DOCKETED	
Docket Number:	19-SPPE-04
Project Title:	SJ2
TN #:	241977-2
Document Title:	San Jose Data Center Final EIR- Part 2
Description:	N/A
Filer:	Lisa Worrall
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	2/28/2022 9:25:51 AM
Docketed Date:	2/28/2022

SAN JOSE DATA CENTER

Final Environmental Impact Report

SCH # 2021020002

Part 2 of 2

CALIFORNIA
ENERGY
COMMISSION
Gavin Newsom,
Governor

February 2022
CEC-700-2021-003-F

DOCKET NUMBER 19-SPPE-04

Section 7

Response to Comments

7 Response to Comments

7.1 Introduction

This section presents responses to the comments received during the 45-day public review period for the Draft Environmental Impact Report (DEIR) (December 23, 2021 through February 7, 2022). A Notice of Availability of the Draft Environmental Impact Report was sent out to the project's mailing list. The California Energy Commission (CEC) received comment letters from the County of Santa Clara Parks and Recreation Department, Ada Marquez, Bay Area Air Quality Management District, Claire A. Warshaw, and the project applicant, Microsoft.

Table 7-1 presents the list of commenters that submitted comments on the DEIR. The individual comments are numbered, and responses immediately follow the comments. If revisions have been made to the EIR based on the comments, the revisions are included in the text of this FEIR shown as ~~strikeout~~ for deletions of text, and as underline for new text. The response references the general location of the revisions.

TABLE 7-1 COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

Commenter	Date of Comment	Comment Set	Page Number
County of Santa Clara Parks and Recreation Department, TN241447	Feb. 4, 2022	A	7-2
Ada Marquez- Five-part comment package	Feb. 7, 2022		
Draft Environmental Impact Report (DEIR) for the San Jose Data Center SCH # 2021020002 (SJDC or Project) (Docket Number 19-SPPE-04) Applicant Microsoft Corporation- Small Power Plant Exemption (SPPE) (1 of 4), TN 241458		B	7-5
Bay Area Air Quality Management Agency, TN 2414620	Feb. 7, 2022	C	
Claire Warshaw, TN 241463	Feb. 7, 2022	D	
Microsoft, TN 241464	Feb. 7, 2022	E	

7.2 Comment Letters and Responses

Staff's response follows each comment letter.

Comments Set A: County of Santa Clara Parks and Recreation Department

County of Santa Clara
Parks and Recreation Department

298 Garden Hill Drive
Los Gatos, California 95032-7669
(408) 355-2200 FAX (408) 355-2290
Reservations (408) 355-2201
www.parkhere.org

February 4, 2022

California Energy Commission
Attn: Lisa Worrall, Project Manager
715 P Street
Sacramento, CA 95814

SUBJECT: Notice of Availability of a Draft EIR for San Jose Data Center Project

Dear Ms. Worrall,

The Santa Clara County Parks and Recreation Department (County Parks Department) has received the Notice of Availability of a Draft Environmental Impact Report (Draft EIR) for the San Jose Data Center Project (Project).

The County Parks Department functions to provide a sustainable system of diverse regional parks, trails, and open spaces that connects people with the natural environment and supports healthy lifestyles while balancing recreation opportunities with natural, cultural, historic, and scenic resource protection. The County Parks Department is also charged with the planning and implementation of the Santa Clara County Countywide Trails Master Plan Update (Countywide Trails Plan), an element of the Parks and Recreation Section of the County General Plan (adopted by the Board of Supervisors on November 14, 1995). The Countywide Trails Plan indicates the following planned trail routes located adjacent to the Project site:

> *Juan Bautista de Anza National Historic Trail (R1, Anza Trail):* a national and regional hiking and bicycling trail route along the margins of the San Francisco Bay, which shares a planned conceptual alignment with the San Francisco Bay Trail adjacent to the project site, along Alviso Milpitas Road and a portion of Zanker Road.
>
> *San Francisco Bay Trail (R4, Bay Trail*): a regional off-street hiking and bicycling trail route circling San Francisco and San Pablo Bays, linking nine Bay Area counties and forty-two shoreline cities. The Project site is adjacent to the planned Bay Trail alignments along Alviso Milpitas Road, shared with the planned Highway 237 Bikeway Trail, and along a portion of Zanker Road, as most recently revised in the "Highway 237 Bikeway Trail Feasibility Study & SF Bay Trail Alignment Confirmation" (Highway 237 Bikeway Study), prepared by LPA, Inc. for the City of San Jose (March 3, 2020). The Project site is also adjacent to the site of a proposed pedestrian and bicycle bridge across Highway 237, linking multiple trails with shared or intersecting alignments in this area (Bay Trail, Anza Trail, Coyote Creek/Llagas Creek Trail, Highway 237 Bikeway Trail).

Existing segments of the Anza Trail, Bay Trail, and Coyote Creek/Llagas Creek Trail (S5) are also located near the project site.

The map showing nearby existing and planned regional trail alignments provided as part of the Draft EIR (Figure 4.16-1) appears to be somewhat out of date. The more recent planned Bay Trail alignments are reflected in the Highway 237 Bikeway Study, mentioned above. Updated data associated with the Countywide Trails Plan can be found on the County Parks Department's website or through contacting us. The City of San Jose's Trails Program also maintains GIS data for planned and existing trails in this area. A-1

The figure showing the proposed Class I bike trail, referenced as Figure 4-4 (page 4.16-5), appears to be missing or simply mislabeled (Figure 3-4 shows the proposed Road and Bike Improvements). A-2

The Project should avoid impacts to the existing and planned regional trail routes in this area and should explore opportunities for implementation of portions of the planned Anza Trail, Bay Trail, and/or Highway 237 Bikeway Trail as part of Project construction. The County Parks Department appreciates the inclusion of a proposed Class I bike trail as part of the project along a portion of Zanker Road and recommends that the Project coordinate with the Metropolitan Transportation Commission – Bay Trail Project and the National Park Service on designation of this Class I trail as part of the Bay Trail and Anza Trail, respectively. A-3 The Parks Department also recommends that the Project coordinate with the City of San Jose's Trails Program regarding the potential for incorporation of an off-street trail that meets Bay Trail standards along the Alviso Milpitas Road frontage of the Project site (where bicycling and pedestrian use is currently on the road), or to allow for construction of such a trail in the future. A-4 The design of the Project's access points should also take public trail use into consideration, to minimize safety conflicts with pedestrians and bicyclists. The Project might also explore additional opportunities identified in the Highway 237 Bikeway Study for this area, such as supporting improvement of pavement markings, wayfinding, and interpretive signage along Alviso Milpitas Road. A-5

Thank you for the opportunity for County Parks Department to provide comments on the NOA of a Draft EIR for the San Jose Data Center Project. If you have any questions, please email me at Kimberly.brosseau@prk.sccgov.org

Sincerely,
Kimberly Brosseau
Kimberly Brosseau, AICP
Senior Planner

Responses to Comments Set A:

A-1 Figure 4.16-1 in **Section 4.16 Recreation** has been updated.

A-2 The typo on page 4.16-6 has been corrected. Staff has also updated **Figure 3-4** in **Section 3 Project Description** to identify the existing bike trail instead of the proposed Class I bike trail.

A-3 Edits have been made on page 4.17-17 in **Section 4.17 Transportation** to encourage the coordination among the project owner, the city of San Jose, the Metropolitan Transportation Commission – Bay Trail Project, and the National Parks Service for the designation of the proposed Class I Bikeway Trail along Zanker Road as part of the Bay Trail and Anza Trail.

A-4 As discussed on pages 4.17-6 and 4.17-7 of the DEIR, the project owner has proposed roadway improvements that facilitate pedestrian and bicycle movement along a portion of Zanker Road. Additionally, bicycle and pedestrian improvements would be constructed along Nortech Parkway Extension, a new road to be constructed as part of the project. The city of San Jose, as the permitting agency, would ensure the project owner coordinates with the city of San Jose's Trails program to ensure the construction of the proposed Class I Bikeway Trail extension meets all design standards. No changes to the DEIR are necessary as a result of this comment.

