is divided into 21 topical sections that sufficiently discuss the Project's cumulative impacts in the context of the discussions of the individual topics.[142] The Final EIR also contains a section dedicated to discussion of cumulative impacts.[143]

10. Comments on the Draft EIR and responses to significant points raised in the review and consultation process.[144]

[136] Guidelines, §§ 15126, 15126.4.
[137] Exs. 201-203, 207, 213, Section 4 (Environmental Setting, Environmental Impacts and Mitigation).
[138] Ex. 200, pp. 1-2 – 1-27.
[139] Guidelines, §§ 15126, 15126.6.
[140] Ex. 203, Section 5 (Alternatives).
[141] Guidelines, § 15130.
[142] Exs. 201-203, 207, 213, Section 4 (Environmental Setting, Environmental Impacts and Mitigation).
[143] Ex. 203, pp. 4.20-4 – 4.20-14.
[144] Guidelines, § 15132(b) and (d).

Section seven of the Final EIR includes comments on the Draft EIR and adequate responses to those comments.[145] The Final EIR also includes a discussion of known controversy and issues to be resolved.[146]

11. Organizations and persons consulted in preparing the EIR.[147]

Section 6 of the Final EIR lists authors and reviewers of the Final EIR.[148] Other organizations and persons consulted are described in the relevant individual topics in the Final EIR.[149]

In exercising our independent judgment about the Project, and in preparing the discussion herein, we have reviewed and considered the Final EIR, together with all comments received and responses made during the course of this proceeding, and the evidence presented during the evidentiary hearing or admitted by stipulation following the evidentiary hearing, as contained in the hearing record.

We find that substantial evidence exists that the Final EIR has been prepared as required by law.

B. Mitigation Monitoring or Reporting Program

Under CEQA when a lead agency adopts mitigation measures for a project, it must also adopt a program for monitoring or reporting on the mitigation measures it has imposed.[150] The program serves to ensure that mitigation measures adopted through CEQA are implemented.[151] We assume granting of the SPPE triggers the requirement to adopt such a program.[152]

In this proceeding, Staff proposed mitigation measures for air quality, biological resources, cultural and tribal cultural resources,[153] geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation;[154] Staff included

[145] Ex. 203, Section 7 (Response to Comments).
[146] Ex. 200, pp. 1-21 – 1-22.
[147] Guidelines, § 15129.
[148] Ex. 203, p. 6-1.
[149] See, e.g., *id.* at p. 4.21-22.
[150] Guidelines, § 15097(a).
[151] See *ibid.*
[152] See, e.g., *Residents Against Specific Plan 380 v. County of Riverside* (2017) 9 Cal.App.5th 941, 962 (County complied with CEQA when MMRP was part of final project approval, as opposed to earlier consideration of project).
[153] We have modified CUL-1 in section V.)C.iii., "Consultation with the Tamien Nation," below.
[154] Ex. 200, pp. 1-2 – 1-19.

those mitigation measures in its MMRP.[155] We hereby adopt, and incorporate by reference, the MMRP attached to this Decision as Appendix D as the MMRP for the Project, to be overseen by the City of Santa Clara. With the imposition and implementation of the mitigation measures in the MMRP, together with the Project features included in the Application, we find that the potential impacts to air quality, biological resources, cultural and tribal cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation are less than significant.

The City of Santa Clara has agreed to monitor Applicant's performance of the mitigation measures we adopt.[156] "A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation."[157]

V. DISCUSSION

In evaluating the Project, as for all SPPE applications, the CEC fulfills its CEQA obligations and requirements mandated by the CEC's regulations with a quasi-adjudicative hearing process.[158] This process provides opportunities for robust public participation, for parties to submit evidence on the analyses and conclusions of the environmental documentation, and for the CEC to make pertinent findings of fact and conclusions of law.

Our consideration of the Project includes an evaluation of the Application, the Final EIR, comments on the Draft EIR, the hearing record, and public comment. The discussion below addresses our assessment of the Project under CEQA and the Warren-Alquist Act in the context of the three dispositive questions:

- ✓ Is the Backup Generating Facility a thermal powerplant with a generating capacity of up to 100 MW?
- ✓ Will a substantial adverse impact on energy resources result from the construction or operation of the Project?
- ✓ Will a substantial adverse impact on the environment result from the construction or operation of the Project?

[155] Ex. 203, Section 8 (Mitigation Monitoring and Reporting Program).
[156] Ex. 205.
[157] Guidelines, § 15097(a).
[158] Cal. Code Regs., tit. 20, § 1944.

A. The Backup Generators Have a Combined Generating Capacity of 96 MW.

The Warren-Alquist Act defines a thermal powerplant as "any stationary or floating electrical generating facility using any source of thermal energy, with a generating capacity of 50 megawatts or more, and any facilities appurtenant thereto."[159] As discussed below, the uncontested evidence shows that the Backup Generators constitute a thermal powerplant with a generating capacity in excess of 50 MW.

The only CEC regulation that defines generating capacity is Section 2003.[160] In the Final EIR, Staff[161] states that the Backup Generators are not steam or combustion turbine generators and therefore Section 2003 is not controlling in this proceeding.[162] The Project would include 44 diesel-fueled emergency backup generators, each with a nameplate output capacity of 2.75 MW and continuous steady-state output capacity of 2.2 MW.[163] The Backup Generators would provide emergency backup power supply for the Data Center only during interruptions of electric service from SVP.[164] The Backup Generators would be electrically isolated from the Pacific Gas & Electric Company (PG&E) transmission grid with no means to deliver electricity offsite of the Data Center (SVP's distribution line would only allow power to flow in one direction – from PG&E's transmission line to the Data Center).[165]

For isolated facilities such as this one, Staff bases its jurisdictional analyses on the net MW that can be delivered for "use" (i.e., to a data center facility or the electricity grid), not the gross or nameplate rating.[166] Staff states that for a data center, the maximum load being served is determinative and not the combined net capacity of the installed Backup Generators.[167] Here, the maximum load of the Data Center would not exceed 96 MW.[168] As a result, Staff concludes that "[w]hile CA3 has an apparent installed generation capacity greater than 100 MW . . . , the 'extra' MW installed are redundant," and "[i]n no case would the maximum facility-wide load demand exceed 96 MW due to

[159] Pub. Resources Code, § 25120.
[160] Cal. Code Regs., tit. 20, § 2003.
[161] Unless specified otherwise, all references to Staff in this section refer to Staff's analyses, conclusions, and discussions in the Final EIR.
[162] Ex. 203, Appen. A, p. 3.
[163] *Id.* at Appen. A, p. 1.
[164] *Ibid*.
[165] *Ibid*.
[166] *Id.* at Appen. A, p. 2.
[167] *Ibid.*
[168] *Id.* at Appen. A, p. 6.

physical constraints built into the project."[169]

In addition, Staff found that the maximum demand of 96 MW would be fixed by the specification and installation of electrical buses and panels, switchyard, and breakers that would have an upper electrical capacity limit, and by the specification and installation of cooling equipment that have an upper physical limit of cooling capacity.[170] Staff concluded that the Backup Generators will not generate electricity in excess of 96 MW.[171]

Section 2003(a) states: "The 'generating capacity' of an electric generating facility means the maximum gross rating of the plant's ***turbine generator(s)***, in megawatts . . . minus the minimum auxiliary load."[172] The Backup Generators in this Project are not turbine generators. However, we find that the principles in establishing generating capacity for turbine generators can also apply to internal combustion engines, such as the Backup Generators. Thus, under these principles, we identify the maximum gross rating, defined as the output in MW at those conditions that yield the highest generating capacity on a continuous basis. While Section 2003 states that the maximum gross rating cannot be limited by an operator's discretion to lower output or by temporary design modifications, we believe it is also true that the maximum gross rating can be limited by permanent design modifications that limit output. Additionally, when a facility is not connected to an electric distribution system such as the grid, its maximum gross rating cannot exceed that of its connected demand. We see no practical differences among 1) adding a device to a grid-connected powerplant that permanently constrains generation, 2) connecting a generating facility to a demand with a permanent circuit that limits the amount of electricity that can be delivered from the generating facility, or 3) permanently limiting the size of the demand to which the generation is connected. All three are examples of permanent and actual constraints on generation.

In this case, the record shows that the maximum demand of the Data Center is 96 MW and that the demand is fixed by the use of electrical equipment that has an upper electrical capacity limit.[173] Thus, even though the Backup Generators have a combined

[169] *Id.* at Appen. A, p. 2.
[170] *Id.* at Appen. A, p. 5.
[171] *Id.* at Appen. A, p. 7.
[172] (Emphasis added).
[173] Ex. 203, Appen. A, p. 7.

nameplate capacity that exceeds 100 MW, the maximum generating capacity of those Backup Generators is limited to the maximum demand of the Data Center of 96 MW.

Thus, we find that the Backup Generators have a maximum generating capacity of 96 MW, which will not exceed 100 MW. To ensure that the generating capacity remains at 96 MW, based on the Data Center demand and as analyzed by the Final EIR, we adopt Condition of Exemption PD-1 to read as follows:

> **Condition of Exemption PD-1. Notice of Events Affecting Electrical Demand of the Facility.**
>
> The granting of the Small Power Plant Exemption for the CA3 Backup Generating Facility is specifically conditioned on the existing configuration of the CA3 Data Center and on its demand for electricity not exceeding 96 MW. The Project owner may not alter the configuration or equipment of the CA3 Data Center if the demand for electricity would then increase or if generation capacity would exceed 96 MW. If the Project owner in the future desires to alter the configuration or equipment of the CA3 Data Center in a manner that may result in an increase in electrical demand, any such alteration, change, or modification shall be subject to the requirements set forth in the regulations of the CEC relating to changes in Project design, operation, or performance and amendments to Commission Decisions, as they may exist at that time.

We also adopt Condition of Exemption PD-2, as stated below, to ensure that the electricity produced by the Backup Generators will be used only by the Data Center, thereby making the demand limit of the Data Center the permanent restriction on generating capacity.

> **Condition of Exemption PD-2. Notice of Events Affecting Off-Site Distribution of Energy Generated by the Facility.**
>
> The granting of the Small Power Plant Exemption for the CA3 Backup Generating Facility is specifically conditioned on the power generated being used exclusively by the CA3 Data Center. At no time shall the Project owner or operator allow power generated by the CA3 Backup Generating Facility to be used for any other facility, property, or use, including, but not limited to, delivery to the electric distribution system without the express written approval of the CEC.

With the adoption and implementation of Conditions of Exemption PD-1 and PD-2, we find that the Project has been, and will be, limited to a maximum demand of 96 MW and therefore the maximum generation capacity of the Backup Generators is less than 100 MW.

B. Potential Energy Impacts: The Final EIR establishes that no substantial adverse impact on energy resources will result from the construction or operation of the Backup Generators or the Project.

The Final EIR concludes that the Project would not have significant adverse impacts on energy resources.[174] This conclusion was not contested by any party. To determine whether an SPPE may be granted pursuant to the Warren-Alquist Act, we must find that the Project has no "substantial adverse impact on energy resources."[175] The Warren-Alquist Act does not define the phrase "substantial adverse impact on energy resources," so we examine it by reference to similar standards under CEQA, including the Project's energy consumption during construction or operation and whether the Project conflicts with or obstructs state or local plans for renewable energy or energy efficiency.[176]

We find that the Final EIR thoroughly analyzes the potential impacts on energy resources from Project construction and operation and the Project's consistency with state and local plans for renewable energy and energy efficiency. The Final EIR concludes that the Project will have less than significant impacts on energy and energy resources.[177] The Final EIR also concludes that the Project will not conflict with state or local plans for renewable energy or energy efficiency.[178] Based on substantial evidence in the record, and finding no evidence to the contrary, we concur with the Final EIR and conclude that the Project would not have a substantial adverse impact on energy resources.

C. Potential Environmental Impacts: The Final EIR establishes that no substantial adverse impact on the environment will result from the construction or operation of the Backup Generators or the Project.

The Final EIR concludes that with the implementation of mitigation measures, the Project would not have any significant adverse impacts on the environment.[179] This

[174] Ex. 202, pp. 4.6-1 – 4.6-8.
[175] Pub. Resources Code, § 25541.
[176] Guidelines, Appen. F and Appen. G.
[177] Ex. 202, pp. 4.6-3 – 4.6-7.
[178] *Id.* at pp. 4.6-6 – 4.6-7.
[179] Ex. 200, p. 1-2.

conclusion was not contested by any party. To determine whether an SPPE may be granted pursuant to the Warren-Alquist Act, we must find that the Project has no "substantial adverse impact on the environment."[180] The Warren-Alquist Act does not define the phrase "substantial adverse impact on the environment," so, again, we examine it by reference to similar standards under CEQA.

One of the basic purposes of CEQA is to inform government decisionmakers and the public about the potential significant environmental effects of proposed activities.[181] An EIR meets the purpose of CEQA by adequately informing the public and the CEC about the environmental effects of a Project, including analyzing the significant environmental effects of a proposed project, identifying alternatives, and disclosing possible ways to reduce or avoid possible environmental damage.[182]

Here, the Final EIR includes an analysis of the Project's environmental setting and effects on the environment.[183] Staff concluded that impacts in the areas of air quality (including public health), biological resources, cultural and tribal cultural resources, geology and soils (paleontology), greenhouse gas emissions, hazards and hazardous materials, noise, and transportation would be potentially significant but, with mitigation measures, would be reduced to less than significant.[184] The areas of aesthetics, energy and energy resources, hydrology and water quality, land use, and utilities and service systems would have less than significant impacts from the Project.[185] The areas of agriculture and forestry resources, mineral resources, and wildfire would have no impact from the Project.[186]

The Final EIR evaluates the Mandatory Findings of Significance[187] and finds that, with mitigation incorporated, the Project will have less than significant impacts related to degrading biological, cultural and tribal cultural, and geological resources, and related to cumulative impacts.[188] The Final EIR also finds that the Project will have a less than significant impact related to adverse effects on human beings with mitigation incorporated.[189] The Final EIR discusses the effects of the Project in each topical area

[180] Pub. Resources Code, § 25541.
[181] Guidelines, § 15002(a)(1).
[182] *Id.*, § 15002(f).
[183] Exs. 200-203, 207, 213, Section 4 (Environmental Setting, Environmental Impacts and Mitigation).
[184] Ex. 200, p. 1-2.
[185] *Ibid.*
[186] *Ibid.*
[187] Guidelines, § 15065 and Appen. G.
[188] Ex. 203, pp. 4.20-2 – 4.20-12.
[189] *Id.* at p. 4.20-12.

through the lens of environmental justice and finds that the Project will not have any significant effects on environmental justice populations.[190] The Final EIR also contains a discussion of alternatives to the Project[191] and copies of the public comments received on the Draft EIR and responses thereto.[192] The Final EIR concludes that all potentially significant impacts will be mitigated to less than significant levels, and therefore the Project will not have a significant adverse impact on the environment.[193]

