



Notice of Preparation of a Draft Environmental Impact Report

In accordance with California Code of Regulations, title 14, section 15082, California Energy Commission (CEC) staff has prepared this Notice of Preparation (NOP) to inform the Office of Planning and Research (OPR) and each responsible and trustee agency that an Environmental Impact Report (EIR) will be prepared for the Martin Backup Generating Facility (MBGF) and Martin Data Center (MDC) (22-SPPE-03) proposed in the city of Santa Clara. Together these elements constitute the "project" under the California Environmental Quality Act (CEQA).

The project would consist of one four-story data center building, an onsite substation and an onsite switching station (to be owned and operated by Silicon Valley Power (SVP)), generator equipment yard (constituting the MBGF), surface parking and landscaping, and a recycled water pipeline extension. The CEC is requesting your agency's comments on the proposed project.

Small Power Plant Exemption (SPPE) Process

The CEC has the exclusive authority to certify all thermal power plants (50 megawatts (MW) and greater) and related facilities proposed for construction in California. The SPPE process allows applicants proposing to construct thermal power plants between 50 and 100 MW to obtain an exemption from the 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 (Pub. Resources Code, § 25541). Public Resources Code, section 25519(c) designates the CEC as lead agency, in accordance with CEQA, for all facilities seeking an SPPE. The CEC will not be approving the construction of the project, only determining whether the project can be exempted from the CEC's jurisdiction.

The CEC staff has begun its review of the application and will prepare an EIR for public review. At the conclusion of the evaluation and opportunity for public review and comment regarding the project, a decision will be made by the CEC at a noticed business meeting on whether the application meets the requirements of Public Resources Code, section 25541. Should the exemption be granted, the applicant would still need to secure the appropriate entitlements and permits from the relevant local, regional, state, and federal agencies to construct and operate the proposed project. The CEC's regulations setting forth the SPPE process are primarily located in Title 20, California Code of Regulations, sections 1936 and 1940-1942.

Response to Notice of Preparation

Pursuant to the NOP rule in the CEQA Guidelines (Cal. Code of Regs, tit. 14, § 15082(b)), each responsible and trustee agency and the OPR shall provide the CEC with specific detail about the scope and content of the environmental information related to the responsible or trustee agency's area of statutory responsibility that must be included in the draft EIR. At a minimum, the response shall identify:

- the significant environmental issues and reasonable alternatives and mitigation measures that the responsible or trustee agency, or the OPR will need to have explored in the draft EIR; and
- whether the agency will be a responsible agency or trustee agency for the project.

This response is due to CEC within 30 days of receipt of the NOP. Staff requests your comments by **Thursday, March 16, 2023**. If a responsible or trustee agency, or the OPR fails by the end of the 30-day period to provide CEC with either a response to the notice or a well-justified request for additional time, CEC staff will presume that none of those entities have a response to make.

You may submit comments electronically. To use CEC's electronic commenting feature, go to CEC's webpage for this proceeding, cited above, click on the "Submit eComment" link, and follow the instructions in the online form. Be sure to include the project name in your comments. Once filed, you will receive an email with a link to them and the comments will be part of the proceeding's public record.

Project Webpage, Subscription, and Contact Information

CEC maintains a website for this project at:

<https://www.energy.ca.gov/powerplant/backup-generating-system/martin-backup-generating-facility-mbgf>. The SPPE application and related project documents are viewable by clicking the "Docket Log (22-SPPE-03)" link located near the upper right corner of the project webpage. The direct link to the project docket log

is: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=22-SPPE-03>.

To receive electronic notices of all project-related activities and documents related to the exemption evaluation, go to CEC's subscription page <https://www.energy.ca.gov/subscriptions> under "Power Plants Licensing and Projects" and check the "Martin MBGF" box under "Projects Under Review".

If you have any questions or need additional information on how to participate in CEC's review of the proposed project, please contact Eric Veerkamp, Project Manager, by email to eric.veerkamp@energy.ca.gov.