A-5 As stated in subsection "4.17.2 Environmental Impacts", typical activities related to the construction of any development could include lane narrowing or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (closure and detour signs) would be provided to ensure vehicles, pedestrians, and bicyclists are able to adequately reach their intended destinations safely. Additionally, the city of San Jose, as the permitting agency, would ensure the project's construction, including the construction on the new Class I Bikeway Trail, is conducted in a way that minimizes safety conflicts with pedestrians and bicyclists. No changes to the DEIR are necessary as a result of this comment.

Comments Set B: Ada Marquez

February 7, 2022

Commissioner Karen Douglas, Presiding Member
Commissioner Patty Monahan, Associate Member
California Energy Commission

Lisa Worrall
Senior Environmental Planner
715 P Street
Sacramento, CA 95814
(916) 661-8367
lisa.worrall@energy.ca.gov

Re: Draft Environmental Impact Report (DEIR) for the San Jose Data Center SCH # 2021020002 (SJDC or Project) (Docket Number 19-SPPE-04)[1]
Applicant Microsoft Corporation- Small Power Plant Exemption (SPPE)

Dear Commissioners Karen Douglas and Patty Monahan:

As documented on the Docket Log, as concerned residents we submitted comments and questions pertaining to this project (TN# 240572, 240562, 240189, 236959, and 236718). The SJDC DEIR did not adequately describe the environmental setting (baseline conditions) §15125, analyze environmental effects of the project: short-term, long-term, direct, in-direct, cumulative, significant irreversible, and/ or evaluate exacerbating hazards by locating the development within a hazardous area §15126.2(a).

Alviso[2]: The SJDC DEIR failed to adequately describe the existing baseline conditions

The community of Alviso is located at the most northern area of the City of San Jose and annexed by the City of San Jose in 1968 (Figure 1). The Alviso Specific Master Plan was approved in 1998 and amended in 2016 in which the community developed their vision for compatible land-uses, protection of natural resources, preservation of the Alviso village with local, state, and federally protected historical resources, and opportunities for employment.[3] The Los Esteros Facility is currently zoned Light Industrial. Additionally, Alviso is located adjacent to the Don Edwards San Francisco Bay National Wildlife Refuge, burrowing owl habitat, riparian corridors, and within the Santa Clara Valley Habitat Plan HCP/NCCP.[4] Per SB 1000, SB 535, AB 1550, and AB 617, Alviso is identified as a disadvantaged and low-income community with a pollution burden of 88% with $PM_{2.5}$ results that is 43% (**9.955 µg/m3**) higher than other CA census tracts.[5]

B-1

[1] California Energy Commission : Docket Log https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-04
[2] §15125 Environmental Setting (CEQA Statute and Guidelines, 2021)
[3] Specific Plans | City of San Jose (sanjoseca.gov)
[4] Santa Clara Valley Habitat Agency, CA | Official Website (scv-habitatagency.org) per the California Endangered Species Act (CESA) and the Federal Endangered Species Act (ESA)
[5] Census Tract 6085504602 SB 535 Disadvantaged Communities | OEHHA (ca.gov). Auction Proceeds Disadvantaged Communities (ca.gov)

The Alviso residents are disproportionately affected by ground water contamination, air pollution, and many cumulative environmental issues: the former South Bay Asbestos Area on the National Priority List (NPL), the Union Pacific Railroad, Highway 237, methane vapor from the Newby Island Landfill and Zanker Recycling Zero Waste Energy, the Calpine Energy Plant, facilities with hazardous wastes, large Google warehouses, the (Approved Rezoning Development)Microsoft San Jose Data Center, RWF Cogeneration Project for the San Jose/Santa Clara Water Pollution Control Plant (WPCP), and numerous unpermitted business with diesel trucks, and Topgolf Entertainment Center with significant traffic impacts, etc.[6] Currently, Alviso is as much as 15 feet below sea level and is within the most impacted area known as Economic Impact Area 11.[7]

The proposed Microsoft SJDC Project is located adjacent to the Los Esteros Critical Energy Facility. The City of San Jose completed the DEIR for Los Esteros Critical Energy Facility/US Dataport in 2000 for the "Planned Development Rezoning from a (PD) Planned Development District to allow installation of 180 megawatt (MW) Natural Gas fired power plant in addition to the previously approved 2.2 million square foot telecommunication equipment facility on a 174 gross acre site."[8] In 2002, the CA Energy Commission issued the license for this project. Since then, several amendments and phases have approved authorization to operate as a 320 MW combined-cycle facility. The conversion of this peak power plant to a base load power plant was significant for this small community. Although a Title V Facility is incompatible with the City of San Jose's zoning requirements, the CA Energy Commission approved this expansion without any regards to the City's environmental and health concerns.[9]

B-1 continued

The Purpose of the EIR

The applicant Microsoft Corporation is applying for an SPPE (PRC Section 25541). If the CEC Commissioners (the lead agency) *"finds that the proposed project would not create a substantial adverse impact on the environment or energy resources"* (SJDC DEIR, p. 2-1) per CEQA, the CEC Commissioners will approve the applicant's request for an exemption from CEC's jurisdiction.

B-2

- The DEIR states, ***"Upon granting of an exemption, the local permitting authorities—in this case the City of San Jose and the Bay Area Air Quality Management District—would perform any follow-up CEQA analysis and impose mitigation, as necessary, for granting approval of the project."*** **(DEIR, p. 2-1)**. However, the BAAQMD's NOP comment letter (TN#236946) does not state that this project in the future would require CEQA analysis by their agency: *"Certain aspects of the Project will require a permit (Authority to Construct/Permit to Operate) from the Air District (for example, backup diesel generators). Please contact Barry Young, Senior Advanced Projects Advisor, at (415) 749-4721 or byoung@baaqmd.gov to discuss permit requirements. Any applicable permit requirements should be discussed in the EIR"*. In addition, the project must comply with all air regulations such as Regulation 2 Rule 2: New Source Review[10] (TN# 236089). Per CEQA **§15281. AIR QUALITY PERMITS** *"CEQA does not apply to the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V, as defined in Section*

[6] RWF Cogeneration Project | City of San Jose (sanjoseca.gov) San Jose City Data Center, Licensing Case - Docket # 2019-SPPE-04
[7] 2014-2015 SANTA CLARA COUNTY (scscourt.org)
[8] US Dataport/Los Esteros Critical Energy Facility SCH Number 2000062132 (ca.gov) SCH Number 2002079013 (ca.gov)
[9] CEC Overrides San Jose Zoning Ban on Power Plant Expansion - CA Current (A hard copy of DEIR is at the Alviso Library)
[10] Reg 2 Rule 2 New Source Review (baaqmd.gov) . For additional information about air quality permits, please refer to Permits (baaqmd.gov) and Online Permitting System (baaqmd.gov).

B-2 continued

39053.3 of the Health and Safety Code, or pursuant to an air district Title V program established under Sections 42301.10, 42301.11, and 42301.12 of the Health and Safety Code, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility."

- The City of San Jose approved the 237 Industrial Center DEIR[11] in 2017 which included the analysis of two project options simultaneously: Option 1 Light Industrial development, and Option 2 a Data Center, with rezoning from A(PD) Agricultural Planned Development to Light Industrial (LI) (TN# 230762).[12] According to the correspondence between the CEC staff and the City of San Jose, the Special Use Permit (File No. SP16-053) expired on October 24th, 2020 (TN# 237358)..[13]

The CEC Staff explains under section 2.4.3 Final EIR: *"If the project is determined as qualifying for an exemption, the applicant would seek permits from the responsible agencies, in this case, the City of San Jose and Bay Area Air Quality Management District. Any required mitigation measures would be enforced by the appropriate responsible agency"* (SJDC DEIR, p.2-2).