The analysis, findings, and conclusions in the Final EIR were not contested by the parties and do not require further discussion. However, as set forth in the April 20 Notice and Orders and the May 25 Questions, the parties were asked to provide further information regarding the Final EIR's analysis of the Project's impacts related to exceedances of cancer risk and annual emissions of PM2.5 in the cumulative health risk assessment. In addition, the May 6 Notice of Continuance solicited testimony on whether the BAAQMD Justification Report affected the proposed mitigation measures. Finally, the July 15 Notice and Orders sought an update on the progress of the consultation with the Tamien Nation. In this section of the Decision, we briefly discuss these issues and the responses received from the parties to inform our conclusion on the environmental impacts of the Project.

i. The Committee's Questions regarding the Health Risk Assessment

a. Legal Background

An EIR must provide decisionmakers with enough information to make a decision about the environmental consequences of the project. "The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."[194]

In a cumulative impacts analysis, the EIR "shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable . . . ."[195] "Cumulatively considerable" means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."[196] If a project's impacts are less than cumulatively considerable, then the cumulative impacts are not

[190] *Id.* at pp. 4.21-12 – 4.21-23.
[191] *Id.* at pp. 5-1 – 5-21.
[192] *Id.* at pp. 7-1 – 7-74.
[193] Ex. 200, p. 1-2.
[194] Guidelines, § 15151.
[195] Guidelines, § 15130(a).
[196] Guidelines, § 15065(a)(3).

considered significant.[197] A project's contribution may be considered less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."[198] If, on the other hand, the CEC identifies a significant cumulative impact, the EIR must consider, and the CEC must adopt, any feasible mitigation or alternative to reduce the severity of the impact.[199]

Before certifying a final EIR, the CEC must not only determine if the final EIR has been completed in compliance with CEQA, but also review and consider the information contained in the final EIR and ensure that the final EIR reflects the CEC's "independent judgment and analysis."[200] In particular, the CEC evaluates a final EIR to ensure that substantial evidence supports the conclusions reached. Substantial evidence means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."[201]

b. Final EIR's Discussion of Cumulative Health Risks

The Final EIR relied on the thresholds of significance in BAAQMD's 2017 CEQA Guidelines to analyze the health risks of the Project.[202] Those guidelines also recommend that agencies consider cumulative impacts from sources within 1,000 feet of the project, unless a larger radius is more appropriate.[203] Because the nearby Caltrain railroad and surrounding industrial stationary sources could present elevated existing levels of toxic air contaminants, Staff requested the Applicant submit information on sources within 2,000 feet of the Project.[204] However, Applicant only performed an analysis of impacts from sources within 2,000 feet on the maximally exposed individual sensitive receptor (MEISR).[205] That analysis showed that there were exceedances of both cumulative cancer risk and cumulative PM2.5.[206] The Final EIR states that the exceedances are largely driven by the emissions from Caltrain and that

[197] Guidelines, § 15130(a)(3).
[198] Guidelines, § 15130(a)(3).
[199] Guidelines, § 15126.4(a); Pub. Resources Code, § 21002.
[200] Guidelines, § 15090(a).
[201] *City of Long Beach v. City of Los Angeles* (2018) 19 Cal.App.5th 465, 474.
[202] Ex. 201, pp. 4.3-2 – 4.3-5.
[203] *Id.* at pp. 4.3-19 – 4.3-20
[204] *Id.* at p. 4.3-49.
[205] *Id.* at p. 4.3-50.
[206] *Ibid.*

the distance multipliers did not extend to 2,000 feet, resulting in an overestimate of the total cumulative risk.[207]

Staff then performed an independent cumulative health risk assessment, assessing impacts within 1,000 feet of other maximally exposed sensitive receptors (e.g., maximally exposed individual worker (MEIW), maximally exposed individual resident (MEIR), etc.).[208] Applying the thresholds from the 2017 CEQA Guidelines, the Final EIR showed that the Project's cancer risk[209] at the MEISR and MEIR, and PM2.5[210] concentration at the MEISR and MEIW during Project operation exceeded the thresholds of significance.[211] Despite finding exceedances of the cancer risk at the MEISR and MEIR,[212] and exceedances of PM2.5 concentrations at the MEISR and MEIW,[213] the Final EIR nonetheless concluded that the Project did not have a cumulatively considerable impact.[214] BAAQMD, in comments on the Draft EIR, pointed out these exceedances and requested that Staff impose mitigation or alternatives to reduce these cumulative impacts to less than significant levels.[215]

c. Committee Proceedings

The April 20 Notice and Orders ordered the parties to explain in greater detail for each exceedance why the incremental effects of the project are not "cumulatively considerable" when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.[216]

In response, Applicant submitted written declarations and information to support its claim that the Final EIR's analysis was conservative and an overestimate.[217] Staff responded with a legal argument that where there is a preexisting cumulative effect, whether the additional amount of the project's effect should be considered cumulative must be considered in the context.[218] Staff cited case law finding that the "one

[207] *Ibid.*
[208] *Ibid.*
[209] Cancer risk is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure.
[210] Particulate matter with an aerodynamic diameter less than 2.5 micrometers.
[211] Ex. 201, pp 4.3-52 – 4.3-55.
[212] *Id.* at 4.3-53.
[213] *Id.* at 4.3-55.
[214] *Id.* at 4.3-52 – 4.3-55.
[215] Ex. 203, pp. 7-10 – 7-11.
[216] TN 242815, p. 8.
[217] Ex. 42.
[218] Ex. 206, p. 1.

[additional] molecule rule" is not the law, but that instead the Project's incremental effects must be assessed for whether those impacts are "cumulatively considerable."[219] Staff also asserted that the Final EIR's analysis was conservative and an overestimate of the health risk.[220]

The Committee was not persuaded that the reasoning provided in the Final EIR was adequate given the apparent exceedances of the adopted thresholds of significance and based on its independent judgment of the document, and therefore it requested the parties bring witnesses to respond to Committee questions on the topic at the Evidentiary Hearing.[221]

At the Evidentiary Hearing, the Committee heard both legal argument and expert testimony from the parties on the cumulative health risk assessment. As legal argument, Staff stated that BAAQMD's 2017 CEQA Guidelines were ambiguous as to whether an exceedance of a cumulative threshold was necessarily cumulatively considerable, because BAAQMD's 2017 CEQA Guidelines identify a threshold for cumulative impacts, but not a threshold or analysis for how to determine whether an individual project's effects are cumulatively considerable.[222] Staff therefore argued that because the project did not exceed the individual thresholds, its effects were not cumulatively considerable even though it exceeded the cumulative thresholds.[223]

Following the legal argument, Staff and Applicant then presented expert witnesses to respond to the Committee's questions. Staff and Applicant agreed in their testimony on the following:

- The cumulative impacts analysis considered impacts from sources within 2,000 feet of the Project based on the Committee's direction in a prior case[224] to look at sources within 2,000 feet due to the proximity of an airport, but 1,000 feet is a more appropriate radius for this Project.[225]

- The Caltrain Electrification Project is a reasonably foreseeable future project.[226]

---

[219] *Ibid*.
[220] *Id.* at p. 2.
[221] TN 243300. See also TN 242971.
[222] 5/27/22 RT 24:11 – 27:24.
[223] 5/27/22 RT 29:22 – 30:3.
[224] Sequoia Data Center SPPE, Docket No. 19-SPPE-03.
[225] 5/27/22 RT 55:21 – 56:12.
[226] 5/27/22 RT 60:14 – 60:17.

Staff further stated that it had not refined the cumulative impacts analysis despite finding exceedances of the cumulative thresholds because it did not think the Project's impacts were cumulatively considerable.[227]

After considering the testimony and argument provided, the Committee asked Staff to prepare an update to the Final EIR that contained an analysis of the applicable radius of sources affecting the analysis, an analysis of the emission reductions of the Caltrain Electrification Project as a reasonably foreseeable future project, and documents substantiating the updated analysis.[228]

d. Update to Air Quality Section of the Final EIR

In response to the Committee's direction, Staff prepared an "Update to Air Quality Section of the FEIR" (June 22 Update).[229] In the June 22 Update, Staff made three refinements to the cumulative health risk assessment. First, Staff reduced the 2,000-foot radius used in the Final EIR to analyze the health impacts of the Project on the MEISR to a 1,000-foot radius.[230] Second, the June 22 Update discussed the effect of electrification of the Caltrain system. Staff revised the analysis by reducing the existing background concentrations of pollutants, using an 87-percent reduction from the Caltrain Electrification Project, based on that project's 2015 EIR.[231] Third and finally, in the June 22 Update, Staff reduced the amount of time a worker would be exposed to emissions from the project.[232] This Worker Adjustment Factor lowered the multiplier from 1 to 0.24, accounting for a worker's presence 8 hours a day, 5 days a week.[233]

Based on these three refinements to the analysis, the June 22 Update shows that at the MEISR, the cancer risk concentration would be 31.38 in one million; and at the MEIR, the cancer risk concentration would be 38.91 in one million; both of which are below the 100 in one million significance threshold for cumulative impacts.[234] The PM2.5 concentration at the MEISR would be 0.427 $\mu g/m^3$, and the PM2.5 concentration at the MEIW would be 0.573 $\mu g/m^3$, both of which would be below the PM2.5 significance threshold of 0.8 $\mu g/m^3$ for cumulative impacts.[235]

---

[227] 5/27/22 RT 60:8 – 60:13.
[228] *Ibid*.
[229] Ex. 207.
[230] *Ibid.*
[231] *Id.* at pp. 4.3-53 – 4.3-54.
[232] *Id.* at p. 4.3-56.
[233] *Id.* at p. 4.3-52, fn.8.
[234] *Id.* at p. 4.3-56.
[235] *Id.* at p. 4.3-58.

Therefore, Staff concludes in the June 22 Update that, with mitigation, the Project will not have any significant cumulative health impacts.[236] Because the June 22 Update did not meet any of the criteria requiring recirculating an EIR,[237] Staff did not recirculate the Final EIR or the June 22 Update.

e. Findings and Conclusions

In developing an EIR, air quality analyses are often iterative, involving first a screening-level analysis that relies on conservative inputs followed by more detailed models that more accurately assess the impacts of the Project.[238] Here, the Draft EIR used conservative inputs to prepare an assessment of the potential cumulative health risk impacts of the project, including a broader radius of emission sources, non-inclusion of the Caltrain Electrification Project, and a worker being exposed all the time at the work site. However, no refined modeling or assessment was performed after finding potential exceedances related to cancer risk and PM2.5 concentration. Although BAAQMD's 2017 CEQA Guidelines and case law may be ambiguous or inconclusive on how to assess whether an individual project's contribution to the cumulative impacts is cumulatively considerable, BAAQMD itself appeared to disagree with the Final EIR's approach, instead requesting that the identified significant cumulative impacts be mitigated. In light of the ambiguity and BAAQMD's comments, the Committee determined that the best approach would be to ask Staff to refine the cumulative health risk assessment to more fully and accurately disclose the potential impacts of the Project, whatever those may be. Staff did so in its June 22 Update and substantiated that update with documentary evidence, showing that the Project will not have any significant cumulative impacts related to health risks.

Under CEQA, a final EIR may need to be recirculated where "significant new information" is added. "Significant new information" means:

> (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
>
> (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

[236] *Id.* at pp. 4.3-60 – 4.3-62.
[237] Guidelines, § 15088.5.
[238] See, e.g., *City of Long Beach v. City of Los Angeles*, *supra*, 19 Cal.App.5that p. 485 (describing a screening analysis); BAAQMD 2017 CEQA Guidelines, p. 3-1.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.[239]

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.[240]

In this case, we find that the new information added in the June 22 Update merely clarifies or amplifies an otherwise adequate Final EIR. Therefore, we agree that recirculation of the June 22 Update is not required.

In exercising our independent judgment on the adequacy of the Final EIR, we find that the Final EIR and June 22 Update sufficiently analyze the potential cumulative health risk impacts of the Project. With the June 22 Update, we find that substantial evidence supports a finding that construction and operation of the Project will not result in any significant cumulative air quality or health impacts.

ii. The Committee's Question Regarding the BAAQMD Justification Report

In its May 6 Notice of Continuance, the Committee asked a question about the effect of BAAQMD's recently published Justification Report on the Final EIR's Mitigation Measure GHG-1 and any other mitigation measure.[241]

Applicant responded by objecting to admission of the Justification Report as not relevant to the proceeding because the new thresholds "were never intended by the BAAQMD Board to be used for anything other than new projects."[242]

Staff responded by describing how the Justification Report did not affect any of the existing mitigation measures for greenhouse gas emissions for both stationary sources (e.g., the Backup Generators) or for the other emissions, largely related to the Data

[239] Guidelines, § 15088.5(a).
[240] Guidelines, § 15088.5(b).
[241] TN 242971, pp. 4 – 5.
[242] TN 242980, p. 2.

Center.[243] Staff explained that the Justification Report applied to "indirect and 'non-stationary' source emissions of land use development projects."[244] In contrast, Mitigation Measure GHG-1 was for the Project's stationary sources (the Backup Generators), so the Justification Report did not affect the mitigation measure.[245] Staff further explained that with Mitigation Measures GHG-2 and GHG-3, the Project's non-stationary sources complied with BAAQMD's new CEQA threshold of significance for land use projects, as described in the Justification Report.[246] Finally, Staff explains that BAAQMD's new CEQA threshold of significance for non-stationary sources do not affect the Final EIR's transportation analysis, as the Project does not exceed the new thresholds of significance.[247]

We find Staff's response persuasive in concluding that the Justification Report does not affect the proposed mitigation measures or the analysis of the Project's potential environmental impacts. Therefore, based on substantial evidence in the record and in the absence of contrary evidence, we find that the analysis and mitigation of greenhouse gas emission and transportation impacts from the Project were not affected by the Justification Report and that mitigation will reduce any significant impacts to less than significant levels.

iii. Consultation with the Tamien Nation

The Draft EIR describes the process of consultation with Native American tribes and nations.[248] After noting a request for consultation from the Tamien Nation, the Draft EIR concludes by saying, "Consultation between the CEC and Tamien Nation is ongoing as of the time of this writing; CEC staff will update this results discussion [sic] in the final environmental impact report after the consultation concludes."[249] However, in the Final EIR, the text remains the same without an update to the outcome of the consultation process.[250]

On July 25, 2022, Staff filed the July 25 Update to clarify the status of consultation with the Tamien Nation.[251] The July 25 Update states that, in December 2021, the Tamien

[243] Ex. 212.
[244] *Id.* at p. 2.
[245] *Ibid.*
[246] *Id.* at pp. 2 - 3.
[247] *Id.* at p. 3.
[248] TN 241264, pp. 4.5-11 – 4.5-14.
[249] *Id.* at 4.5-14.
[250] TN 242453, p. 4.5-14.
[251] Ex. 213.

Nation provided comments on an early version of the Draft EIR and requested changes only to Mitigation Measure CUL-1. The July 25 Update indicates that Staff has made all of the requested changes except for naming the Tamien Nation as the Native American monitor for ground-disturbing activities. Staff stated that the City of Santa Clara should be able to select its own Native American monitor as it would be monitoring compliance with the mitigation measures in the Final EIR.[252] Staff did not recirculate the July 25 Update.