Project Location and Description

The irregularly shaped project site encompasses approximately 7 acres, and is located at 651 Martin Avenue in Santa Clara, California, Assessor's Parcel Number 224-04-071. The parcel currently contains a developed industrial use, four separate single-story structures encompassing a total of roughly 77,200 square feet of enclosed space; the property is zoned MH-Heavy Industrial with a General Plan Designation of MH, Heavy Industrial. The pre-existing concrete and prefabricated metal structures, planned for demolition to make way for the new structure, were used as commercial/warehouse space and include paved surface parking and a loading dock.

Parcels near the proposed project site generally consist of commercial and industrial land uses, with some buildings of similar height and scale to those currently existing on the project site, and still others similar in height and scale to the proposed four-story MDC building. Developed surrounding land uses include an existing warehouse to the North, an existing Union Pacific railroad line to the east, and Martin Avenue on the south, and an existing office building to the west. The Norman Y. Mineta San José International Airport is located approximately one quarter mile east of the site. The nearest residentially zoned properties are roughly 3,000 feet (just over one-half mile) to the south (near the intersection of Main Street and Cabrillo Avenue), and 5,800 feet (approximately 1.2 miles) to the north (at the intersection of Lafayette Street and Laurie Avenue). The closest school is located approximately 0.8 mile southwest of the project site.

The project's generating facility would include 44 diesel-fired generators (gensets) (Caterpillar Model 3516E) to provide up to 96 MW of emergency generating capacity to the data center in the event of a loss of electric service from SVP. The gensets are equipped with selective catalytic reduction equipment and diesel particulate filters to comply with Tier 4 emission standards.

Specifically proposed are 40 gensets to serve the data center suites, and 4 house gensets, each a fully independent package system with dedicated diesel supply (each with a useable maximum of 5,100 gallons and a total capacity of approximately 237,600 gallons) and urea storage located on a skid below the genset and within the generator enclosure. The gensets are arranged in a "5 to make 4" setup serving 16 data center lineups, providing a dedicated backup genset in case of a failure or maintenance, hence the "5 to make 4". As part of

the uninterruptible power supply system, batteries providing roughly five (5) minutes of battery backup time, allow for transfer from utility provided power to backup generation, if necessary.

Existing native and non-native trees and ornamental landscaping are proposed to be demolished, save for the trees along the western property line. In addition, select on-site trees, particularly native species not in conflict with utilities, grading, stormwater treatment facilities, and architectural improvements will be protected and retained. New complimentary landscaping will consist of drought and recycled water tolerant native and non-native tree species, large and medium shrubs, and groundcovers. Project ingress and egress will closely emulate the current driveway layout at the southwest (primary) and southeast corners at Martin Avenue; off street parking and perimeter streetlights would also be provided.

Probable Environmental Effects

The EIR will analyze the reasonably foreseeable direct, indirect, and cumulative effects of the proposed MBGF in the topic areas specified in Appendix G of the CEQA Guidelines, plus environmental justice (EJ).

Based on its analysis to date and prior experience evaluating other data centers in industrial settings, the CEC staff has identified that the project would likely have no or less-than-significant impacts in the environmental topic areas of aesthetics, agriculture and forestry resources, energy, environmental justice, land use, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire.

The CEC staff is still conducting information gathering activities associated with select topic areas. Staff's analysis will include any information provided by other agencies in response to this notice that can inform the CEC's environmental review. These environmental topic areas could have potentially significant impacts that could be reduced to less than significant with mitigation, as feasible. It is anticipated the following topics will be analyzed further in the EIR.

Air Quality

The proposed project would be in the San Francisco Bay Area Air Basin (SFBAAB) under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB is designated as a non-attainment area for ozone and particulate matter (PM). The backup diesel generators proposed for the project could result in potentially significant impacts due to ozone precursors (oxides of nitrogen [NO_x] and reactive organic gases) and emissions of diesel particulate

matter (DPM), a toxic air contaminant. The emissions of criteria air pollutants and toxic air contaminants from the backup diesel generators may result in significant air quality impacts under BAAQMD's CEQA significance thresholds and require mitigation; however, CEC staff has not completed its analysis of the significance of the project's potential impacts and is yet to reach a definitive conclusion.