The CEC Commission should not approve the SPPE, if substantial evidence which includes "facts, reasonable assumptions based on facts, and expert opinion supported by facts" that the project may have a significant effect to the residents of San Jose §15384.[14] The Project without the SPPE, would legally still be required to obtain permits from the City of San Jose to comply with California's land-use regulations and BAAQMD's regulations per the Clean Air Act. The lead agency, CEC is legally responsible to comply with the California Environmental Quality Act (CEQA) requirements in adequate preparation of the Environmental Impact Report (EIR) and implement the mitigation and monitoring reporting.[15]

[11] Microsoft buys 64.5 acres of Silicon Valley land as it considers large data center - DCD (datacenterdynamics.com)

[12] 237 Industrial Center | City of San Jose (sanjoseca.gov)

[13] **Per the City of San Jose Code of Ordinances, Title 20 Zoning, Chapter 20.100, Part 7 Special Use Permits:**
20.100.840 - Renewal.[13]
A. The permit holder may seek renewal of a time-conditioned special use permit by filing a timely renewal application on the form provided by the director.
B. An application for renewal must be filed more than ninety calendar days but less than one hundred eighty calendar days prior to the expiration of the special use permit.
C. Once a renewal application has been filed in a timely manner, the expiration date of the special use permit is automatically extended until either the issuance or denial of the application for renewal has become final.
D. Any application filed after the renewal filing period has expired shall be deemed to be an application for a new special use permit. If a new special use permit is not issued prior to the expiration of the special use permit, the continuation of any use which requires such permit shall be in violation of this Code.
E. The procedures set forth in this chapter for the processing of an application for a special use permit shall equally apply to a renewal application except as hereinafter expressly set forth. 20.100.850 - Renewal findings
(Ord. 26248.)
https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT20ZO_CH20.100ADPE_PT7SPUSPE_20.100.850REFI

[14] Public Resources Code 21000-21189 and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) California Legislative Information

[15] Santa Clara Valley Water Dist. v. San Francisco Bay Regional Water Quality Control Board (Dec. 29, 2020) __ Cal.App.5th

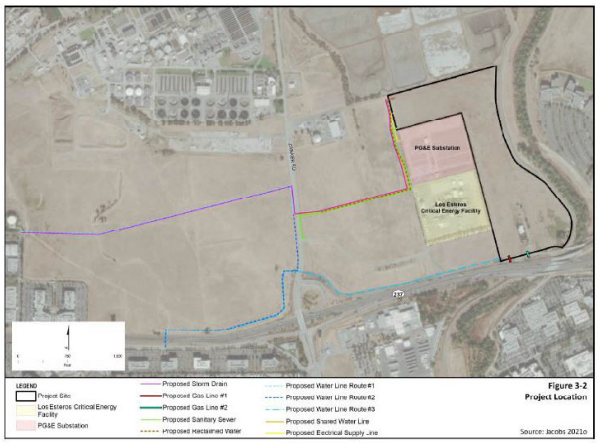
Project Description: Microsoft San Jose Data Center with a maximum electrical load up to 99 megawatts (MW) but estimated at 77 MW.

The current Project site is zoned Light Industrial per the City of San Jose 2040 General Plan and the Alviso Master Plan consisting of 64.5 acres. The Project address is 1657 Alviso-Milpitas Road, San Jose, CA. The applicant proposes a data center with two single story buildings approximately 396,914 gross square feet (sq. ft.), paved parking, 224 (0.45-MW) natural gas generators for utility outages, two Tier 4 diesel generators, a new onsite 115-kilovolt (kV)substation connected to the existing PG&E's Los Esteros Substation, and "offsite infrastructure alignment areas" (Figure 1). Moreover, to provide power to the Project, the existing Los Esteros Substation will include two new 115 kV underground 1,100-foot-long cables that connect to the new SJDC Substation, which is in the northwestern corner of the project site. Two new independent PG&E natural gas pipelines will be approximately 75 feet in length from the project's boundary to the existing PG&E gas line at Alviso-Milpitas Road.

The construction of the project will be approximately 17 months which will "begin in the 4th quarter of 2022, with completion in the 1st quarter of 2024" and includes the offsite infrastructure alignment areas (SJDC DEIR, p.3-13). The duration of construction including staging for the transportation improvements at Zanker Road and Nortech Parkway with a bike trail extension will be about 8 months. The project will be testing for maintenance diesel and gas generators "biweekly for approximately 20 minutes" (SJDC DEIR, p. 3-16). Moreover, the operation of the data center proposes participation in PG&E's Base Interruptible Program (BIP) (SJDC DEIR, p. 3-16)[16]. This Program would require the Project to use natural gas generators and disconnect from the PG&E electrical grid. The applicant provided air emission analysis for 500 hours of operation for "resource load shedding and behind-the-meter RA purposes and reflects 15 minutes of uncontrolled emissions" (SJDC DEIR, p. 3-16; Jacobs 2021o, 3.3 Air Quality, pg. 3.3-15).

B-3

Thus, the environmental impacts of the proposed project (§15124) must also include the offsite infrastructure alignment areas as well, and not only the footprint of the project site.



[16] See Jacobs 2021o, 3.3 Air Quality, p. 3.3 -15 for air emission analysis (include letter from CARB data centers

Figure 1: The Microsoft San Jose Data Center Project includes the footprint and the offsite infrastructure improvements (SJDC DEIR, p.3-3).

Title VI Civil Rights and ENVIRONMENTAL JUSTICE Executive Order 12898 (SJDC DEIR, pp. 4.21-1 to 4.21-25)

Although the CEC staff had a meeting with Mr. Mark Espinoza from the Organización de Comunidad de Alviso and Ada Márquez (TN# 236718) and provided numerous comments to share their concerns (TN# 240572, 240562, 240189, 236959), the Microsoft SJDC DEIR did not include an EJ environmental impact analysis of the community of Alviso. The Project is located within the City of San Jose's Alviso Master Plan and within the six-mile radius (Figure 2). Furthermore, the Project's offsite infrastructure areas has a construction phase of seven months which is less than one mile away (Figure 11). The impact analysis must also include the census tract within the Alviso Master Plan.

B-4

The Alviso community includes the George Elementary School, a city park, a County of Santa Clara Marina Park, a community center, and other amenities. George Mayne Elementary School's address is 5030 North 1 Street, Alviso, CA 95002, Census Tract 6085504602 with a population of approximately 2,355. OEHHA's methodology for geographic scale is at the census tract level and used by the CalEPA. The Alviso community triggers the threshold for SB1000, SB535 Disadvantaged Communities, AB 1550 Low-Income, and AB 617 (Figure 3). However, this census tract has an overall Pollution Burden of 82% The demographics include Hispanic 58.9%, White 20.2%, African American 5.2%, Native American 1.5 %, Other 0.3%, and Asian American 13.8%. Approximately 73.8% of the residents in Alviso are between 10-64 years old. Later this year, an update to the U.S. EPA's (2015) *Guidance on Considering Environmental Justice During the Development of Regulatory Action* will be available.[17] Alviso has an 84.08% Pollution Burden (Figure 4).

The SJDC DEIR omitted an EJ analysis for Alviso, a vulnerable and low socio-economic status (ses) community per the Cal EPA and U.S. EPA. Therefore, the SJDC DEIR lacks substantial evidence that this project will not have significant effects on the health and environment of the Alviso community (census tract 6,085,504,602.00).[18] The SJDC Project is located within the same census tract as the Alviso community. Note: The SJDC DEIR in the text uses "census blocks", but Table 4.21-3, Table 4.21-4, and Table 4.21-5 uses "census tracts", please use consistent units. This letter provides U.S EPA EJSCREEN maps incorporating data layers from the U.S. EPA, CalEPA, OEHHA, CA ARB, and the BAAQMD (Figure 5, Figure 6, Figure 8, and Figure 7).