The CEC is the lead agency under CEQA for SPPEs.[253] Under CEQA, the lead agency is responsible for imposing all feasible mitigation measures.[254] In the July 27 Update, Staff did not provide any evidence to support a finding that naming the Tamien Nation as Native American monitor was "infeasible." We therefore amend Mitigation Measure CUL-1 to name the Tamien Nation as preferred for the Native American monitor. Mitigation Measure CUL-1 shall now read as follows:

> CUL-1: The following project-specific measures would be implemented during construction to avoid significant impacts to unknown subsurface cultural resources:
>
> • A Secretary of the Interior-qualified archaeologist and a Native American cultural resources monitor shall be on site to monitor all ground-disturbing activity, including the removal of foundations and landscaping, on the project site. The project applicant shall submit the name and qualifications of the selected archaeologist and Native American monitor, along with a signed letter of commitment or agreement to monitor, to the City's Director of Community Development prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given **to members of the Tamien Nation** and to Native Americans with:
>
> o Aboriginal, culturally affiliated ties to the area being monitored.
>
> o Knowledge of local historic and prehistoric Native American village sites.
>
> o Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.

[252] *Id.* at pp. 4.5-14 – 4.5-15.
[253] Pub. Resources Code, § 25519(c).
[254] Guidelines, § 15041.

- o Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq. o Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.

- o Ability to travel to project sites within traditional tribal territory.

- o Knowledge and understanding of California Code of Regulations, title 14, section 15064.5.

- o Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding of CEQA mitigation provisions.

- o Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.

- o Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

The change made to Mitigation Measure CUL-1 does not make it "considerably different from others previously analyzed."[255] In addition, the new information added in the July 25 Update merely clarifies or amplifies or makes insignificant modifications to an otherwise adequate Final EIR. Therefore, we find that recirculation of the Final EIR or July 25 Update is not required. With the July 25 Update, we find that substantial evidence supports a finding that, with the imposition and implementation of Mitigation Measure CUL-1, as amended, and CUL-2, the potential impacts of the Project on cultural and tribal cultural resources are mitigated to a level of less than significant.

iv. Conclusion Regarding Potential Environmental Impacts

After reviewing the evidence in the record, we find that the Project will not have a significant adverse impact, individually or cumulatively, on the environment. Furthermore, we find that the Final EIR considered and analyzed a reasonable range of alternatives. We also find that the mitigation measures incorporated into the Project design, proposed in the Final EIR, and set forth in the MMRP, will reduce any potentially

[255] Guidelines, § 15088.5(a)(3).

significant impacts to less than significant levels and will be enforced by the City of Santa Clara. Therefore, we conclude that the construction and operation of the Project will not have a substantial adverse impact on the environment.

VI. FINDINGS AND CONCLUSIONS

Based on the record of this proceeding, we find:

1. The Final EIR, June 22 Update, and July 25 Update have been prepared in compliance with CEQA and thoroughly and adequately analyze potential environmental and energy resources impacts.

2. This Decision was prepared in accordance with the public review process mandated by the Warren-Alquist Act, CEC regulations, and CEQA.

3. The Backup Generators are a thermal powerplant that has a generating capacity of up to 96 MW.

4. The imposition and implementation of Conditions of Exemption PD-1 and PD-2 will ensure that the generating capacity of the Backup Generators will not exceed 96 MW.

5. The imposition and implementation of mitigation measure AQ-1 will ensure that the Project will not have any significant environmental impacts on air quality.

6. The imposition and implementation of mitigation measures BIO-1 through BIO-4 will ensure that the Project will not have any significant environmental impacts on biological resources.

7. The imposition and implementation of mitigation measures CUL-1, as modified by this Decision, and CUL-2 will ensure that the Project will not have any significant environmental impacts on cultural and tribal cultural resources.

8. The imposition and implementation of mitigation measures GEO-1 and GEO-2 will ensure that the Project will not have any significant environmental impacts on geology and soils (paleontology).

9. The imposition and implementation of mitigation measures GHG-1 through GHG-3 will ensure that the Project will not have any significant environmental impacts related to greenhouse gas emissions.

10. The imposition and implementation of mitigation measure HAZ-1 will ensure that the Project will not have any significant environmental impacts related to hazards and hazardous materials.

11. The imposition and implementation of mitigation measure NOI-1 will ensure that the Project will not have any significant environmental impacts related to noise.

12. The imposition and implementation of mitigation measure TRANS-1 will ensure that the Project will not have any significant environmental impacts on transportation.

13. BAAQMD will require the Project to fully offset NOx emissions during BAAQMD's permitting process.

14. The adoption of the MMRP, set forth in Appendix D, and the City of Santa Clara's agreement to serve as the enforcement agency for the MMRP will ensure that the Project complies with all requirements in the MMRP.

15. The Project will not cause any significant adverse environmental impacts with implementation of the Project design features and mitigation measures imposed by this Decision, which incorporates the Final EIR, June 22 Update, and July 25 Update by reference.

16. The Project will not cause any significant adverse impacts to energy resources.

17. Based on the above findings, the CEC may grant a small powerplant exemption in accordance with California Public Resources Code section 25541.

We hereby **CERTIFY** the Final EIR, contained in Appendix A, including the June 22 Update to the Final EIR contained in Appendix B, and the July 25 Update to the Final EIR contained in Appendix C, for the CEC's Decision for the Small Power Plant Exemption for the CA3 Backup Generating Facility. In certifying the Final EIR, we do so through the exercise of our independent judgment and review after finding substantial evidence, considering the record as a whole, to support certification.

We hereby **ADOPT** the MMRP contained in Appendix D to ensure the Project design features and additional mitigation measures from this Decision will be implemented by the City of Santa Clara.

We therefore **GRANT** the CA3 Backup Generating Facility a Small Power Plant Exemption from the Application for Certification provisions of the CEC's powerplant licensing process.

Appendix A: Final EIR

Appendix B: June 22, 2022, Memorandum and Update to Air Quality Section of FEIR

Appendix C: July 25, 2022, Cultural and Tribal Cultural Resources Update to the FEIR

Appendix D: Mitigation Monitoring and Reporting Program

Appendix E: Exhibit List

Appendix F: Proof of Service List

APPENDIX A

FINAL EIR

CA3 Backup Generating Facility - Vantage

Final Environmental Impact Report
Part 1 of 4

March 2022
CEC-700-2022-003

CALIFORNIA
ENERGY
COMMISSION
Gavin Newsom,
Governor

DOCKET NUMBER 21-SPPE-01

FINAL ENVIRONMENTAL IMPACT REPORT

CA3 Backup Generating Facility

(21-SPPE-01)

Lead Agency

California Energy Commission

March 2022

Table of Contents

Section 1

Summary

1 Summary

This environmental impact report (EIR) has been prepared by the California Energy Commission (CEC) staff to evaluate the potential environmental effects of the development of the CA3 Data Center and associated Backup Generating Facility (CA3BGF), referred to together as the project (project), in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, the Warren-Alquist State Energy Resources Conservation and Development Act, and California Code of Regulations, Title 20, chapter 5, article 5 (Small Power Plant Exemptions).

The CEC has the exclusive authority to certify all thermal power plants of 50 megawatts (MW) and greater and related facilities proposed for construction in California. The Small Power Plant Exemption (SPPE) process allows applicants with facilities between 50 and 100 MW to obtain an exemption from CEC's jurisdiction and proceed with local permitting rather than requiring CEC certification. The CEC can grant an exemption if it finds that the proposed facility would not create a substantial adverse impact on the environment or energy resources. Public Resources Code section 25519(c) designates the CEC as the lead agency, in accordance with CEQA, for all facilities seeking an SPPE.

1.1 Project Summary

Vantage Data Services is seeking an exemption from the CEC's jurisdiction as an SPPE project. The applicant proposes to construct and operate the project, at 2590 Walsh Avenue, Santa Clara, California. The project would consist of an approximately 468,000-square-foot four-story data center building. To provide for the reliable operation of the project in the event of the loss of electrical service from the local electric utility provider, Silicon Valley Power (SVP), the project includes 44 2.75-MW diesel-fired emergency backup generators to provide uninterruptible power supply for its servers. The CA3BGF would be capable of generating sufficient electricity to serve the data center building that makes up the CA3DC. Eight of the 40 data center generators would be redundant, yielding the applicant's goal of a 99.999 percent reliability factor. The remaining four emergency backup generators are house generators (two of which are redundant) that would support portions of the CA3 administration building and features necessary for emergency response. The CA3BGF would only be operated for maintenance and testing and during emergency utility power outages. The maximum electrical load of the data center would be 96 MW.

The data center building would have two main components. The first would be the data center suites that house client servers. The second would be administrative facilities, including support facilities such as the building lobby, restrooms, conference rooms, landlord office space, customer office space, loading dock, and storage. The data center suite would have four levels, each containing four data center suites and corresponding electrical/uninterruptable power supply rooms.

1.2 Summary of Environmental Impacts and Mitigation Measures

In accordance with Public Resources Code section 25519(c) and CEQA, the CEC serves as the lead agency to review an SPPE application and perform any required environmental analyses. Upon the granting of an exemption, the local permitting authorities—in this case the City of Santa Clara and Bay Area Air Quality Management District (BAAQMD)—would perform any follow-up CEQA analysis and impose mitigation, as necessary, for granting approval of the project.

Below is an overview of the analysis included in **Section 4 Environmental Setting, Environmental Impacts and Mitigation**. Impacts are categorized by type as follows:

- No Impact. The scenario in which no adverse physical changes to (or impacts on) the environment would be expected.
- Less Than Significant Impact. An impact that would not exceed the defined significance criteria or would be eliminated or reduced to a less than significant level through the implementation of mitigation measures or compliance with existing federal, state, and local laws and regulations.
- Less Than Significant with Mitigation Incorporated. An impact that would be reduced to a less than significant level through the implementation of the identified mitigation measure.
- Significant and Unavoidable Impact. An adverse effect that meets the significance criteria but appears to have no feasible mitigation that would reduce the impact to a less than significant level. In some cases, mitigation may be available to lessen a given impact, but the residual effects of that impact would continue to be significant even after the implementation of the mitigation measure.

Staff concludes that with the implementation of the following mitigation measures, potentially significant impacts identified in this EIR would be avoided or reduced to less than significant levels. Staff concluded that impacts in the areas of Air Quality (including Public Health), Biological Resources, Cultural and Tribal Cultural Resources, Geology and Soils (paleontology), Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation would be potentially significant, but, with mitigation measures, would be reduced to less than significant. The areas of Aesthetics, Energy and Energy Resources, Hydrology and Water Quality, Land Use, and Utilities and Service Systems would have less than significant impacts from the project. The areas of Agriculture and Forestry Resources, Mineral Resources, and Wildfire would have no impact from the project. The mitigation measures would be enforced by the appropriate responsible agency under CEQA, which includes the City of Santa Clara. The following summarizes the potential impacts and mitigation as required. The changes to the mitigation measures clarify, amplify, and make insignificant modifications to the mitigation measures as presented in the DEIR. The changes do not alter the analyses or the conclusions reached.

Air Quality. *Less Than Significant with Mitigation Incorporated*. The project would not conflict with or obstruct the implementation of the applicable air quality plan. The project would not expose sensitive receptors to substantial pollutant concentrations. The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. The mitigation measure **AQ-1** would reduce air quality impacts during project construction. This measure requires the incorporation of BAAQMD's best management practices to control fugitive dust. This measure also incorporates exhaust control measures to reduce emissions from construction equipment. The project owner would fully offset the oxides of nitrogen (NOx [as an ozone precursor]) emissions of the emergency backup generators from readiness testing and maintenance during the permitting process with BAAQMD. With the implementation of **AQ-1** during construction and the procurement of NOx offsets for readiness testing and maintenance through BAAQMD's permitting requirements, the project would not cause a cumulatively considerable net increase of any air pollutant, and impacts would be reduced to less than significant.

AQ-1: To ensure that fugitive dust impacts are less than significant, the project will implement BAAQMD-recommended Best Management Practices (BMPs) during the construction phase. The project owner also shall implement a construction emissions control plan that has been reviewed and approved by the Director or Director's designee of the City of Santa Clara Community Development Department~~Planning Division~~ prior to the issuance of any grading or building permits, whichever occurs earliest. These BMPs are incorporated into the design of the project and will require the project owner to do or ensure the following:

- Water all exposed areas (e.g., parking areas, graded areas, unpaved access roads) twice a day.
- Maintain a minimum soil moisture of 12% in exposed areas by maintaining proper watering frequency.
- Cover all haul trucks carrying sand, soil, or other loose material.
- Suspend excavation, grading, and/or demolition activities when average wind speed exceeds 20 miles per hour.
- Pave all roadways, driveways, and sidewalks as soon as possible. Lay building pads as soon as grading is completed, unless seeding or soil binders are used.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction with a maximum 50 percent air porosity.
- Use a power vacuum to sweep and remove any mud or dirt-track next to public streets, if visible soil material is carried onto the streets.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

- Minimize idling time for all engines by shutting engines when not in use or limiting idling time to a maximum of five minutes. Provide clear signage for construction workers at all access points.
- Properly tune and maintain construction equipment in accordance with manufacturer's specifications. Check all equipment against a certified visible emissions calculator.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency and the on-site job superintendent regarding dust complaints.
- Install vegetative ground cover in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Limit simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install water washers to wash all trucks and equipment prior to leaving site.
- Treat site access to 100 feet from the paved road with a 6- to 12-inch compacted layer of wood chip, mulch, or gravel.
- Install sandbag or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize idling time of diesel-powered construction vehicles to two minutes.
- ~~Develop a plan demonstrating that off-road equipment (more than 50 horsepower) used for construction would comply with Tier 4 emission limits.~~
- 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.
- Use low volatile organic compound (i.e., reactive organic compounds) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- All construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of oxides of nitrogen and particulate matter.
- All contractors use equipment that meets the California Air Resources Board's most recent certification standard for off-road, heavy-duty diesel engines.

Biological Resources. *Less Than Significant with Mitigation Incorporated*. The project would not adversely affect any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS), with

mitigation incorporated. Staff proposes mitigation measures **BIO-1**, which requires nesting bird pre-construction surveys and the implementation of appropriate nest buffers, and **BIO-2**, which requires conducting bat clearance surveys prior to the demolition of the existing buildings or removal of trees and to develop a Bat Mitigation and Monitoring Plan , which details exclusion methods, roost removal procedures, and compensatory mitigation methods for permanent impacts for roost removal.

The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local plans, policies, and regulations or by the CDFW or USFWS. The project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filing, hydrological interruption, or other means. The project would not interfere with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

With mitigation, the project would not conflict with tree preservation policies or ordinances or tree replacement policies. To avoid conflict with city of Santa Clara General Plan (General Plan) policies regarding tree removal and protection of trees, staff proposes mitigation measures **BIO-3**, which provides detailed requirements for the replacement of trees removed as part of the project, and **BIO-4**, which requires the implementation of tree protection measures to avoid and minimize impacts to trees to remain on site.

The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The implementation of mitigation measures **BIO-1** through **BIO-4** would ensure all impacts are reduced to less than significant.