The EIR will discuss whether the project would result in potential cumulatively considerable net increase of a criteria pollutant(s) for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The EIR will also discuss whether the project would: conflict with or obstruct implementation of the applicable air quality plan; expose sensitive receptors to substantial pollutant concentrations, including impacts from criteria pollutants and toxic air contaminants; or result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

If project impacts related to air quality and public health are determined to be significant, mitigation will be identified to reduce impacts to a less than significant level, as feasible.

Biological Resources

The applicant identified 33 existing trees on the project site that are proposed to be removed to facilitate the development of the project. These trees are protected under the city of Santa Clara Municipal Code, chapter 12.35, and the City of Santa Clara 2010 – 2035 General Plan. Of the 33 trees to be removed, one of them is specifically protected by Policy 5.10.1-P4 of the General Plan and the same chapter of the plan requires at least a 2:1 replacement ratio for trees removed. In addition, a tree removal permit from the City of Santa Clara will also need to be obtained. A conflict with local policies or ordinances for tree preservation and tree replacement could arise if satisfactory provisions for the replacement of trees that are removed and protections for trees to remain along the boundary of the project site are not made. The EIR will discuss the project's potentially significant impacts due to the possible direct or indirect disturbance of existing trees during project construction.

Construction activities, including the removal of trees and vegetation clearing that take place during the breeding season for protected birds (February to August) have the potential to cause the direct destruction of active nests of protected birds, including raptors. The EIR will discuss the project's potentially significant impacts due to the possible direct or indirect disturbance of nesting bird habitat during project construction.

The project applicant identified construction activities, including demolition of existing buildings and removal of trees, have the potential to cause direct destruction of active bat roosts of protected bats, if present. The EIR will discuss the project's potentially significant impacts due to the possible direct or indirect disturbance of protected bats and their roosts, during project implementation. CEC staff will also discuss the potential, if any, for other special status species to be affected by direct or indirect impacts caused by the project.

These impacts may be reduced to less than significant levels with the implementation of design measures as modified by staff and agreed to by the applicant. The CEC staff is working with the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS) to ensure the applicant-proposed mitigation measures, PDM BIO-1 through PDM BIO-4, will meet CDFW and USFWS requirements. The CEC staff is ensuring that the project design measures would mitigate biological resource impacts to less than significant.

Cultural and Tribal Cultural Resources

Based on preliminary information, three archaeological resources have been identified in the project study area: P-42-000433 (CA-SCL-430/H), the Old Mission Site; P-42-001080 (CA-SCL-702), a precontact lithic scatter with Native American burials; and P-42-004159 (CA-SCL-1070/H), a multi-component site consisting of a precontact deposit containing Native American burials, and an historic-era deposit containing historic privy, dump, and refuse scatter associated with the industrial use of the site and earlier farming activities. Consultation with California Native American tribes is in progress to identify any additional cultural resources and potential impacts. Ground disturbance proposed as part of the project could encounter and damage buried resources that meet CEQA's criteria for historical, unique archaeological, or tribal cultural resources. The resulting impacts would likely be significant under CEQA. There are also at least seven parcels adjacent to the project site or the proposed recycled water line extension alignment that contain buildings or structures that are 45 years or older. Staff is waiting for the applicant to evaluate the eligibility for listing on the California Register of Historical Resources or as a local landmark (Data Request 23, TN#247096). Without evaluations of these resources staff is unable to analyze any potential effects to significant built environment cultural resources outside of the project site, but within the project area of analysis. Although the applicant has proposed two project design measures to reduce the severity of cultural or tribal cultural resource impacts, at this time, there is not enough information to conclude whether the project would result in significant impacts to cultural or tribal cultural resources and whether they could be mitigated to less than

significant. Mitigation measures would be proposed to reduce potentially significant impacts to less than significant, if feasible.