B-5

[17] EJ 2020 Action Agenda: EPA's Environmental Justice Strategy | US EPA 2020 EJSCREEN User Guide 2020 by U.S. EPA)[17]
[18] EJSCREEN (epa.gov)

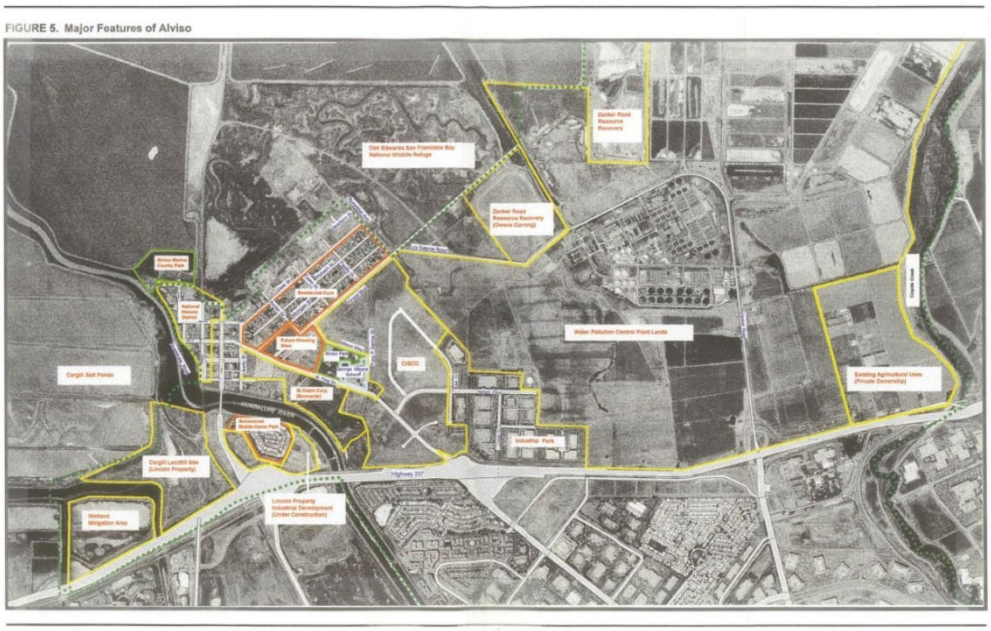


Figure 2: Major Features of Alviso Master Plan (City of San Jose, p. 11)[19]

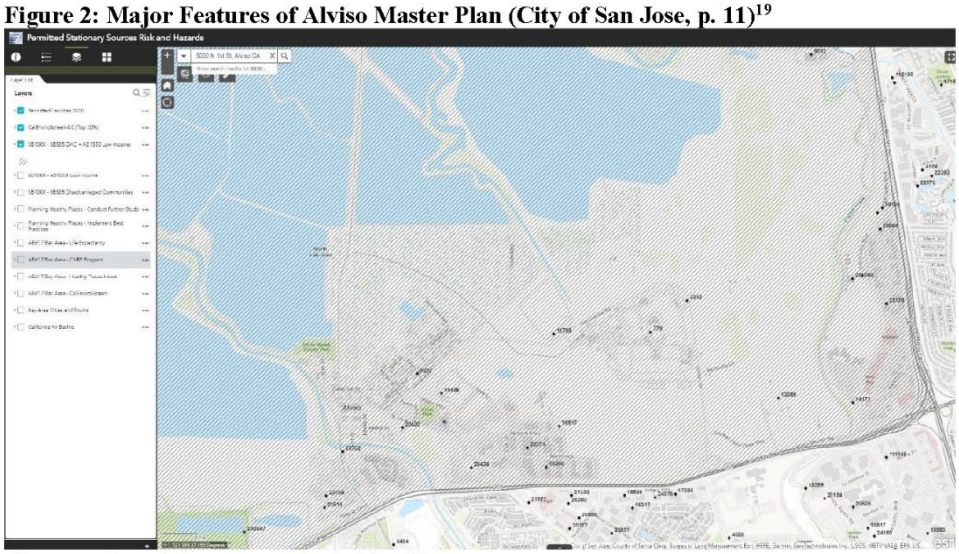


Figure 3: The Alviso community is identified per SB 1000+SB535+AB1550 (Source: BAAQMD, by Márquez, 2022).

[19] Specific Plans | City of San Jose (sanjoseca.gov)

B-5 continued

6

Figure 4: Alviso has an 84.08% Pollution Burden (U.S. EPA EJSCREEN Map by Márquez, 2022).

Figure 5: Alviso is identified as "Moderate Social Vulnerability" for climate change impacts (U.S. EPA EJSCREEN Map by Márquez, 2022) .

B-5 continued

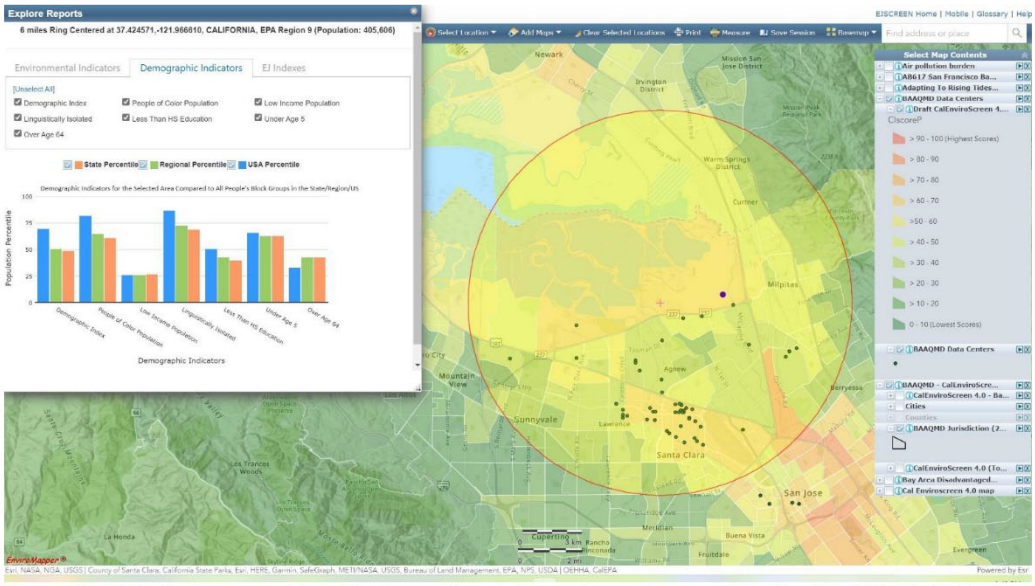


Figure 6: Alviso's demographic indicators with existing data centers permitted by BAAQMD (U.S. EPA EJSCREEN Map by Márquez, 2022).