BIO-1: If possible, demolition and construction activities, including the removal of trees and vegetation clearing, shall take place between September and January. If demolition or construction activities, including the removal of the trees on the site, would take place between January and September, a pre-construction survey for nesting raptors and other protected native or migratory birds shall be conducted by a qualified ornithologist, approved by the city of Santa Clara, to identify active nests that may be disturbed during project implementation. Pre-construction surveys shall be conducted no more than 14 days prior to the initiation of demolition or construction activities or tree relocation or removal. Surveys shall be repeated if project activities are suspended or delayed for more than 14 days during the nesting season. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area to be disturbed by these activities, and the ornithologist shall, in consultation with CDFW, designate a construction-free buffer zone (typically 250 feet for non-raptors to 500 feet for raptors) around the nest until the end of the nesting activity. Any changes to a buffer zone must be approved by the city of Santa Clara, in consultation with CDFW. The nests and buffers will be field

checked weekly by the approved ornithologist. The approved buffer zone will be marked in the field with exclusion fencing, within which no construction, tree removal, or vegetation clearing shall commence until the ornithologist verifies that the nest(s) are no longer active. If an active bird nest is discovered during demolition or construction, then a buffer zone shall be established under the guidelines specified.

- The applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the city of Santa Clara's Director of Community Development prior to the issuance of permits for ~~a~~ tree removal, demolition, or grading. ~~permit by the city arborist.~~ The report(s) shall contain maps showing the location of all nests, species nesting, status of the nest (e.g., incubation of eggs, feeding of young, near fledging), and the buffer size around each nest (including reasoning behind any alterations to the initial buffer size). The report shall be provided within 10 days of completing a pre-construction nest survey.

BIO-2: If suitable roosting habitat for special-status bats will be affected by project construction (e.g., removal of buildings, removal of trees), a qualified wildlife biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning tree removal and/or demolition ground disturbance. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat, etc.). Visual surveys shall include trees within 0.25 mile of construction activities. The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.

- If evidence of bat use is observed, the number and species of bats using the roost shall be determined. Bat detectors may be used to supplement survey efforts.
- If roosts are determined to be present and must be removed, the bats shall be excluded from the roosting site before the tree or structure is removed. Exclusion methods may include the use of one-way doors at roost entrances (bats may leave, but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).
- If roosts cannot be avoided or it is determined that construction activities may cause roost abandonment, such activities shall not commence until permanent, elevated bat houses have been installed outside of, but near, the construction area. Placement and height will be determined by a qualified wildlife biologist, but the height of the bat house shall be at least 15 feet. Bat houses shall be multi-chambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required shall be dependent upon the size and number of colonies found, but at least one bat house shall be installed for each pair of bats (if occurring individually) or of a sufficient number to accommodate each colony of bats to be relocated.

- If bat roosts are detected, then a Bat Mitigation and Monitoring Plan shall be prepared and implemented to mitigate for the loss of roosting habitat. The Bat Mitigation and Monitoring Plan shall include information pertaining to the species of bat and location of the roost, exclusion methods and roost removal procedures, compensatory mitigation for permanent impacts (including specific mitigation ratios and location of proposed mitigation as described in above bullet) and monitoring to assess bat use of mitigation areas. This Plan shall be submitted to CDFW for review.

BIO-3: The project applicant shall obtain approval by the City's Department of Community Development ~~the appropriate tree removal permits from the city of Santa Clara~~ for all ~~the~~ ~~removal of~~ trees to be removed.~~all healthy mature trees.~~ The acquisition of this permit shall include details of the final mitigation numbers. The Ceity of Santa Clara's Tree Ordinance (SCCC 12.35.090(C)(7)~~landscape ordinance~~ mandates~~ a 2:1~~ replacement ~~with 24-inch box size trees or 1.5:1 replacement~~ ratio and size of tree species for planting.~~ with 36-inch box size trees.~~ Depending on the species and size of the tree, additional mitigation may be required by the city of Santa Clara. The project proposes to mitigate for the loss of 66 trees through a combination of 24-inch box size and 36-inch box size.

BIO-4: The project applicant shall follow the tree protection measures for trees that are to remain in place, as included as specific conditions by the city of Santa Clara as part of Architectural Review approval and included on the approved landscape plans for the project.

Cultural and Tribal Cultural Resources. *Less Than Significant with Mitigation Incorporated*. The project would not impact any known resources that could meet CEQA's criteria for historical resources, unique archaeological resources, or tribal cultural resources. However, previous cultural resources studies in the project area indicate that buried archaeological or ethnographic resources could be encountered during ground disturbing activities at the site. Staff recommends two mitigation measures, **CUL-1** and **CUL-2**, to address the discovery of previously unknown buried cultural resources, including human remains. **CUL-1** proposes to require monitoring by both a qualified archaeological resources specialist and a Native American monitor and implement a Workforce Environmental Awareness Program. **CUL-2** proposes measures to be taken in the event human remains are discovered during ground disturbance. With the implementation of these mitigation measures, potential impacts on cultural and tribal cultural resources would be reduced to a less than significant level. Consultation between the Tamien Nation (a California Native American tribe) and CEC is ongoing. This consultation might result in changes to the Cultural and Tribal Cultural Resources section of the EIR, as well as the mitigation measures, for the final EIR. At present, the identification of new impacts or mitigation measures does not appear likely.

[1] **CUL-1:** The following project-specific measures would be implemented during construction to avoid significant impacts to unknown subsurface cultural resources:

- A Secretary of the Interior-qualified archaeologist and a Native American cultural resources monitor shall be on site to monitor all ground-disturbing activity, including the removal of foundations and landscaping, on the project site. The project applicant shall submit the name and qualifications of the selected archaeologist and Native American monitor, along with a signed letter of commitment or agreement to monitor, to the City's Director of Community Development prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given to Native Americans with:

    - Aboriginal, culturally affiliated ties to the area being monitored.
    - Knowledge of local historic and prehistoric Native American village sites.
    - Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
    - Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
    - Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
    - Ability to travel to project sites within traditional tribal territory.
    - Knowledge and understanding of Title 14, California Code of Regulations, Section 15064.5.
    - Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding of CEQA mitigation provisions.
    - Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.
    - Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

After the removal of pavement and prior to grading, the archaeologist shall conduct a pedestrian survey over the exposed soils to determine if any surface archaeological manifestations are present.

- After the demolition of the existing building and paved parking lot on the site, a qualified archaeologist with a Native American monitor present shall complete mechanical presence/absence testing for archaeological deposits and cultural materials. In the event any prehistoric site indicators are discovered, additional backhoe testing will be conducted to map the aerial extent and depth below the

1 Mitigation Measures CUL-1 and CUL-2, while included in the Cultural and Tribal Resources Section of the Draft EIR, were both inadvertently left out of the DEIR Summary section.

surface of the deposits. In the event prehistoric or historic archaeological deposits are found during presence/absence testing, the significance of the find will be determined. If deemed significant, a treatment plan will be prepared and provided to the city's Director of Community Development. Where Native American cultural materials are identified, the archaeological monitor will prepare a treatment plan in collaboration with the monitoring California Native American tribe. The key elements of a treatment plan shall include the following:

- Identify the scope of work and range of subsurface effects (include location map and development plan),
- Describe the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found),
- Develop research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information),
- Detail the field strategy used to record, recover, or avoid the finds (photos, drawings, written records, provenience data maps, soil profiles, excavation techniques, standard archaeological methods) and address research goals.
- Analytical methods (radiocarbon dating, obsidian studies, bone studies, historic artifacts studies [list categories and methods], packaging methods for artifacts, etc.); the monitoring California Native American tribe shall determine the appropriateness of analytical methods proposed for Native American cultural materials,
- Report structure, including a technical and layperson's report and an outline of document contents in one year of completion of development (provide a draft for review before a final report),
- Disposition of the artifacts (the monitoring California Native American tribe will determine the disposition of California Native American cultural materials),
- Appendices: site records, update site records, correspondence, consultation with Native Americans, etc.

The archaeologist and California Native American monitor will monitor full-time all grading and ground disturbing activities associated with the construction of the proposed project. If the archaeologist and Native American monitor believe that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the city's Director of Community Development. Department of Recreation 523 forms shall be submitted along with the report for any cultural resources encountered over 50 years old.

- If prehistoric or historic resources are encountered during on-site construction activities, all activity within a 50-foot radius of the find shall be stopped, the city's Director of Community Development shall be notified, and a Secretary of the Interior-qualified archaeologist shall examine the find and record the site, including field notes, measurements, and photography for a Department of Parks and Recreation 523

Primary Record form. The archaeologist shall make a recommendation in collaboration with the monitoring California Native American tribe regarding eligibility for the California Register of Historical Resources, data recovery, curation, or other appropriate mitigation. Ground-disturbance within the 50-foot radius can resume once these steps are taken and the city's Director of Community Development has concurred with the recommendations. Within 30 days of the completion of the construction or cultural resources monitoring, whichever comes first, a report of findings documenting any cultural resource finds, recommendations, data recovery efforts, and other pertinent information gleaned during cultural resources monitoring shall then be submitted to the city's Director of Community Development under confidential cover, along with a report that redacts the location(s) of all cultural resources. Once finalized, this report shall be submitted to the Northwest Information Center at Sonoma State University.

- Prior to and for the duration of ground-disturbance, the project owner shall provide Worker Environmental Awareness Program training to all existing and any new employees. This training should include: a discussion of the applicable laws and penalties under the laws; samples or visual aids of the artifacts that could be encountered in the project vicinity, including what those artifacts may look like partially buried, or wholly buried and freshly exposed; and instructions to halt work in the vicinity of any potential cultural resource discovery, and notify the city-approved archaeologist and Native American cultural resources monitor. The Native American monitor shall provide a Tribal Cultural Resources Sensitivity Training in conjunction with the Worker Environmental Awareness Program.

CUL-2: The project proposes to implement the following measure to ensure the project's impacts to human remains are less than significant:

- If human remains are discovered during the presence/absence testing or excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall determine whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the coroner will notify the NAHC immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with the California Code of Regulations, Title 14, section 15064.5(e) of the CEQA Guidelines. All actions taken under this mitigation measure shall comply with the Health and Safety Code, section 7050.5(b).

Geology and Soils (paleontology). *Less Than Significant with Mitigation Incorporated*. Construction would temporarily increase sedimentation and erosion by exposing soils to wind and runoff until construction is complete and new vegetation is established. The city's National Pollutant Discharge Elimination System Municipal Permit, urban runoff policies, and the City Code are the primary means of enforcing erosion control measures

through the grading and building permit process. In accordance with General Plan policies, the implementation of the regulatory programs and policies in place would reduce possible impacts of accelerated erosion during construction to a less than significant level. The continuous operation and maintenance work would not result in increased erosion or topsoil loss. The probability that the construction, operation, or maintenance of the proposed project would have an impact on the risk of loss, injury, or death involving the rupture of an earthquake fault during operation is remote. As the project site is relatively flat with no open faces or slopes near the site, there is a low potential for landslides.

A project-specific geotechnical engineering report, along with the final project design, would be required to address, as needed, any potential issues arising from expansive soils, liquefaction, unstable geologic, or soil units that could result from the construction of this project. With the implementation of applicable design criteria per the California Building Standards Code, as well as the incorporation of the anticipated project-specific mitigation recommendations in the final geotechnical engineering report, seismic hazards would be minimized, to the extent feasible with conformance to the applicable seismic design criteria of the California Building Standards Code. Also, adherence to these standards would ensure the project, which is on expansive soil, would ensure that impacts from expansive soils would be less than significant. Earth moving during project construction has the potential to disturb paleontological resources. Staff proposes mitigation measure **GEO-1** to ensure the project design conforms to the requirements of a final geotechnical engineering investigation and California and local building standards and codes. Staff proposes mitigation measure **GEO-2** to train field staff in the identification and handling of paleontological resources. Staff concludes that with the implementation of **GEO-1** and **GEO-2**, that impacts of any geologic hazards and the impacts to unique paleontological resources would be reduced be to a less than significant levels.

GEO-1: To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Building redevelopment design and construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The report shall be reviewed and approved by the City of Santa Clara's Building Division as part of the building permit review and issuance process. The building shall meet the requirements of applicable Building and Fire Codes, including the 2019 California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site, and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

GEO-2: Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in teaching non-specialists, to ensure they can

recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.

- If a fossil is found and determined by the qualified paleontologist to be significant and avoidance is not feasible, the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. Construction work in these areas shall be halted or diverted to allow the recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall then be deposited in a scientific institution with paleontological collections. A final Paleontological Mitigation Plan Report shall be prepared that outlines the results of the mitigation program. The city's Director of Planning and Inspection shall be responsible for ensuring that the paleontologist's recommendations regarding treatment and reporting are implemented.

Greenhouse Gas Emissions. *Less Than Significant with Mitigation Incorporated*. The greenhouse gas (GHG) emissions for the annual readiness testing and maintenance emissions from the facility's stationary sources would not exceed the existing BAAQMD CEQA significance threshold of 10,000 metric tons of carbon dioxide equivalent per year ($MTCO_2e/yr$) for stationary sources. However, BAAQMD is in the process of preparing and presenting to the BAAQMD board for approval an update to the CEQA GHG threshold for stationary sources to 2,000 $MTCO_2e/yr$ or compliance with the California Air Resources Board's cap-and-trade program. Therefore, staff proposes mitigation measure **GHG-1** to require the applicant to limit the GHG emissions of the emergency backup generators to whichever BAAQMD CEQA GHG threshold is effective at the time of permitting. To further reduce GHG emissions, staff proposes mitigation measure **GHG-2** to require the applicant to use an increasing mix of renewable diesel and phase out the use of conventional petroleum diesel. Staff concludes with the implementation of **GHG-1** and **GHG-2**, the project's GHG emissions from the emergency backup generators would not have a significant direct or indirect impact on the environment.

The city of Santa Clara Climate Action Plan is a Qualified Climate Action Plan under CEQA. Pursuant to California Code of Regulations, title 14, section 15183.5, the CEC may rely on the compliance with the Qualified Climate Action Plan in its analysis of GHG emissions impacts. With the implementation of **GHG-2** and **GHG-3**, the project would comply with the requirements of the city's Climate Action Plan and other plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. **GHG-2** requires the project to use an increasing mix of renewable diesel to ensure that the operation of the emergency backup generators would not hinder California's efforts to achieve statewide 2030 or 2045 GHG emissions reduction goals. **GHG-3** requires the applicant to participate in SVP's Large Customer Renewable Energy (LCRE) program or other renewable energy program that accomplishes the same objective as Silicon Valley Power's (SVP) LCRE

Program for 100 percent carbon-free electricity or purchase ~~carbon offsets~~ renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. The project's likelihood of operating for non-testing/non-maintenance (emergency) purposes is low and, if such operation did occur, it would be infrequent and of short duration. Staff concludes that these emissions would be less than significant.

With the implementation of **GHG-1**, **GHG-2**, **GHG-3**, and the efficiency measures to be incorporated into the project, GHG emissions related to the project would not conflict with the BAAQMD CEQA significance threshold, the city's Climate Action Plan, or other plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. Because the project would be consistent with applicable plans and policies adopted to reduce GHG emissions and would comply with all regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions, the potential for the project to conflict with an applicable plan, policy, or regulation for GHG reductions would be less than significant. With the implementation of **GHG-1**, **GHG-2**, and **GHG-3**, impacts related to GHG emissions would be reduced to less than significant.