Geology and Soils (Paleontology)

The project site is in the Santa Clara Valley, an area known to have scientifically significant but widespread or intermittent fossil discoveries. Surficial sediment at the project site is generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not usually considered fossils. However, Pleistocene age (2.6 million to 11,700 years before present) sediments may also be present at or near the surface. Although unlikely, paleontological resources could be encountered during construction requiring earth moving, such as grading, trenching for utilities, excavation for foundations, and installation of support structures where native soil would be disturbed. If paleontological resources are discovered, construction could have potentially significant direct or indirect impacts due to the destruction of a unique paleontological resource. These impacts could be reduced to less than significant levels with the incorporation of proposed mitigation. If not, the CEC staff will propose mitigation measure(s) that could reduce impacts to less than significant.

Greenhouse Gas Emissions

The project could result in potentially significant greenhouse gas (GHG) emissions from three categories of activities: direct emissions from construction, direct emissions from the testing and maintenance of the backup diesel generators, and emissions from the data center's miscellaneous operations, both direct and indirect. During operation, the project applicant has proposed to obtain electricity from SVP which would be subject to California's Renewables Portfolio Standard. The applicant proposes to use renewable diesel as the primary fuel for the backup generators when feasible and ultra-low sulfur diesel as fuel when renewable diesel is not readily available. The CEC staff will evaluate the direct emissions from construction and the backup generators and indirect emissions from the project's data center's electricity use and assess whether mitigation is necessary and what options are available.

Hazards and Hazardous Materials

The project site is in an area with properties of varying commercial and industrial land uses, and of former industrial and agricultural land uses. The site is generally bounded on the north by an existing warehouse, on the east by an existing Union Pacific railroad line, on the south by Martin Avenue, and on the west by an existing office building. The project site is located within two miles of Norman Y. Mineta San José International Airport, approximately one quarter mile

west of the airport. The site is located within the area of influence of the Santa Clara County Comprehensive Land Use Plan (CLUP) where it may be affected by noise, height, and aviation safety considerations. The nearest residences are located approximately 1,400 feet to the southwest of the project site.

Based on Phase I Environmental Site Assessment (ESA) conducted for the project site in July 2021 (included in Appendix E of the project application), the project site has a history of agricultural use from approximately 1939 to 1956 and of industrial use from 1956 to the present. The Phase I ESA identified several environmental conditions associated with the site's former agricultural use and the former presence of two underground storage tanks (USTs). The Phase I ESA also identified environmental conditions associated with a former paperboard manufacturing facility located approximately 150 feet east of the project site. The demolition of existing buildings and onsite infrastructure and construction of project components could encounter contaminated soil or groundwater. Demolition of the pre-1970s era onsite buildings and infrastructure may encounter asbestos containing material and lead based paint. A Phase II ESA conducted in September 2021 (included in Appendix E of the project application) detected arsenic and nickel levels above respective environmental screening levels (ESLs) in the soil sampling. The Phase II ESA also detected benzene levels above respective ESLs in the soil vapor sampling.

The project would use hazardous materials during project construction (including demolition activities), and operation. Spills or leaks of hazardous materials that will be used and stored at the project site during project construction, such as fuels for construction equipment and vehicles, and small amounts of lubricants and solvents could occur due to project construction activities. During operation, a large quantity of diesel fuel, totaling approximately 237,600 gallons for all the generators, would be stored in integrated diesel fuel storage tanks within each generator package. Urea or diesel exhaust fluid, used as part of the diesel engine combustion process, would be stored in two 55-gallon drums located within the generator enclosure. Spills or leaks of diesel fuel or diesel exhaust fluid could occur during refueling or due to damage to the tanks.