B-5 continued

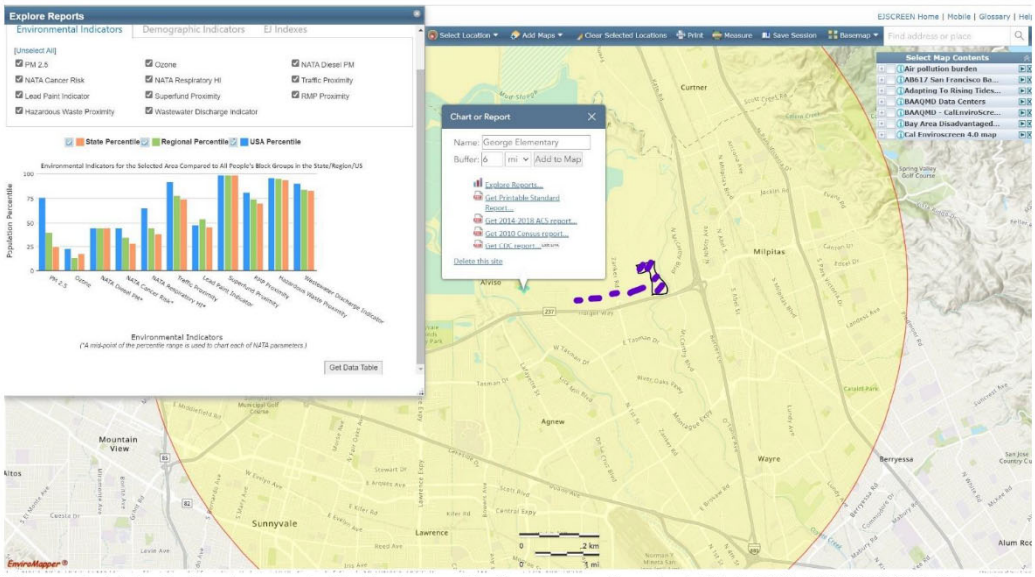
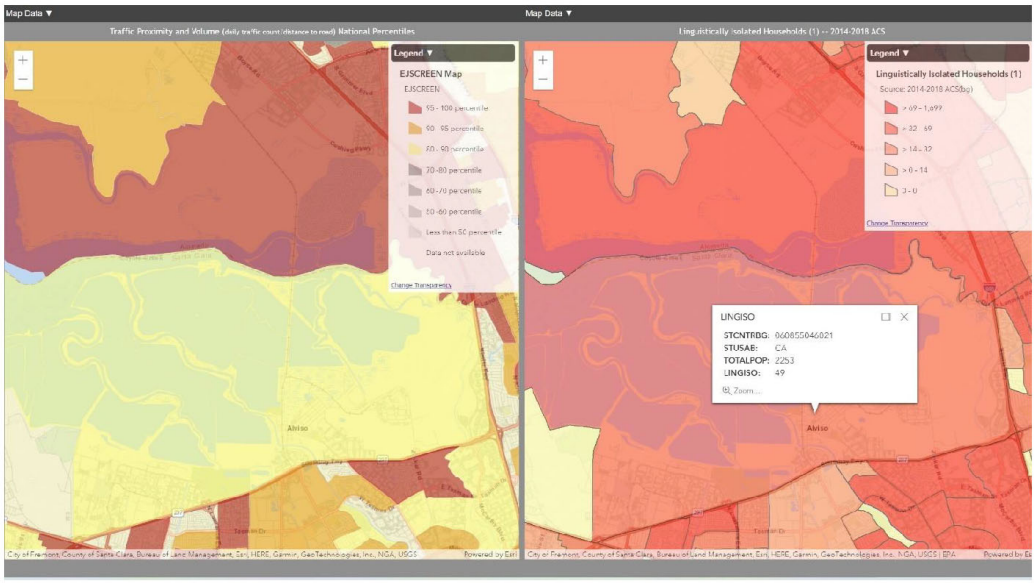


Figure 7: Alviso's Environmental Indicators with the proposed project (U.S. EPA EJSCREEN, Map by Márquez, 2022).



B-5 continued

Figure 8: Alviso Map with Traffic volume and linguistically isolated data (U.S. EPA EJSCREEN Map by Márquez, 2022).

AIR QUALITY (SJDC DEIR, pp. 4.3-1 to 4.3-54)

B-6

The SJDC DEIR applies the BAAQMD thresholds of significance for the air quality analysis. As noted in the NOP comment letter (TN# 236959), these thresholds were adopted in 2010 which complied with the 2010 Clean Air Plan. The BAAQMD CEQA Air Quality Guidelines (May 2017) states on the cover:[20]

> "**Note: This May 2017 version of the Guidelines includes revisions made to the Air District's 2010 Guidelines to address the California Supreme Court's 2015 opinion in Cal. Bldg. Indus. Ass'n vs. Bay Area Air Quality Mgmt. Dist., 62 Cal.4th 369**. The May 2017 CEQA Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The Air District is currently working to update any outdated information in the Guidelines. Please see the CEQA webpage at http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa for status updates on the Air District's CEQA Guidelines or contact Jaclyn Winkel at jwinkel@baaqmd.gov for further information."

Moreover, the BAAQMD guidelines were never updated from URBEMIS to CalEEMod.[21] The BAAQMD adopted the 2017 *Clean Air Plan: Spare the Air, Cool the Climate* to comply with

[20] BAAQMD CEQA Guidelines - May 2017
[21] Download Model (aqmd.gov)

California's 2030 and 2050 GHG's reduction targets, and more protective public health strategies[22] Most importantly, the 2017 Clean Air Plan includes control measures that will reduce approximately 4.4 million metric tons of GHGs CO_2 equivalent basis per year by 2030; and 5.6 MMT based on 20-year global warming potential factors. Since the 2010 adoption of BAAQMD's CEQA Air Quality Thresholds and Guidelines, significant updates to the CEQA Statutes and Guidelines (Public Resources Code 21000-21189) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387), case law, regulatory standards. and scientific methodologies for avoiding and/or mitigation measures (Appendix A Air Quality). Although the BAAQMD provides CEQA comment letters[23]for air quality and greenhouse gas emissions analysis, lead agencies cannot legally implement them unless the thresholds and mitigation measures are included in the adopted BAAQMD CEQA thresholds.[24] A random sample of approved CEQA documents from the Fall of 2019 to most recent, revealed that many lead agencies disregarded the BAAQMD's CEQA comments if they are not in the Air District CEQA Guidelines, for example AB 617 and SB 1000[25]. Unlike *§15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions*[26] *and §15126.4(c) Consideration and Discussion of Mitigation Measures Related to Greenhouse Gas Emissions*[27], air quality does not have a separate CEQA discussion and mitigation. However, CEQA Guidelines Appendix G Environmental Checklist Form Air Quality states: *II. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.* Pursuant to California Health and Safety Code Section 40200, "Bay Area Air Quality Management District" means the air quality agency for the San Francisco bay area. For example, the City of San Jose adopted the 2030 Greenhouse Gas Strategy to comply with the CEQA GHGs section, but legally relies on the BAAQMD's CEQA Air Quality Thresholds and Guidelines. To illustrate the importance: Per the City of San Jose's Ordinance Chapter 11.105 Transportation Demand Management, employers with 100 or more employees at a work site must comply with the BAAQMD's Rule 1, Regulation 13.[28] Additionally, the City of San Jose's 2040 General Plan specifically includes air quality goals[29] and requires new development to comply

B-6 continued

[22] Current Plans (baaqmd.gov)

[23] Comment Letters (baaqmd.gov); Reg 2 Permits (baaqmd.gov) , Public Hearings (baaqmd.gov), and Rules Under Development (baaqmd.gov) ; Furthermore since 2010, the BAAQMD has adopted important regulations and amendments such as, Regulation 2, Rule 2-301, Regulation 11, Rule 18, Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Amended 2021), Final Air District Health Risk Assessment Guidelines (Updated 12/15/2021), etc.

[24] §15064.7 Thresholds of Significance and §15126.4 Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects

[25] General Plan Guidelines and Technical Advisories - Office of Planning and Research

[26] §15064.4 "(c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change."

[27] Local Government Actions for Climate Change | California Air Resources Board Portal map shows local government climate action planning

[28] Chapter 11.105 - TRANSPORTATION DEMAND MANAGEMENT | Code of Ordinances | San Jose, CA | Municode Library

[29] Not included in the SJDC DEIR (2021): MS-11.3 Review projects generating significant heavy duty truck traffic to designate truck routes that minimize exposure of sensitive receptors to TACs and particulate matter. MS-11.4 Encourage the installation of appropriate air filtration at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources. MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses. Goal MS-13 – Construction Air Emissions (Chapter 3 Environmental Leadership); MS-10.6, MS-10.7, MS-10, MS-11.3, MS-1.1, MS-2.2, MS-2.3, MS-2.8, MS-2.11, MS-3.1, MS-3.3, MS-14.4, LU-

with the BAAQMD CEQA Guidelines. The City of San Jose also has "non" CEQA disclosure[30] in DEIRs for new residential development located near TACs sources. The community of Alviso submitted an Environmental Appeal (CEQA comment letter) and a Permit Appeal to the City of San Jose for a Mitigated Negative Declaration (MND) of a proposed corporation yard/warehouse[31] with the California Attorney General's Bureau of Environmental Justice (Bureau) "*Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*".[32] The City of San Jose's response was that the City cannot legally require the CA Attorney's Warehouse Projects mitigation measures because it was not included in the City of San Jose's adopted BAAQMD's Air Quality CEQA Guidelines (2017). Many communities in the Bay Area with environmental justice impacts do not have the financial resources to hire environmental attorneys to review CEQA documents.