GHG-1: If the Bay Area Air Quality Management District (BAAQMD has adopted a new threshold of significance for stationary sources on or before CA3 receives its Authority to Construct permit, the project shall reduce the time the engines operate for readiness testing and maintenance on an annual basis to ensure the project complies with the new limit. Prior to the start of operation, the project owner shall provide a report to the director, or director's designee, of the city of Santa Clara Community Development Department ~~Planning Division~~ describing how the project intends to comply with the limit, including a proposed schedule of readiness testing and maintenance operations for the year. The project owner shall provide an annual report thereafter to the Director, or Director's designee, of the city of Santa Clara Planning Division describing all operations of the facility that occurred for readiness testing and maintenance and calculating the attendant GHG emissions that resulted for the year.

GHG-2: The project owner shall use renewable diesel as the primary fuel for the emergency backup generators to the maximum extent feasible, and only use ultra-low sulfur diesel (ULSD) as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. If testing confirms that use of this fuel will not result in emissions that would cause the project to exceed applicable thresholds after any available mitigation for such emissions has been applied, the project owner shall ensure that renewable fuels are used for a minimum of at least 44 percent of total energy use by the emergency backup generators by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030. Renewable fuels shall be used for 100 percent of total energy use by the emergency backup generators by December 31, 2045. The project owner shall provide an annual report of the status of procuring and using renewable diesel to the director, or director's designee, of the city of Santa Clara Electric Utility Department ~~Planning Division~~ demonstrating compliance with the mitigation measure.

GHG-3: The project owner shall ensure that 100 percent of the electricity purchased to power the project is covered by carbon-free resources using one of the following options: (1) participate in SVP's ~~L~~LCRE program or other renewable energy program that accomplishes the same objective as SVP's LCRE Program for 100 percent carbon-free electricity, or (2) purchase ~~carbon offsets~~ renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. The project owner shall provide documentation to the director, or director's designee, of the city of Santa Clara Electric Utility Department ~~Planning Division~~ of enrollment and annual reporting of continued participation in SVP's LCRE program with 100 percent carbon-free electricity coverage. If not enrolled in SVP's LCRE Program, the project owner shall provide documentation and annual reporting to the director, or director's designee, of the city of Santa Clara Electric Utility Department ~~Planning Division~~ that confirms that alternative measures achieve the same 100 percent carbon free electricity as SVP's LCRE program, with verification by a qualified third-party auditor specializing in greenhouse gas emissions.

Hazards and Hazardous Materials. *Less Than Significant with Mitigation Incorporated*. During the construction phase of the project, the only hazardous materials used would be paints, cleaners, solvents, gasoline, motor oil, welding gases, and lubricants. When not in use, any hazardous material would be stored in designated construction staging areas in compliance with local, state, and federal requirements. Any impacts resulting from spills or other accidental releases of these materials would be limited to the site due to the small quantities involved and their infrequent use. The transportation of the diesel fuel to the site would take a few tanker-truck trips for the initial fill and, during operation, one fuel truck delivery would occur every three months. Diesel fuel has a long history of being routinely transported and used as a common motor fuel. The risk to the off-site public or environment through the routine transport, use or disposal of hazardous materials would have a less than significant impact.

Hazardous materials would be stored, handled, and used in accordance with applicable regulations. Personnel would be required to follow instructions on health and safety precautions and procedures to follow in the event of a release of hazardous materials. All equipment and materials storage would be routinely inspected for leaks. Records would be maintained for documenting compliance with the storage and handling of hazardous materials. In addition, there would be engineering controls for the diesel, such as a double walled tank for the diesel fuel and leak detection gas, that would mitigate the risk of a spill or release. The risk to the off-site public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would have a less than significant impact.

Ground disturbing activities associated with the grading and construction of the project would have the potential to encounter the impacted groundwater and/or soil. Staff proposes mitigation measure **HAZ-1** requiring the preparation of a SMP to establish

proper procedures to be taken when contaminated soil is found and how to dispose of the contaminated soil properly. Staff concludes that with the implementation of **HAZ-1,** impacts to the public or the environment due to contaminated soils would be reduced to a less than significant level.

HAZ-1: The project will implement the following measures to reduce potentially significant soil and or groundwater impacts to construction workers to a less than significant level.

- Prior to the issuance of grading permits, shallow soil samples shall be taken in areas where soil disturbance is anticipated to determine if contaminated soils with concentrations above established construction/trench worker thresholds may be present due to historical agricultural use and from historical leaks and spills. The soil sampling plan must be reviewed and approved by the Santa Clara Fire Department Fire Prevention and Hazardous Materials Division prior to the initiation of work. Once the soil sampling analysis is complete, a report of the findings will be provided to the Santa Clara Fire Department Fire Prevention and Hazardous Materials Division and other applicable City staff for review.
- Documentation of the results of the soil sampling shall be submitted to and reviewed by the City of Santa Clara prior to the issuance of a grading permit. Any soil with concentrations above applicable Environmental Screening Levels or hazardous waste limits would be characterized, removed, and disposed of off-site at an appropriate landfill according to all state and federal requirements.
- A Site Management Plan (SMP) will be prepared to establish management practices for handling impacted groundwater and/or soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP will include:
    - a detailed discussion of the site background.
    - a summary of the analytical results.
    - preparation of a Health and Safety Plan by an industrial hygienist.
    - protocols for conducting earthwork activities in areas where impacted soil and/or groundwater are present or suspected.
    - worker training requirements, health and safety measures and soil handing procedures shall be described.
    - protocols shall be prepared to characterize/profile soil suspected of being contaminated so that appropriate mitigation, disposal, or reuse alternatives, if necessary, can be implemented.
    - notification procedures if previously undiscovered significantly impacted soil or groundwater is encountered during construction.

- notification procedures if previously unidentified hazardous materials, hazardous waste, underground storage tanks are encountered during construction.
- on-site soil reuse guidelines.
- Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility.
- soil stockpiling protocols; and
- protocols to manage groundwater that may be encountered during trenching and/or subsurface excavation activities. Prior to issuance of grading permits, a copy of the SMP must be approved by the Santa Clara County Environmental Health Department, and the Santa Clara Fire Department Fire Prevention and Hazardous Materials Division. Prior to issuance of grading permits, a copy of the SMP must be approved by the Santa Clara County Environmental Health Department, and the Gilroy Planning Division

- If contaminated soils are found in concentrations above risk-based thresholds pursuant to the terms of the SMP, remedial actions and/or mitigation measures will be taken to reduce concentrations of contaminants to levels deemed appropriate by the selected regulatory oversight agency for ongoing site uses. Any contaminated soils found in concentrations above thresholds to be determined in coordination with regulatory agencies shall be either 1) managed or treated in place, if deemed appropriate by the oversight agency or 2) removed and disposed of at an appropriate disposal facility according to California Hazardous Waste Regulations and applicable local, state, and federal laws.

Noise. *Less Than Significant with Mitigation Incorporated*. The area surrounding the project site consists of Light Industrial land uses to the north, east, and west. Approximately 150-200 feet to the south-southwest, the Caltrain corridor separates the project site from medium-density residential development. The nearest airport is Norman Y. Mineta San Jose International Airport approximately 1.75 miles east of the project site.

Sources of groundborne vibration associated with project operation would include the backup generators and rooftop equipment. These pieces of equipment would be well-balanced as they are designed to produce very low vibration levels throughout the life of a project. In most cases, even when there is an imbalance, they could contribute to ground vibration levels only in the vicinity of the equipment and would be dampened within a short distance. Furthermore, the backup generators would be equipped with specifications that ensure sufficient exhaust silencing to reduce vibration. Therefore, vibration impacts due to project operation would be less than significant. The predominant long-term ambient noise sources are nearby and distant traffic, and by cooling and mechanical noise from various facilities. Additionally, noise events that interrupt the ambient noise are caused by trains and loud vehicles occasionally passing by.

Temporary construction activities at the project site may significantly increase the existing ambient noise levels at the residential area immediately south of the project site (depending on the activity occurring and equipment being used at the time). However, with the implementation of the proposed mitigation measure **NOI-1**, noise impacts would be reduced during construction to less than significant. Likewise, with the implementation of **NOI-1**, the project's contribution to cumulative noise impacts during project construction would not be cumulatively considerable.

NOI-1: The project shall implement the following measures to reduce temporary construction noise to less than significant levels.

- Construction is not permitted during the hours of 6 p.m. to 7 a.m. Monday through Friday~~,~~ ~~and~~ between 6 p.m. to 9 a.m. on Saturday, and prohibited on Sundays and holidays.
- Prior to the start of construction, identify a noise control disturbance coordinator. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint received (e.g., starting too early, bad muffler, etc.) and shall ensure that reasonable measures warranted to correct the problem are implemented as soon as possible.
- Prior to the start of construction, establish a telephone number for the disturbance coordinator, and post it in a conspicuous location on the construction site.
- Prior to the start of construction, notify, in writing, the residents within 800 feet from the center of the project to the south across the rail line and industrial buildings to the north, east, and west of the project site of the construction schedule, ~~in writing,~~ and provide a written schedule of "noisy" construction activities to the adjacent land uses.
- Include the telephone number for the disturbance coordinator construction site in the above notice regarding the construction schedule sent to residences south across the rail line and industrial buildings to the north, east, and west of the project site.
- The project owner shall orient construction equipment and locate construction staging areas within the project site away from the nearest residences to the south, to the extent feasible.
- Equip all construction-related internal combustion engine-driven equipment with the best available noise control equipment (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) and use best noise control practices to minimize noise levels from construction activities.

Transportation. *Less Than Significant with Mitigation Incorporated*. Project construction would not significantly obstruct any transit, roadway, bicycle, or pedestrian facilities in the area. Construction activities would occur mostly onsite and not in the public right-of-way, except for an extension to an existing recycled water line from the intersection of

Walsh Avenue and Northwestern Parkway (approximately 500 feet east of the project site) to the site for secondary water needs. While this construction would require temporary lane blockages/closures on Walsh Avenue during daytime hours, it would not interfere with a designated bike lane or transit route, as none exist on the affected portion of Walsh Avenue. Furthermore, Walsh Avenue has four travel lanes. The temporary construction associated with connecting the project site to the existing buried recycled water line is not anticipated to disrupt more than one travel lane at a time. This would ensure at least one travel lane remains open in each direction. Project construction would not otherwise temporarily or permanently alter any public roadways or intersections.

The project would not result in hazards to aircraft from either a geometric design feature, such as structure height, or incompatible uses, including land uses or thermal plumes. The project would not increase any other hazards.

The City of Santa Clara Fire Department reviewed the project and recommended several access and internal circulation changes to ensure proper turning radius and movement of emergency vehicles would occur. These changes include:

- Expanding the width and apron radius at the existing entrance on Walsh Avenue (west side);
- Creating a new entrance on Walsh Avenue at the east side to allow for circular movement of vehicles through the project site; and
- Expanding the width of internal access roads and adjusting the location of the proposed substation to ensure the turning radius requested by the Fire Department is provided at all four corners of the proposed building.

With the incorporation of these changes into the project design, all requests by the City of Santa Clara Fire Department have been met to ensure proper access and movement of emergency service vehicles throughout the project site. Lastly, the City of Santa Clara, as the permitting agency, would ensure the project is consistent with building and zoning code requirements ensuring adequate emergency access. Therefore, the impact would be less than significant.

The project would not physically block any access roads or result in traffic congestion that could significantly compromise timely access to this facility or other facilities located within the project vicinity during construction and operation.

To meet the target vehicle miles travelled (VMT) for the project, the applicant has agreed to an alternative work schedule for employees reflecting a 4-40 workweek (40 hours in 4 days) so that the project VMT would be below the city's threshold. This is a Transportation Demand Management (TDM) measure, which is the commitment to a 4-40 work schedule. Staff evaluated the measure in the context of impacts to VMT and concludes that the requirement defined in this TDM measure is sufficient. This TDM measure would reduce the project VMT to 13.20 per employee, causing the project VMT to fall below the city-

approved threshold of 14.14. The city requires a TDM annual report, which would allow it to obtain confirmation that the 4-day, 40-hour work schedule has been complied with. Staff proposes mitigation measure **TRANS-1**, which would require the implementation of a TDM program that incorporates the 4-40 work schedule TMD measure.

TRANS-1: The project shall implement a TDM program sufficient to demonstrate that the VMT associated with the project would be reduced to 14.14 or less per employee. The TDM program shall include, but is not limited to, the following measure, which has been determined to be a feasible method for achieving the required VMT reduction:

- The operations workforce at the project shall work a 4-40 work schedule (40 hours in 4 days).

Prior to the issuance of an occupancy permit, the TDM program shall be submitted and approved by the Director of Community Development and shall be monitored annually to gauge its effectiveness in meeting the required VMT reduction. The TDM program shall establish an appropriate estimate of initial vehicle trips generated by the occupant of the proposed project and shall include the conducting of driveway traffic counts annually to measure peak-hour entering and exiting vehicle volumes. The volumes shall be compared to trip thresholds established in the TDM program to determine whether the required reduction in vehicle trips is being met. The results of annual vehicle counts shall be reported in writing to the Director of Community Development.

If TDM program monitoring results show that the trip reduction targets are not being met, the TDM program shall be updated to identify replacement and/or additional feasible TDM measures to be implemented. The updated TDM program shall be subject to the same approvals and monitoring requirements listed above.

Summary

The CEC determines whether the project qualifies for an SPPE and if the project is granted the exemption, the project would seek permits from the local responsible agencies.

1.3 Summary of Alternatives to the Project

CEQA requires that an EIR identify alternatives to the project as proposed and evaluate their comparative merits. CEQA Guidelines section 15126.6 states that an EIR must describe a "reasonable range of potentially feasible alternatives," focusing on those that "would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant environmental effects of the project." Based on the requirements of CEQA and the summary of environmental impacts presented above, this EIR describes and analyzes three alternatives to the proposed project, including the "No Project" alternative, which is required to be analyzed even though it does not meet the project objectives. A summary of the project alternatives follows. A full analysis of project alternatives is provided in **Section 5 Alternatives**, along with a description of other alternatives considered but not carried forward for full analysis.

1.3.1 Alternative 1: No Project Alternative

Staff evaluated a "No Project" scenario in which no development of the project would occur and current conditions would continue at the site for an unknown period. Although a different project would likely be proposed at the site in the future, no development plan exists to allow a comparison with the proposed project, and it would be speculative to assume the characteristics of such an alternative. Alternative 1 would avoid the proposed project's potentially significant impacts identified in this EIR and would have no impact compared to the proposed project; therefore, it would be *environmentally superior* to the project. However, if the project is not constructed, the applicant's project objectives would not be attained.

1.3.2 Alternative 2: Renewable Diesel Fuel

Staff also evaluated a renewable diesel fuel alternative. Renewable diesel is not a fossil fuel and is made of nonpetroleum renewable resources (vegetable oil or other biomass feedstock, such as wood, agricultural waste, garbage, etc.). Renewable diesel is a cleaner burning fuel alternative to conventional diesel that would be expected to meet the project objectives as a source of fuel for the emergency backup generators. Under this alternative, the project would be developed the same as proposed, except it would use renewable diesel as the fuel source for the emergency backup generators. There would be no changes to the number, size, or placement of the emergency backup generators.