The project construction or operation could result in potentially significant environmental impacts due to encountering onsite or offsite contaminated soil or groundwater and hazardous materials (lead-based paint and asbestos containing materials) during construction, spills from diesel fuel or diesel exhaust fluid during operation, or aviation safety or noise hazards. The CEC staff will review the applicant proposed project design measure (**PDM HAZ-1**) to determine whether it is sufficient to reduce potentially significant impacts to less than significant; and propose additional mitigation measures, as necessary.

Hydrology and Water Quality

Project construction would disturb approximately 6.5 acres of land and be subject to construction-related stormwater permit requirements of California's National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) administered by the State Water Resources Control Board (SWRCB). Prior to any ground-disturbing construction activity, the project owner would be required to comply with the Construction General Permit, which includes the preparation of a Stormwater Pollution Prevention Plan (SWPPP). With the implementation of the construction SWPPP, redevelopment of the site would not cause a substantial degradation in the quality, or an increase in the rate or volume, of stormwater runoff from the site during construction. The applicant proposes specific best management practices (BMPs) to address water quality degradation due to construction-related stormwater runoff as part of **PDM HYD-1**. The CEC staff will evaluate if these measures would reduce impacts from construction-related water quality impacts to less than significant and propose additional mitigation measures, as necessary.

Noise

The noise levels associated with construction could be potentially significant but could be mitigated via the implementation of a construction noise plan. The temporary intermittent noise impacts associated with the yearly testing of the gensets, as well as the likelihood for increased noise levels resulting from project operation could be potentially significant. If potential, significant adverse impacts on sensitive receptors are identified, CEC staff would draft mitigation, including noise attenuation and other measures to reduce impacts.

Transportation

The EIR will discuss the project's potentially significant impacts from vehicle miles travelled (VMT). The project generated VMT per employee (15.60) is greater than the City of Santa Clara's threshold of 14.14 VMT per employee for industrial uses. Implementation of a 4-40 work schedule (40 hours in 4 days) could reduce the project generated VMT per employee (15.60) to 13.26 VMT per employee. CEC staff will evaluate if this measure would reduce impacts from VMT to less than significant and propose a mitigation measure, as necessary.

Alternatives

The EIR will consider a reasonable range of potentially feasible alternatives to the project. In addition to a no project alternative, the EIR will likely consider

fuel cell technology, battery storage, alternative fuels (renewable diesel and biodiesel), and natural gas internal combustion engines.

Environmental Justice

The CEC staff has determined the presence of an environmental justice population within the vicinity of the project site using currently available 2020 Census and California Department of Education data. The CEC staff will analyze whether the project would result in any potentially significant disproportionate impacts to the environmental justice population.

Responsible Agencies

Responsible agencies for this project are the Bay Area Air Quality Management District and the City of Santa Clara. The project will require the following approvals and permits if exempted:

- Bay Air Quality Management District – authority to construct and permit to operate
- City of Santa Clara – Project Clearance Committee review and approval, Master Plan approval

Trustee Agencies

Trustee agencies identified for this project are the California Department of Fish and Wildlife.

Scoping Meeting(s)

The CEC staff has determined that the project is not a project of statewide, regional, or areawide significance pursuant to California Code of Regulations, title 14, section 15206, and, thus, does not intend to hold a scoping meeting. Please note, however, that pursuant to the provisions of California Code of Regulations, title 14, section 15082(c), a responsible agency, a trustee agency, OPR, or a project applicant may request one or more meetings between representatives of the agencies involved to assist the lead agency in determining the scope and content of the environmental information that the responsible agency or trustee agency may require. Requests for such a meeting should be directed to the CEC staff Project Manager, Eric Veerkamp, at the email listed above.

Attachments (from the SPPE application):

Regional Map (Figure 3.1)
Aerial Project Location Map (Figure 3.2)
Site Plan (Figure 3.3)



Figure 3-1
Regional Map

Source: DayZen LLC MBGF SPPE Application - Part I Figure 1-1



**Figure 3-2
Project Location**



Source: DayZenLLC MBGF SPPE Application - Part I Figure 1-2