It is commendable that the BAAQMD is in the process of preparing CEQA GHG Thresholds and Guidelines; however, except for the stationary source thresholds, their effort is redundant of existing government resources.[33] Vulnerable communities are in desperate need of updated air quality thresholds to address local cumulative impacts. Although AB 617[34] is in its fourth year, this law will not reach its fullest effectiveness of protecting health and reducing air toxics exposure until the air quality thresholds are updated and guidelines in the Bay Area are available[35] [36] Simultaneous co-benefits can occur upon updating the air quality thresholds such as, reducing criteria pollutants (reduces ozone precursors- (ROG and NOx) (Clean Air Plan 2017, p.2/4); therefore, potentially reducing GHG emissions as well.

B-6 continued

1.1, LU-1.2, LU-1.3, LU-1.7, LU-3.5, LU-5.1, LU-9.1, LU-9.3, LU-10.3, LU-10.4, TR-1.1, TR-1.2, TR-1.3, TR-4.1, TR-4.3, and TR-9.1. EC-6.4, EC-6.6, EC-6.8, EC-6.9, EC-7.2, EC-7.4, EC-7.5, EC-7.8, and EC-7.10.

[30] To address Cal. Building Industry Association vs. Bay Area Air Quality Mgmt. Dist., 62 Cal.4th 369

[31] 1436 State Street Project Initial Study/Mitigated Negative Declaration **FILE NOS: H21-049 (FORMERLY SP18-058) AND ER21-110)**

[32] Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

[33] General Plan Guidelines - Chapter 8 (ca.gov) Climate Change; 2017 Scoping Plan Documents | California Air Resources Board; 2017 Scoping Plan, Appendix B Local Action ; 2030 Scoping Plan, Appendix C Vibrant Communities and Strategies to Reduce VMT (ca.gov); SB 743 §15064.3 Determining the Significance of Transportation Impacts

[34] Assembly Bill (AB 617) requires air districts and communities with disproportionate impacts from air pollution to adopt and implement a community emissions reduction plan. The cumulative exposure to air pollutants has a significant impact to human health, especially to sensitive receptors. The District adopted the West Oakland Community Action Plan (2019) which analyzed the sources, PM2.5, diesel PM, and toxic air contaminants (TACs) emissions to develop an integrated multi-pollutant plan to eliminate air pollution disparities and protect public health. Prior to AB 617, the District's air toxics program was established to address the adverse health effects from exposure to TACs. The Community Air Risk Evaluation (CARE) Program identified areas in the Bay Area with high levels of air pollution, to reduce local health impacts, and develop strategies to protect health. Regulation 11, Rule 18: Reduction from Air Toxic Emissions at Existing Facilities adopted in 2017, requires screening analyses for facilities, HRA's, and require Best Available Retrofit Control Technology for significant sources of TAC pollutants.

[35] The scientific evidence of air pollutant levels below government thresholds impacting public health is well documented across various disciplines (public health, environmental health sciences, environmental engineering, toxicology, epidemiologist, etc.); which the District held a symposia on October 28, 2019. Dr. Christopher Frey's presentation made the compelling argument that the current standards for $PM_{2.5}$ annual and 24-hour standards are not adequate to protect public health. https://www.baaqmd.gov/news-and-events/conferences/pm-conference ; ac_particulate_matter_reduction_strategy_report.pdf (baaqmd.gov)

[36] 'The Jury's Out': Is California's Landmark Environmental Justice Law Helping Communities With the Dirtiest Air? | KQED ; Fighting for justice in California's polluted places - CalMatters ; Why isn't California's signature environmental justice law working? | Grist

The adoption of an updated air quality thresholds with the most current guidance, mitigations[37], and methodologies e.g., health, implementation of AB 617 strategies for communities not yet selected for funding (i.e., San Jose) are important for consistency, transparency, and environmental equity. Historically, the BAAQMD CEQA Air Quality Guidelines was the standard to emulate and provided an analytical tool for the public and not just accessible for paid consultants. The current BAAQMD's CEQA Guideline Update web page does not include any information about future updates to the air quality thresholds or guidelines.

B-6 continued

Significance Criteria: The SJDC DEIR (p.4.3-22) discussion pertaining to sensitive receptors and health impacts from criteria pollutants is erroneous.[38] The Sacramento Metro Air District published the *Guidance to Address the Friant Ranch Ruling for CEQA*[39]which will assist the CEC Staff, The analysis is inadequate and does not comply with current case law. *§15064 (b)(1) "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area." §(2) Compliance with the threshold does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant."*

B-7

Environmental Setting:
The SJDC DEIR omitted air quality data for the City of San Jose and Santa Clara County. Therefore, this CEQA comment letter establishes the air quality baseline conditions to provide decision-makers the "most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts" (§15125).

Per CEQA, the CEC Staff must also use the Envision San Jose 2040 General Plan Draft Program EIR Technical Appendix D Air Quality Existing Conditions Report.[40] Moreover in 2019, the BAAQMD published a fine particulate matter data analysis of the San Francisco Bay Area to comply with AB 617. The City of San Jose in 2016 had the "highest Bay Area annual average $PM_{2.5}$ concentration (9.2 $\mu g/m^3$)" (p.7) (Table 1) .[41]

B-8

[37] §15126.4 (A) There must be an essential nexus (i.e., connection) between the mitigation measure and a legitimate governmental interest. *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987); and
(B) The mitigation measure must be "roughly proportional" to the impacts of the project. *Dolan v. City of Tigard*, 512 U.S. 374 (1994). Where the mitigation measure is an *ad hoc* exaction, it must be "roughly proportional" to the impacts of the project. *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.

[38] 2108 *Sierra Club v. County of Fresno*, 6 Cal.5th 502 (Friant Ranch)

[39] CEQA Guidance & Tools (airquality.org)

[40] https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/completed-eirs/envision-san-jose-2040-general-plan-4-year/envision-san-jos-2040-general-plan

[41] *Fine Particulate Matter Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617* (BAAQMD, 2019). baaqmd_2016_pm_modeling_report-pdf.pdf *Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617* (BAAQMD, 2019). baaqmd_2016_toxics_modeling_report-pdf.pdf

Table 1: "PM stations in the 1-km modeling domain with their annual and quarterly average $PM_{2.5}$ values" (BAAQMD, 2016, p,7).

Table 2.1: PM stations in the 1-km modeling domain with their annual and quarterly average $PM_{2.5}$ values.

Station Name	$PM_{2.5}$ Averages (µg/m³) for 2016				
Stations in the Bay Area	ANNUAL	QTR_01	QTR_02	QTR_03	QTR_04
Berkeley Aquatic Park	7.2	--[a]	--[a]	7.7	6.6
Concord	6.2	6.0	4.3	4.6	9.4
Gilroy	5.7	5.9	6.1	6.8	4.1
Laney College	8.8	8.9	9.4	8.7	8.1
Livermore	7.6	7.4	7.2	8.4	7.3
Napa	8.9	6.5	7.2	10.4	11.1
Oakland	6.2	5.2	5.9	6.4	7.2
Oakland West	8.7	9.6	8.9	7.6	8.6
Redwood City	8.7	6.8	10.3	10.6	6.7
San Francisco	7.8	8.5	8.1	5.9	8.4
San Jose - Jackson	8.3	8.0	8.0	8.8	8.4
San Jose - Knox Avenue	9.2	9.0	8.6	9.9	9.2
San Pablo	8.1	7.6	8.9	7.8	8.2
San Rafael	6.6	7.0	6.1	5.9	7.1
Sebastopol	5.1	4.9	4.6	4.0	6.5
Vallejo	7.6	8.4	5.6	6.0	10.2
Stations outside the Bay Area					
Manteca	9.9	10.8	7.5	8.8	12.3
San Lorenzo Valley Middle School	5.3	5.4	5.2	4.7	5.8
Roseville - N Sunrise Ave	6.8	6.7	5.7	6.7	8.3
Sacramento Health Department - Stockton Blvd.	6.9	7.8	5.7	6.6	8.3
Sacramento - 1309 T Street	7.6	7.2	5.6	7.1	10.9
Sacramento - Bercut Drive	--[a]	--[a]	--[a]	--[a]	14.6
Sacramento - Del Paso Manor	8.7	8.6	6.1	7.2	13.2
Santa Cruz	5.4	5.8	5.9	5.3	4.5
Stockton - Hazelton	11.8	13.9	8.2	10.0	15.2
Woodland - Gibson Road	6.3	5.2	5.4	8.1	6.9

[a]Data missing or invalidated.