Air quality and public health impacts using renewable diesel during project operations would *likely be similar* to those that would occur with the project. However, this conclusion would need to be confirmed by testing emissions under controlled conditions for the size of engines proposed for the project. Also, while the project would meet BAAQMD GHG thresholds for the readiness testing and maintenance of the diesel emergency backup generators with the implementation of mitigation measure **GHG-1**, GHG emissions could be reduced further by using renewable diesel in place of petroleum-based diesel. The impact from GHG emissions is *likely less* under this alternative. Staff considers Alternative 2 to be *somewhat environmentally superior* to the proposed project, although further study and analysis would be needed to fully compare this alternative to the proposed project.

In the foreseeable future, as more renewable diesel suppliers come online and the supply becomes more plentiful, the project should incorporate renewable diesel in increasing amounts as the primary source of fuel. Due to supply issues and cost, reliance on the sole use of renewable diesel fuel could compromise the reliability of the data center. Staff has proposed mitigation measure **GHG-2** to reflect the expected increasing availability of renewable diesel over time. **GHG-2** would require the project owner to use an increasing mix of renewable diesel to the maximum extent feasible, and only use ULSD as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel.

1.3.3 Alternative 3: Natural Gas Internal Combustion Engines

Natural gas internal combustion engines (ICEs) are fueled by natural gas, while the proposed engines for the project would use conventional diesel. The preferred, most feasible method to supply fuel for the natural gas ICEs would be by pipeline through Pacific Gas and Electric's underground natural gas transmission system. The two closest locations for independent natural gas pipeline connections are one adjacent to the project site on Walsh Avenue and one approximately 1.36 miles west of the project site on the Lawrence Expressway[2]. The project's primary pipeline would connect to the nearby gas line on Walsh Avenue. A secondary pipeline connecting to the gas line at Lawrence Avenue would be installed to provide added reliability under this alternative.

Air quality impacts using natural gas ICEs are expected to be *much less* than those that would occur with the proposed project's conventional diesel-fired engines. Public health impacts from toxic air contaminants using natural gas ICEs are *likely less* than those that would occur under the proposed project. Impacts from GHG are also *likely less* under this alternative.

Staff considers Alternative 3 to be *environmentally superior* to the proposed project due to its deep reductions in criteria air pollutants. Redesigning the project with natural gas ICE technology could increase the number of engines on-site depending upon the MW sizing and physical dimensions. As discussed, two gas pipeline connections are available and likely needed to match the fuel supply reliability of the proposed project. Permitting and construction of the new pipelines to these connections would take time to complete.

1.4 Known Areas of Controversy

The CEC issued a Notice of Preparation on August 20, 2021, seeking input from responsible and trustee agencies and the public regarding the scope and context of environmental areas in the EIR. The comment period began August 24, 2021, ending September 22, 2021. Four[3] comment letters were received. Issues of concern reflected in these letters and emails include, but are not limited to, the following:

- Air Quality and Greenhouse Gas Emissions (GHG):
    - Because the project is in an area that has long been disproportionately impacted by air pollution and is identified as a priority community by the State of California as a Senate Bill 535 disadvantaged community, the air district is concerned about the potential for any increase in emissions that could result from the project.
    - Highly recommend the CEC to go beyond regulatory requirements and require the project applicant to adopt the use of cleaner, non-diesel technologies.

[2] Along Walsh Avenue to Lawrence Expressway.

[3] Bay Area Air Quality Management District, dated 9/21/2021; Native American Heritage Commission, dated 9/10/2021; J. Montemayor dated 7/31/2021; Empere, LLC, dated 8/30/2021

- The GHG impact analysis should include an evaluation of the project's consistency with the most recent draft of the AB 32 Scoping Plan by the California Air Resources Board and with the State's 2030, 2045, and 2050 climate goals.
- The EIR should estimate and evaluate the potential health risk to existing and future sensitive populations within and near the project area from toxic air contaminants (TAC) and fine particulate matter (PM2.5) as a result of the project's construction and operation.
- The EIR should include various scenarios of backup power generation operations beyond routine testing and maintenance.
- The EIR should evaluate all feasible measures, both onsite and offsite, to minimize air quality and GHG impacts.
- The EIR should evaluate the Project's consistency with the Air District's 2017 Clean Air Plan (2017 CAP).

- Tribal Cultural Resources:
  - Ensure that the CEC complies with Assembly Bill 52 (includes tribal consultation requirements) in its review of the proposed project. Additional comments and concerns include tribal monitoring during construction, terms and definitions in the DEIR, and the confidential document handling process at the local municipal level.

1.5 Issues to be Resolved

Staff concluded that all potentially significant impacts can be mitigated to a less than significant level. There are no remaining issues to be resolved.

Section 2

Introduction

2 Introduction

2.1 Energy Commission Jurisdiction and the Small Power Plant Exemption Process

The California Energy Commission (CEC) is responsible for reviewing, and ultimately approving or denying, all thermal electric power plants 50 megawatts (MW) and greater proposed for construction in California. CEC has a regulatory process, referred to as the Small Power Plant Exemption (SPPE) process, which allows applicants with projects between 50 and 100 MW to obtain an exemption from the CEC's jurisdiction and proceed with local permitting rather than requiring a CEC license. CEC can grant an exemption if it finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. See **Appendix A** for more information about the project's jurisdictional and generating capacity analysis.

2.2 CEQA Lead Agency

In accordance with Public Resources Code section 25519(c) and the California Environmental Quality Act (CEQA), CEC serves as the lead agency to review an SPPE application and perform any required environmental analyses. Upon granting an exemption, the local permitting authorities—in this case the City of Santa Clara and Bay Area Air Quality Management District (BAAQMD) would undertake any additional review of the project necessary for their permitting processes.

2.3 Purpose of the Environmental Impact Report

The purpose of this document is to provide agency decision makers and the public with objective information regarding the project's significant effects on the environment and energy resources, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. This information will be used by the CEC Commissioners in considering the applicant's request for an SPPE to exempt the project from CEC's power plant licensing jurisdiction. If the CEC ultimately exempts the project from its jurisdiction, the City of Santa Clara and BAAQMD, as well as any other local permitting agency, would use this environmental analysis in their project review process.

2.4 Environmental Process

2.4.1 Notice of Preparation

A Notice of Preparation (NOP) of the EIR was circulated to the public and public agencies from August 24, 2021, to September 22, 2021 (State Clearinghouse #2021080438). The NOP was combined with a request for agency participation, as required by CEC's SPPE regulations (see subsection 2.5.1 below).

2.4.2 Draft EIR

The Draft EIR wasswill be circulated for agency and public review during a 45-day public review period prior to certification of the document by the CEC. This includes submitting the Draft EIR to the State Clearinghouse, sending direct mailing to state and other agencies, sending via direct mailing to libraries, and posting the document to the project's CEC docket.

2.4.3 Final EIR

Substantive comments were received from Andrew Ratermann, the Bay Area Air Quality Management District, and the project applicant, Vantage Data Services on the Draft EIR and were formally addressed in Section 7, Response to Comments.on the Draft EIR will be formally addressed in the Final EIR. Consistent with CEQA Guidelines section 15095, the Final EIR will bewas posted to the project docket and distribute via the list serve.; once certified, will be provided to responsible agencies (City of Santa Clara and BAAQMD).

The decision-making body must certify that it has reviewed and considered the information in the Final EIR and that the EIR has been completed in conformity with the requirements of CEQA. The CEC must consider the information in the EIR and respond to comments submitted during the comment period. If the CEC Commissioners find that the proposed project would create a substantial adverse impact on the environment or energy resources, the SPPE would be denied and the project would be required to go through the Application for Certification permitting process in order to move forward.

If the project is determined as qualifying for an exemption, the project would seek permits from the responsible agencies. Any required mitigation measures would be enforced by the appropriate responsible agency, which includes the City of Santa Clara and BAAQMD.

2.5 CEQA Analysis Format

The environmental analysis of this SPPE application takes the form of an EIR, which is prepared to conform to the requirements of CEQA and the CEQA Guidelines (California Code of Regulations, title 14, section 15000 et. seq.). The EIR is based on information from the applicant's SPPE application and associated submittals, data requests and responses, and additional staff research, including consultation with other agencies, such as responsible and trustee agencies.

2.5.1 Notification and Coordination

The noticing of documents is governed by both CEC's regulations set forth in California Code of Regulations Title 20 and the CEQA Guidelines set forth in Title 14. The specific noticing requirements depend on the document at issue and are described below.

2.5.1.1 Application for Small Power Plant Exemption

The Application for SPPE (Application for Exemption) is filed by the project applicant to initiate the exemption proceeding. As specified in Title 20, section 1936(d), the noticing of the Application for Exemption is set forth in Title 20, sections 1713 and 1714. Section 1713(b) requires that a summary of the Application for Exemption be sent to public libraries in the communities near the proposed site as well as libraries in Eureka, Fresno, Los Angeles, San Diego, and San Francisco, and to any person who requests such mailing. As required by section 1713(c), the summary is to be published in a newspaper of general circulation in the county of the project site. In this case the advertisements ran in the San Jose Mercury News (in English), Daily News (in Vietnamese), World Journal (in Chinese), and El Observador (in Spanish). The relevant mailing lists covering the requirements of section 1713(b) are found in **Appendix D**.

In accordance with section 1714, staff provided notification to stakeholder agencies via an Agency Request for Participation letter. This letter provided information on how to participate in CEC's evaluation and decision-making process to agencies with potential interest in the project, most notably the California Department of Fish and Wildlife, the San Francisco Bay Regional Water Quality Control Board, BAAQMD, and various departments of the City of Santa Clara's local government. The mailing list used to engage with stakeholder agencies can be found in **Appendix D**.

Staff conducted further outreach to and consultation with regional tribal governments as described in **Section 4.5 Cultural and Tribal Cultural Resources**.

In addition to the required noticing set forth in sections 1713 and 1714, staff provided public notice of the Application for Exemption on July 30, 2021, through a Notice of Receipt (NOR). This notice was mailed to property owners and occupants within 1,000 feet of the project site and 500 feet of project linears. The NOR was also mailed to a list of environmental and environmental justice organizations developed in collaboration with the CEC Public Advisor's Office with the goal of reaching groups with potential interest in energy generation projects in the Santa Clara region. The NOR pointed recipients to the CEC's project webpage and included instructions on how to sign up for the project listserv to receive electronic notification of events and the availability of documents related to the SPPE proceeding. The relevant mailing lists staff used for this outreach can be found in **Appendix D**.

2.5.1.2 Notice of Preparation and Public Scoping Meeting

On August 24, 2021, staff issued a Notice of Preparation of an EIR to responsible and trustee agencies, starting a 30-day comment period. A scoping meeting was not required under CEQA Guidelines section 15082(c)(1) and no entity requested one; therefore, no scoping meeting was conducted for the project. During the comment period, staff received comments from the Native American Heritage Commission, the Bay Area Air Quality Management District, and from two individuals.

2.5.1.3 Draft Environmental Impact Report

The process for public notification of the Draft EIR is set forth in CEQA guidelines section 15087 and requires at least one of the following procedures:

(1) Publication at least one time in a newspaper of general circulation in the area affected by the proposed project.

(2) Posting of notice by the lead agency on and off site in the area where the project is to be located.

(3) Direct mailing to the owners and occupants of property contiguous to the parcel or parcels on which the project is located. Owners of such property shall be identified as shown on the latest equalized assessment roll.

Staff exceeded the requirements of section 15087 by additionally mailing notification of the Draft EIR to all owners and occupants not just contiguous to the project site but also to property owners within 1,000 feet of the project site and 500 feet of project linears. The Draft EIR was also filed with the State Clearinghouse.

2.6 Organization of this EIR

This EIR is organized into five sections, as described below:

- Section 1 Summary. This section provides a concise overview of the proposed project and the necessary approvals; the environmental impacts that would result from the proposed project; mitigation measures identified to reduce or eliminate these impacts; project alternatives; and areas of known controversy and issues to be resolved.
- Section 2 Introduction. This section summarizes the proposed project and describes the type, purpose, and function of the EIR; the environmental review process and the comments received on the NOP; and the organization of the EIR.
- Section 3 Project Description. This section presents the location of the site and project boundaries, characteristics of the proposed project, and objectives sought by the proposed project.
- Section 4 Environmental Setting, Impacts, and Mitigation. This section includes the environmental setting; regulatory framework; approach to analysis; project-specific and cumulative impacts; and mitigation measures, when appropriate. Staff evaluates the potential environmental impacts that might reasonably be anticipated to result from the construction and operation of the proposed project. Staff's analysis is broken down into the following environmental resource topics derived from CEQA Appendix G:
  - Aesthetics
  - Agricultural and Forestry Resources
  - Air Quality
  - Land Use and Planning
  - Mineral Resources
  - Noise

- Biological Resources
- Cultural and Tribal Resources
- Energy and Energy Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

In addition, this document includes an analysis of how the project would potentially impact an Environmental Justice[1] population.

For each subject area, the analysis includes a description of the existing conditions and setting related to the subject area, an analysis of the proposed project's potential environmental impacts, and a discussion of mitigation measures, if necessary, to reduce potentially significant impacts to less than significant levels.

- Section 5 Alternatives. This section includes a discussion of a reasonable range of alternatives to the proposed project, or to the location of the project, that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives. This section also includes an evaluation of the no project alternative.
- Section 6. Authors and Reviewers
- Section 7. This section includes staff's responses to comments on the Draft EIR.
- Section 8. Mitigation and Monitoring Reporting Program.

1 An environmental justice population is based on race and ethnicity or low-income status. See **Section 4.21 Environmental Justice** for more information.

Section 3

Project Description

3 Project Description

The applicant, Vantage Data Services, filed an application with the California Energy Commission (CEC) seeking an exemption from the CEC's jurisdiction (Small Power Plant Exemption or SPPE) for the CA3 Backup Generating Facility (CA3BGF) (21-SPPE-01). The CA3BGF would be part of the CA3 Data Center (CA3DC) located in the city of Santa Clara. Both the CA3BGF and the CA3DC components comprise the larger project (CA3).

The proposed project site, located at 2590 Walsh Avenue in Santa Clara, California, encompasses 6.69 acres total. The applicant proposes to construct a four-story, approximately 468,000 square foot data center building; a 100 Megavolt amperes (MVA) electric utility substation using a two-bay design (directly adjacent across the property line from the existing Uranium Substation owned by Silicon Valley Power (SVP)); a switching station, generator equipment yard (CA3BGF); and surface parking. The data center building portion of the project would consist of two main components: the data center suites that house client servers and the administrative facilities, which would include support functions.

CA3 would consist of diesel-fired emergency backup generators (gensets), capable of generating sufficient electricity to serve the data center building. Eight of the project's 40 gensets would be redundant, yielding the applicant's goal of a 99.999 percent reliability factor. The remaining four gensets would be house generators (two of which are redundant) that would support portions of administration and features necessary for emergency response.