B-8 continued

13

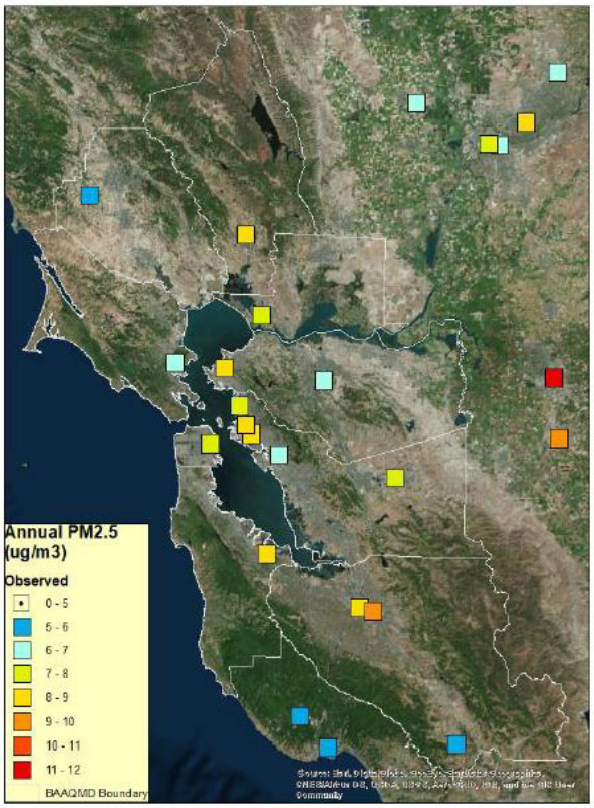


Figure 2.1: Spatial distribution of observed annual average $PM_{2.5}$ concentrations for 2016 within the 1-km modeling domain.

Figure 9: "Spatial distribution of observed annual average $PM_{2.5}$ concentrations for 2016 within the 1-km modeling domain" (BAAQMD, 2016, p. 8)

B-8 continued

Table 2: "Summary of $PM_{2.5}$ anthropogenic emissions (tpd) by geographic area and source sector" 2016 (BAAQMD, 2016, p. 13)

Table 3.2: Summary of 2016 $PM_{2.5}$ anthropogenic emissions (tpd) by geographic area and source sector.

Geographic Area	Area	Nonroad	Onroad	Point	Total
Alameda	3.0	0.5	1.4	1.3	6.2
Contra Costa	3.1	0.5	0.8	4.2	8.7
Marin	0.8	0.2	0.2	0.1	1.3
Napa	0.8	0.2	0.1	0.1	1.2
San Francisco	1.2	1.0	0.3	0.1	2.7
San Mateo	1.4	0.5	0.5	0.4	2.7
Santa Clara	3.9	0.6	1.3	0.7	6.5
Solano[a]	1.3	0.1	0.3	0.5	2.1
Sonoma[a]	1.4	0.3	0.3	0.2	2.2
BAAQMD Subtotal	*17.0*	*3.9*	*5.2*	*7.5*	*33.7*
Non-BAAQMD Counties	23.7	2.2	2.9	2.4	31.2
Domain Total	**40.7**	**6.1**	**8.0**	**9.9**	**64.9**

[a]Emissions totals for Solano and Sonoma counties only include the portion of those counties in BAAQMD's jurisdiction.

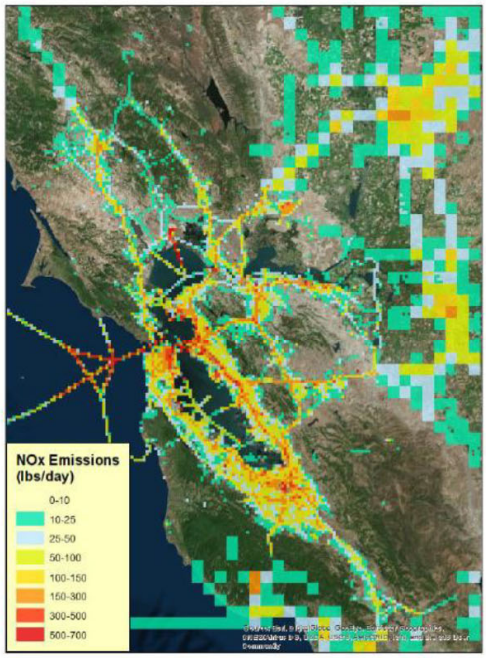


Figure B3: Spatial distribution of annual average NO_x emissions for the 1-km modeling domain.

Figure 10: "Spatial distinction of annual average NOx emissions for the 1-km modeling domain.

B-8 continued

Sensitive Receptors (SJDC DEIR, pp.4.3-12 to 4.3-14 did not include the Alviso community)
The applicant used only the project footprint to measure the outside 1,000-foot zone of influence for environmental impact analysis. Per §15126 "all phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation". The impacts from offsite infrastructure improvements areas to sensitive receptors must also be included in the air quality analysis. As documented in the CEC Docket, Alviso residents expressed numerous concerns about the impacts to the George Mayne Elementary School and residential area of Alviso (Figure 11). The applicant must include the Alviso community's sensitive receptors which are located within the Alviso Master Plan. To fully disclose the cumulative impacts within Alviso, the CEC Staff must provide a map with different sizes of radius, for example at 500 feet, 1,000 feet, 1,500 feet, 2,000 feet, etc.

B-9

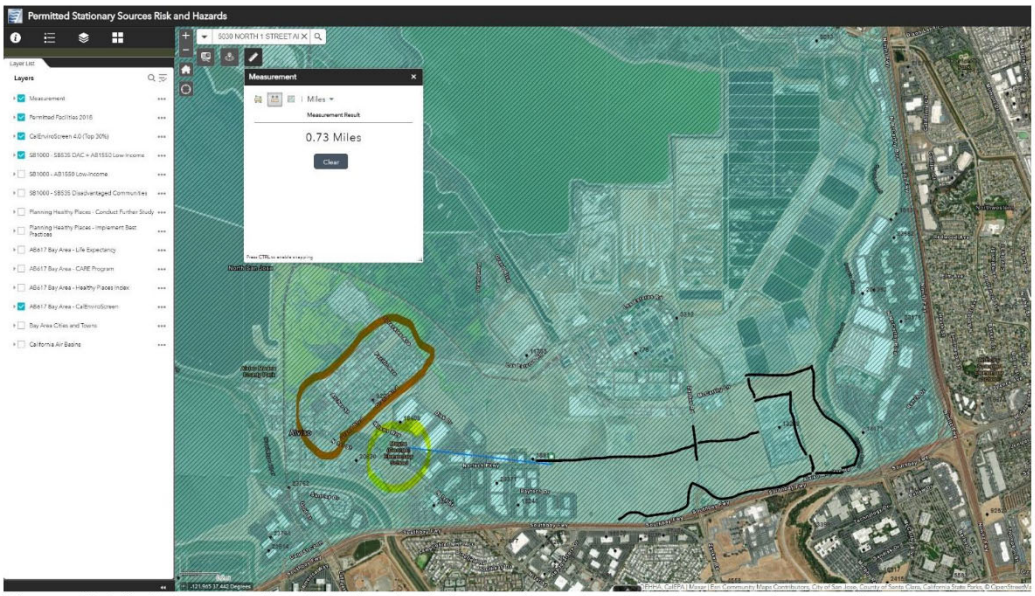


Figure 11: The Microsoft SJDC Project includes the footprint of 64.5 acres and areas of infrastructure improvements. (Source: BAAQMD, Map created by Márquez, 2022)