The new substation would deliver electricity to CA3 from Silicon Valley Power (SVP) via the new switching station, providing 60 kilovolt (kV) service to the site and supporting the need for the CA3BGF to provide uninterruptible power supply for the CA3DC servers. The CA3BGF would only be operated for maintenance, for testing, and during emergency utility power outages.

3.1 Project Title

CA3 Backup Generating Facility/Data Center (CA3)

3.2 Lead Agency Name and Address

California Energy Commission
715 P Street
Sacramento, California 95814-6400

3.3 Lead Agency Contact Person and Phone Number

Eric Veerkamp, Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
(916) 661-8458

3.4 Project Location

The proposed CA3 would be located at 2590 Walsh Avenue in Santa Clara, California. **Figure 3-1** shows the regional location and **Figure 3-2** identifies the project location.

3.5 Project Overview

The CA3BGF would be an emergency backup generating facility with a generation capacity of 96 megawatts (MW) to support the CA3DC. The CA3BGF would consist of 44 2.75 MW gensets arranged in a single generation yard.

The CA3DC would consist of two main components: first, the data center suites that house client servers, and second, administrative and support facilities, such as the building lobby, restrooms, conference rooms, landlord office space, customer office space, loading dock, and storage. The data center suite components would have four levels, each containing four data center suites and corresponding electrical/uninterruptable power supply rooms.

The proposed four-story building for CA3 would have approximately 468,000 square feet of data hall space, composed of administration, data hall, and loading dock masses. Other building elements would include a utility substation, generator equipment yard, surface parking, landscaping, and a recycled water pipeline. An architectural site plan is provided in **Figure 3-3**.

The administrative portion of the CA3DC would be located on the west side of the building. The top of the parapet of the administrative and data hall would top out at 88.75 feet, as per the architectural design; however, as per the city of Santa Clara city code, a total building height at the parapet of 87.5 feet is allowable with approval from the city's Zoning Administrator. The mechanical equipment screen on the roof of the building would extend to a height of 104.83 feet from the top of the slab.

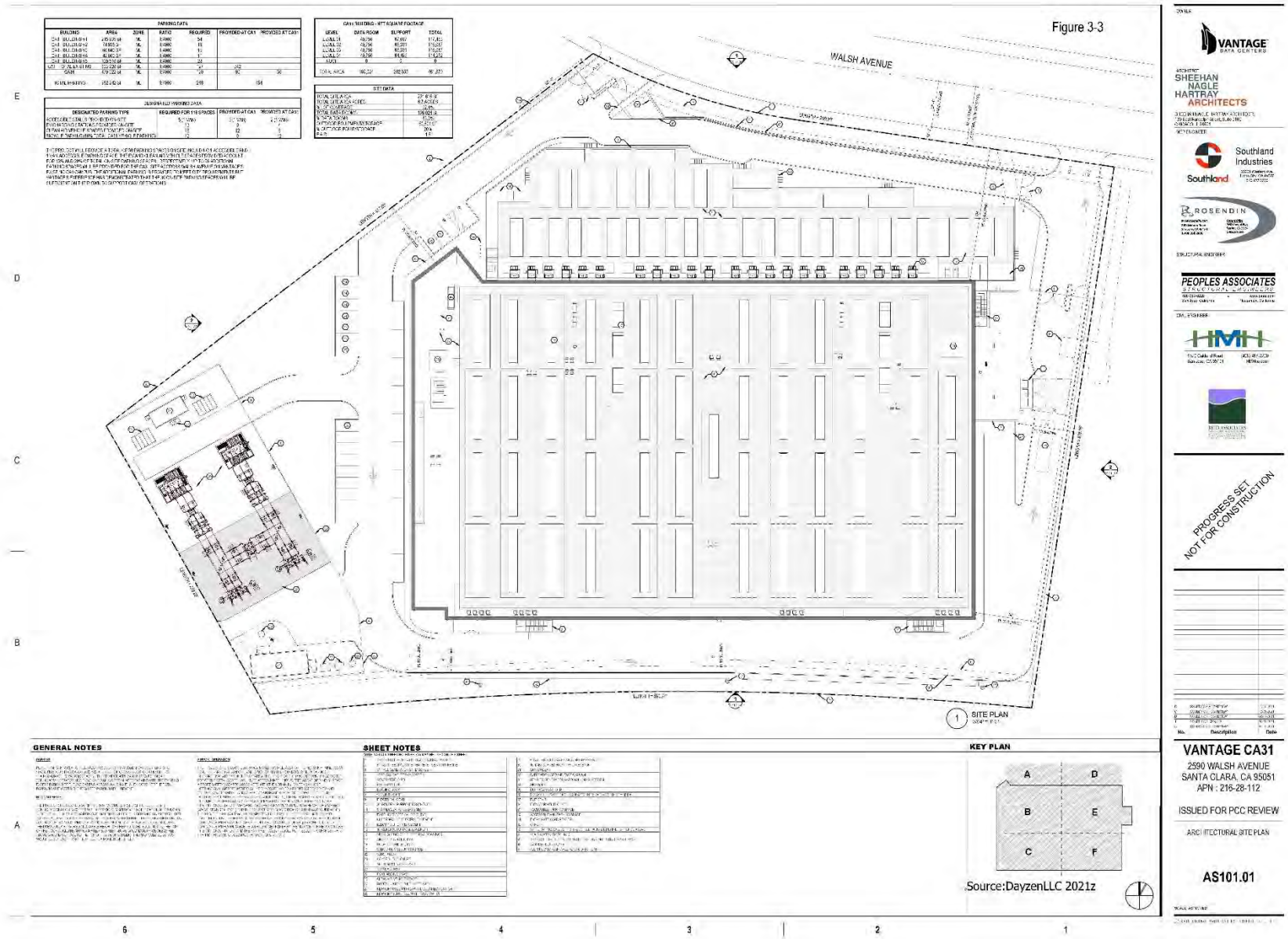
The new building for CA3DC would house computer servers and supporting equipment for private clients in a secure and environmentally controlled structure and would be designed to provide 64 MW of power to information technology (critical IT) equipment. The east side of the proposed project would house the 44 diesel gensets arranged in a generation yard. Forty of the 2.75 MW gensets would be dedicated to replacing the electricity needs of the project in case of emergency and four of the gensets would be used to support redundant critical cooling equipment and other general building and life safety services. Each of the gensets would use an approximately 5,400-gallon diesel fuel tank, with a high fuel level estimated to be 5,100 gallons. Approximately 4,700 gallons would be required for 24 hours of operation. The total diesel fuel available for all gensets would be approximately 238,000 gallons, enough to provide 24 hours of operation in a worst-case scenario. The project would be supported by an onsite substation providing 60 kV to the CA3DC. The substation would be located adjacent to and across the property line from the existing SVP-owned Uranium substation. The station would be configured as a loop with two radial taps to the substation, such that reliability is maintained by

ensuring that if there is a fault along any section of the loop, electric service would still be supplied from the receiving station at the other end of the 60 kV loop.


Figure 3-1
CA3 Project Location
Credits: California Energy Commission
N
Warm Springs District
Sinclair Fwy
Curtner
Ed Levin C Park
Milpitas
Southbay Fwy
Bayshore Fwy
Southbay Fwy
Castro City
Mountain View
Los Altos
Agnew
Nimitz Fwy
Berryes
Sunnyvale
Lawrence
Norman Y Mineta San Jose Int'l Arpt
Santa Clara
82
Norman Y Mineta
0 1 2
Miles
STATE OF CALIFORNIA
ENERGY COMMISSION
Source: DaysenLLC 2021a


Figure 3-2
CA3 Project Location
Credits: California Energy Commission
N
Augustine Dr
Scott Blvd
Central Expy
Bowers Ave
Olcott St
San Tomas Expy
Jay St
Kifer Rd
Saratoga Creek
Walsh Ave
Mead Ave
Agate Dr
0
500
1,000
Feet
101
STATE OF CALIFORNIA
ENERGY COMMISSION

Figure 3-3


WALSH AVENUE
SITE PLAN
GENERAL NOTES
SHEET NOTES
KEY PLAN
A
B
C
D
E
F
Source:DayzenLLC 2021z
VANTAGE
SHEEHAN NAGLE HARTRAY ARCHITECTS
Southland Industries
ROSENDIN
PEOPLES ASSOCIATES
HMH
PROGRESS SET
NOT FOR CONSTRUCTION
VANTAGE CA31
2590 WALSH AVENUE
SANTA CLARA, CA 95051
APN : 216-28-112
ISSUED FOR PCC REVIEW
ARCHITECTURAL SITE PLAN
AS101.01

This Environmental Impact Report (EIR) analyzes the environmental impacts of the whole project, as described above, because of the CEC's lead agency status for this proposed project.

3.5.1 Electrical Power Delivery

Electrical Supply

Electricity for the project would be supplied via a new Vantage-Data Services-owned substation constructed on the project site, connecting through SVP's 60 kV Central Loop. The substation would include two 100 MVA (60/34.5 kV) transformers, only one is required to supply project loads. The three circuit breakers proposed in the on-site substation would allow one of the transformers to be taken out of service for repairs or maintenance while the other can fully support the project load. The Central Loop is fed from the Scott Receiving Station (SRS) and Kifer Receiving Station (KRS). Both the SRS and KRS are 115/60 kV receiving stations. Both SRS and KRS have two 115/60 kV transformers for redundancy and reliability.

SVP is currently conducting a system impact study to identify network upgrades needed to serve growing loads within their system. Pacific Gas and Electric Company (PG&E) and the California Independent System Operator (ISO) are evaluating the need to upgrade the transmission facilities delivering power to the SVP system through the California ISO's Transmission Planning Process (TPP). If these studies identify the need to upgrade the transmission system to reliably serve growing SVP loads, the build out of CA3 may be restricted until the upgrades are put into service. The CA3 and other growing loads in the SVP area are expected to be included in the California ISO 2022-2023 TPP load forecast. SVP's practice is to not add additional project load growth until after completion of environmental review and the granting of necessary entitlements. The projected timeline for CA3 would see entitlements issued after the end of January 2022. Hence, the load growth would be added to a future TPP study. Based on available information, this would likely be in the 2022-2023 TPP study since these are done annually. Any transmission upgrades identified through these studies would be subject to California Environmental Quality Act (CEQA) review (See Appendix B).

Electrical Generation Equipment

The 44 gensets would be Caterpillar Model 3516E internal combustion engines, equipped with Miratech Selective Catalytic Reduction (SCR) equipment and diesel particulate filters (DPF) to achieve compliance with Tier 4 emission standards. The DPFs are expected to control particulate matter by approximately 71 percent. The peak rated output capacity of each genset is 3.75 MW with a steady state continuous output capacity of 2.2 MW. Each individual genset is a fully independent package system, each with dedicated fuel tank and urea storage on a skid below the unit and within the generator enclosure. (DayZenLLC 2021e).

To ensure no interruption of electricity service to the servers housed in the CA3DC building, the servers would be connected to uninterruptable power supply (UPS) systems that store energy and provide near-instantaneous protection from input power interruptions. However, to provide electricity during a prolonged electricity interruption, the UPS systems would require a flexible and reliable backup power generation source to continue supplying steady power to the servers and other equipment. The CA3BGF provides that backup power generation source with the gensets. The CA3BGF would only be interconnected to the CA3DC and would not be interconnected to the transmission or distribution grid; therefore, the CA3BGF would be unable to supply electrical power or respond to power demands off the project site.

Fuel System. The gensets would use ultra-low sulfur diesel fuel (< 15 parts per million sulfur by weight). The total diesel fuel available across all 44 gensets would be approximately 238,000 gallons, enough to provide 24 hours of operation.

Cooling System. The adiabatic cooling system would use air to cool each genset independently as part of its integrated package and, therefore, there would be no common cooling system for the project.

3.5.2 Water Use

The project would use a relatively small amount of water as part of its core business function. The project estimates that it would use approximately 1.75-acre feet of water for each of the two phases of construction and approximately 2.8 acre-feet per year (AFY) for operation of the CA3DC facility (primarily as part of its adiabatic cooling system, and for personal hygienic purposes and landscape watering), 2.0 AFY of potable water and 0.08 AFY of recycled water.

For potable water, the project site is within the jurisdiction and service territory of the city of Santa Clara Department of Water and Sewer Utilities. Water for the project would be provided via the San Francisco Public Utilities Commission. For recycled water, the project would be served by South Bay Water Recycling program (SBWRP), with the project plans to extend a recycled water supply from a pre-existing main in Walsh Avenue at the intersection of Northwestern Parkway.

3.5.3 Proposed Utility Connections

The project would not require new connections to utilities and service systems. Rather, because of the previous industrial tenant at the site, the project would avail itself of the pre-existing connections to the city's storm water, electric, telecommunications, and waste systems where possible. The following sections highlight the current conditions of those connections and where the proposed project would make minor adjustments to what currently exists.

Electrical

The project proposes to construct a new on-site switching station to SVP specifications and an on-site Vantage-Data-Services-owned substation that would provide 60 kV service to the site. The switching station would be located adjacent to and across the property line from the existing SVP Uranium Substation and cut-in to the existing 60 kV line passing nearby. The switching station would ultimately become part of SVP's infrastructure as part of its 60 kV loop system. The station would be configured as a loop with two radial taps to the onsite project substation. If there is a fault along any section of the loop, electric service would still be supplied from the receiving station at the other end of the 60 kV loop, maintaining reliability. (DayZenLLC 2021e).

Storm Drainage

The city of Santa Clara owns and maintains the municipal storm drainage system that currently serves the developed site and would continue to serve the proposed project. Existing storm water runoff exits the site at multiple locations. There are (2) 15-inch storm drain lines serving the site directly off Walsh Ave, with an additional 36-inch storm drain line serving the site in the southeast corner. This line exits the site to the easterly adjacent property before heading north to Walsh Avenue. The on-site drainage system is comprised of overland release flows and an underground pipe network to convey the anticipated peak flows that eventually discharge to the Guadalupe River, which ultimately flows to the San Francisco Bay (DayZenLLC 2021a).

Domestic (Potable) Water

Water services to the site are provided by the city of Santa Clara Department of Water and Sewer Utilities. Approximately 70 percent of the city's potable water is provided by an extensive underground aquifer (accessed by the city's wells). The remaining roughly 30 percent is provided by two wholesale water importers: the Santa Clara Valley Water District (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch Hetchy Regional Water System (imported from the Sierra Nevada). The water system consists of more than 335 miles of water mains, 27 active water wells, and seven storage tanks with 28.8 million gallons of water storage capacity.

Recycled Water

Tertiary treated (or "recycled") water comprises approximately 16 percent of the overall water supplied by the city. Recycled water is supplied from SBWRP, which provides advanced tertiary treated water from the San Jose-Santa Clara Regional Wastewater Facility (RWF;formerly known as the San Jose/Santa Clara Water Pollution Control Plant). The city's recycled water program delivers recycled water throughout the city in addition to existing potable water supplies; recycled water is used for landscaping, parks, public services and businesses. The proposed project plans to utilize recycled water for landscaping needs.

Fire Water

There is a 12-inch diameter domestic water line operated by the city of Santa Clara under Walsh Avenue along the frontage of the property. This domestic water line would serve as the primary source for fire supply in addition to domestic water serving the project. A recycled water pipeline lies at the intersection of Walsh Avenue and Northwestern Parkway, approximately 500-feet to the southeast of the project's property. The project intends to extend the recycled water line as a secondary source of water (DayZenLLC 2021a).

Wastewater (Sanitary Sewer)

Wastewater from the city of Santa Clara is treated at the RWF. Until recently, wastewater from the pre-existing buildings on-site discharged to either a 12- or 15-inch sanitary sewer line flowing to a 30-inch line and eventually to the RWF. Sanitary sewer lines that serve the project site are and will continue to be maintained by the city of Santa Clara Water and Sewer Utilities.

The RWF is owned jointly by the two cities and operated by the city of San Jose's Department of Environmental Services. The facility is one of the largest advanced wastewater treatment facilities in California and serves over 1,400,000 people in Santa Clara and the surrounding region. The RWF provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day. Approximately 10 percent of the RWF's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay. The National Pollutant Discharge Elimination System (NPDES) permit for RWF includes wastewater discharge requirements.

3.5.4 Landscaping

Along with demolishing the existing structure and ancillary improvements, the project would remove existing trees and other vegetation (primarily within the parking lot) associated with the existing commercial enterprise. Additional native and non-native trees and ornamental landscaping along the Walsh Avenue frontage of the property will be removed (66 trees of the 108 existing). Trees would be replaced according to the city of Santa Clara landscape ordinance standards. Other new landscaping, including shrubs and groundcover, would be planted throughout the site, including along the CA3 building's perimeter and property boundaries. All landscaping would meet city of Santa Clara requirements for low water use (DayZenLLC 2021a).

3.5.5 Storm Water Management

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has issued a Municipal Regional Stormwater NPDES Permit (MRP) to regulate storm water discharges from municipalities and local agencies. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low-Impact Development (LID)-based storm water treatment controls to treat post-construction storm water runoff.

According to Appendix E-2, HMP Applicability Map, of the "C.3 Stormwater Handbook" published by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), the project site is in a "purple area," defined as catchments draining to a hardened channel and/or tidal area. According to the MRP, hydromodification controls (HMC) are not required for projects located in purple areas of the HMP Applicability Map. Therefore, the project would not incorporate HMC, but would incorporate the following measures:

The measures to be implemented for the project would include, but are not limited to, the following:

- Site Design Measures:
  - Replacing a portion of the existing paved parking area with pervious pavement (turf block).
- Source Control Measures:
  - Beneficial landscaping (minimize irrigation, runoff, pesticides, and fertilizers).
  - Directing site runoff ito bioswales.
- Low-Impact Development-based controls:
  - Bioretention basin area and at-grade flow-through planter boxes totalling approximately 10,000 square feet.
  - Roof rainwater discharge directly into bioretention areas or planters OR direct rainwater discharge to pipes under sidewalds for discharge to the pavement surface for ultimate surface flow to bioretention planters along the perimeter of the site.

3.5.6 Waste Management

The project would not create any waste material other than minor amounts of solid waste created during construction and maintenance activities. Solid waste and recycling collection in the city of Santa Clara is provided by Mission Trail Waste System through a contract with the city. The city has an arrangement with the owners of Newby Island Sanitary Landfill (NISL), located in San Jose to provide disposal capacity for the city of Santa Clara through 2024. (DayzenLLC 2021a)

3.5.7 Hazardous Materials Management

The project applicant would prepare a Spill Prevention, Control, and Countermeasure Plan (SPCC) to address the storage, use, and delivery of diesel fuel for the gensets. Each genset and its integrated fuel tanks would be designed with double walls. The interstitial space between the walls of each tanks would be continuously monitored electronically for the existence of liquids. This monitoring system would be electronically linked to an alarm system in the security office that alerts personnel if a leak is detected. Additionally, the gensets would be housed within a self-sheltering enclosure that prevents the intrusion of storm water.

Diesel fuel would be delivered on an as-needed basis in a compartmentalized tanker truck with a maximum capacity of 8,500 gallons. The tanker truck would park on the access road to the south of the CA3BGF generator yard and extend the fuel fill hose through one of multiple hinged openings in the precast screen wall surrounding the generator equipment yard. There would be no loading/unloading racks or containment for re-fueling events; however, a spill catch basin would be located at each fill port for the gensets. To prevent a release from entering the storm drain system, drains would be blocked off by the truck driver and/or facility staff during fueling events. Rubber pads or similar devices would be kept in the generation yard to allow for the quick blockage of the storm sewer drains during fueling events. To further minimize the potential for diesel fuel to come into contact with stormwater, to the extent feasible, fueling operations would be scheduled at times when storm events are improbable. Warning signs and/or wheel chocks would be used in the loading and/or unloading areas to prevent vehicles from departing before the complete disconnection of flexible or fixed transfer lines. An emergency pump shut-off would be used if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures would be posted at the loading and unloading areas. Urea or diesel exhaust fluid (DEF) would be used as part of the diesel engine combustion process to meet the emissions requirements. Urea would be stored in two 55-gallon drums located within the generator enclosure. These drums can be filled in place from other drums, totes, or bulk tanker truck at the tank top or swapped out for new using quick connection fittings at the tank top.

3.6 Project Construction

The construction would occur in two separate phases. If approved, Phase I activities would include all demolition, site work and grading, construction of the entire building shell and substation, and placement of approximately half of the gensets, and is estimated to take approximately 15 months to complete. Phase II of the construction would involve placement of the other half of the gensets, and tenant improvements, i.e., walls and other customized space alterations to satisfy tenant requirements. Phase II would begin as soon as feasible, likely in the second or third quarter of 2023 and take approximately seven (7) months to complete for anticipated commercial operation in the fourth quarter of 2024 (total estimated construction time of 22 months (CEC 2022a)).

After provision of the requisite time necessary to complete the CEQA environmental review and local permitting, CEC staff estimates that construction is likely to begin during the third or fourth quarter of 2022, but no earlier than mid-third quarter.

3.7 Workforce

The Phase I construction workforce would be approximately 150 per month and an average of approximately 100 per month. The 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.

Operations personnel for the project is estimated to be 33-35 persons per typical workday, including operations personnel, security guards, a janitor, tenants, and possibly visitors.

3.8 Site Access

The existing curb locations and geometric design of vehicle site access from Walsh Avenue would remain identical to their current locations. For vehicle access, vehicles would be able to enter the project site from the two gated entrances located at the eastern driveway and the western driveway. However, security protocols would most likely require vehicles to enter through the security checkpoint located at the eastern driveway. Vehicles exiting the site may exit from either the western or eastern driveways. As these driveways would be identical to the existing vehicle ingress and egress points of the site, the operation of the project would not increase surface transportation hazards.

The project would provide a total of 30 off-street parking spaces total on the site. Of these 30 spaces, four spaces for electric vehicles would be provided on site and six spaces would be for clean air vehicles. Additional parking would be provided across the street at the Vantage CA1 facility to meet the city's overall code requirement (87 spaces total). The additional parking is provided to meet city requirements, but Vantage Data Services' experience has demonstrated that the 30 on-site parking spaces will be sufficient on their own to support project operations.

3.9 Existing Site Condition

The project site is in a developed industrial park zoned for light industrial uses. The area is surrounded by light industrial and office uses on the north, east, and west. These uses are characterized by data centers, manufacturing, and auto-related services typically up to four stories high. Developed medium-density residential land lies to the south across an active Caltrain regional rail line.

The approximately seven-acre project site on Walsh Avenue is within a developed office/industrial park and contains a defunct (planned for demolition) single-story, solar panel manufacturing facility with loading docks at each end along with ancillary structures supporting the use. Grading of the site is not expected to require the import of fill material. It is possible that up to 10,000 cubic yards of soil and undocumented fill would be removed from the site. The building is surrounded by a parking lot, interspersed with landscaping and sidewalks. See **Figure 3-1**, **Figure 3-2**, and **Figure 3-3** for regional, vicinity, and aerial site location maps.

As stated above, existing municipal storm drainage system, existing wastewater lines, domestic water, and recycled water serve the project site.

3.10 Project Objectives

The applicant's primary goal is to develop a state-of-the-art data center, CA3, that would be part of the single, largest internet hub on the west coast. The project is intended to reliably meet the increased demand of the digital economy and its customers.

In addition to its primary goal, the applicant has set forth these project objectives:

- Develop a state-of-the-art data center large enough to meet projected growth.
- Develop the data center on land that has been zoned for data center use at a location acceptable to the city of Santa Clara.
- Develop a data center that can be constructed in two phases that can be timed to match projected customer growth.
- Incorporate the most reliable and flexible form of backup electric generating technology into the CA3BGF, considering the following evaluation criteria:

  Reliability. The selected backup electric generation technology must be extremely reliable in the case of an emergency loss of electricity from the utility.

  - The CA3BGF must provide a higher reliability than 99.999 percent in order for the CA3DC to achieve an overall reliability of equal to or greater than 99.999 percent reliability.
  - The CA3BGF must provide reliability to the greatest extent feasible during natural disasters, including earthquakes.
  - The selected backup electric generation technology must have a proven built-in resilience so if any of the backup unit fails due to external or internal failure, the system will have redundancy to continue to operate without interruption.
  - The CA3DC must have on-site means to sustain power for 24 hours minimum in failure mode, inclusive of utility outage.

  Commercial Availability and Feasibility. The selected backup electric generation technology must currently be in use and proved as an accepted industry standard for technology sufficient to receive commercial guarantees in a form and amount acceptable to financing entities. It must be operational within a reasonable timeframe where permits and approvals are required.

  Techincal Feasibility. The selected backup electric generation technology must utilize systems that are compatible with one another. (DayzenLLC 2021a)

3.11 Facility Operation

3.11.1 Electricity Usage and Building Load

Data centers are an energy-intensive land use, requiring more electricity than other types of development. The proposed project houses computer servers, which require electricity and cooling 24 hours a day to operate. Other electricity using components of the project in addition to the CA3DC servers and cooling are general lighting, the UPS, data center monitoring equipment, and miscellaneous power loads. The projected maximum demand for the project is 96 MW. Annual greenhouse gas (GHG) emissions associated with electricity usage are the product of the maximum estimated annual electricity usage and the utility-specific carbon intensity factor, which depends on the utility's portfolio of power generation sources, and in other words, which generation technology the energy comes from. The proposed project would be served by SVP.

The energy use emissions for the first phase of operations (the building shell and a portion of the interior for a data center tenant(s) along with sufficient backup generation) for the project were conservatively based on the annual average carbon dioxide (CO2) intensity per megawatt hour (MWh) for 2023 and 2024. Energy use emissions for full buildout (all interior spaces leased to data center tenants) in 2025 were based on the CO2 intensity per MWh for 2025 for a similar project previously exempted under SPPE by the CEC. Energy use expressed as the annual maximum building load from the CA3 data center activities for Phase 1 is estimated to be 54 MW. After full buildout of Phase II, the maximum load from the CA3 data center activities is estimated to be 96 MW.

3.11.2 Backup System Design

CA3 is made up of 16 data center suites in the CA3DC. Each data center suite would be designed to handle 4 MW of IT equipment load. The total maximum load of each data center suite would be 6 MW, which includes the IT equipment load, mechanical equipment to cool the IT equipment load, lighting, and data center monitoring equipment. The sum of the 16-center suite would result in 64 MW of IT equipment load and 96 MW of total electrical load.

The backup electrical system has been designed to serve the lineups in pairs. Each redundant system of five 2.75 MW gensets would serve two data center lineups. Each five-genset redundant system is designed for one genset to be taken out of service at any moment in time (called "5 to make 4"). During an emergency, all five gensets would start and carry load up to approximately 80 percent of their nameplate rating supporting the two lineups they serve. If one of the gensets fails or needs to be taken out of service during the emergency, the 5 to make 4 design allows the failing genset to be removed from operation automatically with the remaining four generators to continue to serve the lineups up to the maximum design load of the two data center suites.

Each redundant backup generation system is made up of five "capacity groups" with each electrical capacity group sized at 2.75 MW (2750 kW) of total power. An electrical capacity group consists of one 2.75 kW generator, one 3,000kVA 34.5kV-480V medium voltage transformer, one 4,000 ampere 480-volt service switchboard, and a 2,000 kW UPS system. The 13.750 MW of total power equipment capacity installed for each 5-to-make-4 system effectively provides only 11 MW of total power.

The electrical load would be monitored by the building automation system. When any of the five redundant genset systems reaches 72 percent loaded (based on 90 percent of the 80 percent maximum loading under normal operation), an alarm would be activated in the engineering office. The operations staff would work with the tenants to ensure that the leased power levels would not be exceeded. It is vital to the reliability of the CA3 data center to make sure that all redundant backup generating systems remain below the 80 percent threshold. (DayzenLLC 2021a)

3.11.3 Energy and Water Efficiency Measures

Due to the heat generated by the data center equipment, cooling is one of the main uses of electricity in data center operations. To reduce GHG emissions and reduce the use of energy related to building operations, the project proposes to implement the following energy and water efficiency measures:

- Daylight penetration to offices.
- Reflective roof surface.
- Meet or exceed Title 24 building standards requirements.
- Electric vehicle (EV) parking.
- Low flow plumbing fixtures.
- Landscaping would meet city of Santa Clara requirements for low water use.

Power usage effectiveness (PUE) is a metric used to compare the efficiency of facilities that house computer servers. It is defined as the ratio of total facility energy draw, including the facility's mechanical and electrical loads to IT server electrical power draw (PUE = total facility source energy [including the Critical IT source energy] critical IT source energy). While the PUE is always greater than 1, the closer it is to 1, the greater the portion of the power drawn by the facility that goes to the critical IT server equipment. The PUE has been used as a guideline for assessing and comparing energy and power efficiencies associated with data centers since 2007. According to the Uptime Institute 2019 Annual Data Center Survey Results, the current average PUE is 1.67. Vantage Data Services estimates that for the project, the maximum peak PUE is expected to be 1.45, the average annual PUE is expected to be 1.26, and actual PUE will be about 1.25, all well below the industry average. (DayzenLLC 2021e)

3.12 Required Approvals and Permits

If the CEC grants an SPPE exemption for the project, the city of Santa Clara would then be responsible for the approval or denial of the project in addition to an approval from the Zoning Administrator for a minor modification for the exceedance of the building height. The Bay Area Air Quality Management District would need to grant an approval for an Authority to Construct permit and a Permit to Operate.

3.14 References

CEC 2022a – California Energy Commission (CEC). (TN 241160). Report of Conversation – Modifications to Project Construction Phasing, dated January 4-12, 2022. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01

DayZenLLC 2021a – DayZenLLC (DayZenLLC). (TN 237380). VDC CA3BGF SPPE Application Part I, dated April 5, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01

DayZenLLC 2021b – DayZenLLC (DayZenLLC). (TN 237381). VDC CA3BGF SPPE Application Part III, dated April 5, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01

DayZenLLC 2021e – DayZenLLC (DayZenLLC). (TN 237423). VDC CA3BGF SPPE Application Part II, dated April 12, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01

DayZenLLC 2021z – DayZenLLC (DayZenLLC). (TN240157). CA3DC PPC Drawing Set Rev3 – Part II, dated October 28, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01