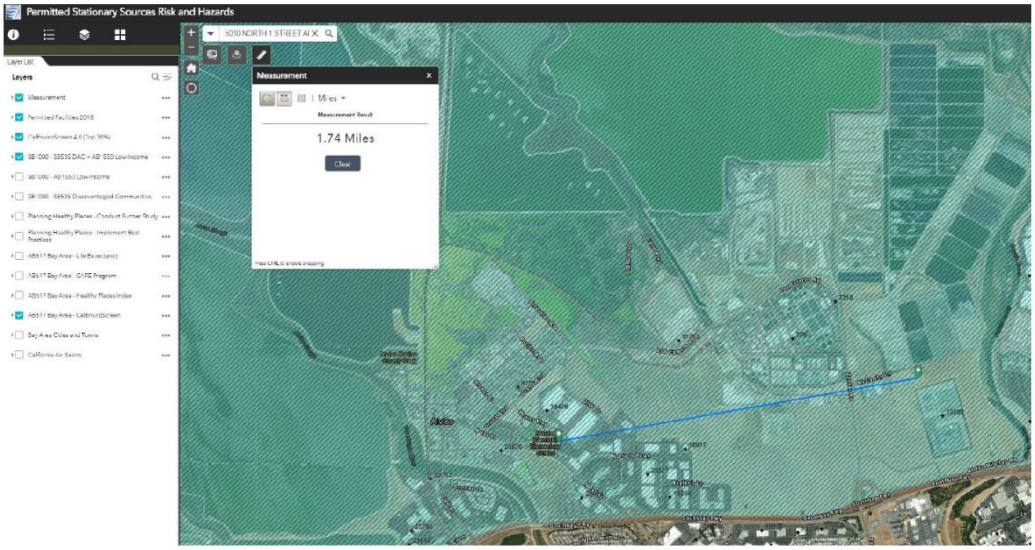


Figure 12: The primary project entrance for the Microsoft SJDC Project to George Mayne Elementary School (Source BAAQMD, Map created by Márquez, 2022).

B-9 continued

a. Applicable Clean Air Plan: The DEIR states that the Project would be less than significant impact per the BAAQMD's Bay Area 2017 Clean Air Plan. The DEIR analysis does not provide substantial evidence that it would not be significant. The Clean Air Plan's 85 control measures with specific actions to reduce air and climate pollutants is comprehensive. Complying with the BAAQMD's permitting process is insufficient. The Applicant did not provide evidence for an exception from the City of San Jose's Greenhouse Gas Strategy; therefore, the impact is significant.

B-10

b. Cumulatively considerable net increase of any criteria pollutant for construction and operation

The project will have 224 natural gas-fired engine-generators, two certified Tier 4 diesel engine generators, mobile sources, emissions associated with the buildings, a new substation on the project site; and to provide power to the Project, two new 115 kV underground 1,100-foot-long cables will connect from the new SJDC Substation to the existing Los Esteros Substation.

Missed Impacts: The analysis did not include an analysis of the criteria pollutants with the emissions associated with the Los Esteros Power Plant. The CalEEMod Version provided by the applicant (e.g., TN#239419) used the 2016.3.2 version instead of the CalEEMod Version 2020.4.0.[42] In addition, to address further air quality analytical inadequacies of the SJDC DEIR, comments from CARB are provided (Appendix B).[43]

B-11

[42] Download Model (aqmd.gov)
[43] (#TN235271) Sequoia Data Center

In addition to the impacts from criteria pollutants, energy and greenhouse gas impacts are also significant per the City of San Jose's Natural Gas Infrastructure Prohibition Ordinance[44] which was approved to comply with the City of San Jose's Climate Action Plan (Greenhouse Gas Strategy) and with the State's Scoping Plan. The Project applicant submitted an exception; however, the DEIR has no evidence of approval by the City of San Jose. The CEC staff cannot assume that the City of San Jose will grant approval. Therefore, the impacts for criteria air pollutants, energy, and greenhouse gas are significant per the City of San Jose Climate Action Plan and Scoping Plan.[45]

B-11 continued

c. Impacts to Sensitive Receptors (SJDC DEIR, pp. 4.3-31 to 4.3-48)
Air Quality Impact Analysis (AQIA) for Criteria Pollutants and Health Risk Assessment HRA for Toxic Air Contaminants (Construction, Operation, and Cumulative)
As a concerned citizen, I disagree that the air quality and health impacts are less than significant for the following facts:

- The Sacramento Metro Air District published the *Guidance to Address the Friant Ranch Ruling for CEQA*[46]. The CEC Staff analysis is inadequate and does not comply with current case law.
- The CEC staff did not include the community of Alviso in the SJDC DEIR analyses. The SJDC does not provide an adequate environmental and health baseline conditions for the community of Alviso. In addition, the link between air pollution and COVID deaths and other existing health data must be included[47]. Please contact the County of Santa Clara Health Department for the most updated health/demographic information for COVID patients by zip codes or census tracts.

- The CEC staff did not disclose that City of San Jose has AB 617 protected communities; the Alviso community is located within the same census tract as the proposed Microsoft Project; and vulnerable communities are legally protected per SB 1000, SB535, and AB1550.
- *§15064 (b)(1) "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area." §(2) Compliance with the threshold does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant."* See above comments in Environmental Justice for evidence.
- The CEC staff did not include an analysis of impacts to sensitive receptors within 1,000 feet of construction activity, the truck routs, and location of equipment for staging areas for the offsite infrastructure improvement areas.

  "Modeling Assumptions. The applicant grouped the emission sources for the construction site into two categories: exhaust emissions and dust emissions. The applicant modeled the

B-12

[44] SAN JOSE REACH CODE | City of San Jose (sanjoseca.gov)
[45] 2017 Scoping Plan Documents | California Air Resources Board
[46] CEQA Guidance & Tools (airquality.org)
[47] Fine particulate matter and COVID-19 mortality in the United States (harvard.edu) Wu, X., Nethery, R. C., Sabath, M. B., Braun, D. and Dominici, F., 2020. Air pollution and COVID-19 mortality in the United States: Strengths and limitations of an ecological regression analysis. *Science advances,* 6(45), p.eabd4049.

combustion equipment exhaust emissions as 437-point sources with horizontal releases placed at regular intervals around the site. The applicant modeled the construction fugitive dust emissions a single area source covering the site with an effective release height at ground level (Jacobs 2021aa)." (TN# 240407). (SJDC DEIR, p. 4.3-32)

- The analysis of the effects of construction at the "offsite infrastructure alignment areas were not completed by the applicant because *"Although some of the demolition, excavation, and construction activities would occur offsite in proximity to the project, all emissions were modeled as being released from the project site due to the temporary nature of the offsite emissions (Jacobs 2021o, pg. 3.3-29)."*(SJDC DEIR, p. 4.3-38)

B-12 continued

- The construction analysis and mitigations measures are required for the entire Project, including all offsite infrastructure improvements. Moreover, the project must include an analysis as shown in the yellow highlighted areas. as well (Figure 14). CEQA requires to analyze environmental effects of the project: short-term, long-term, direct, in-direct, cumulative, significant irreversible, and/ or evaluate exacerbating hazards by locating the development within a hazardous area §15126.2(a).
- The modeling assumptions for construction workers and the location of sensitive receptors are erroneous. The impact analysis must also include the community of Alviso and George Mayne Elementary School. The analysis did not disclose and analyze the truck routes for construction and project operations, and of the tanker trucks when refueling the backup generators at the SJDC (Figure 13).

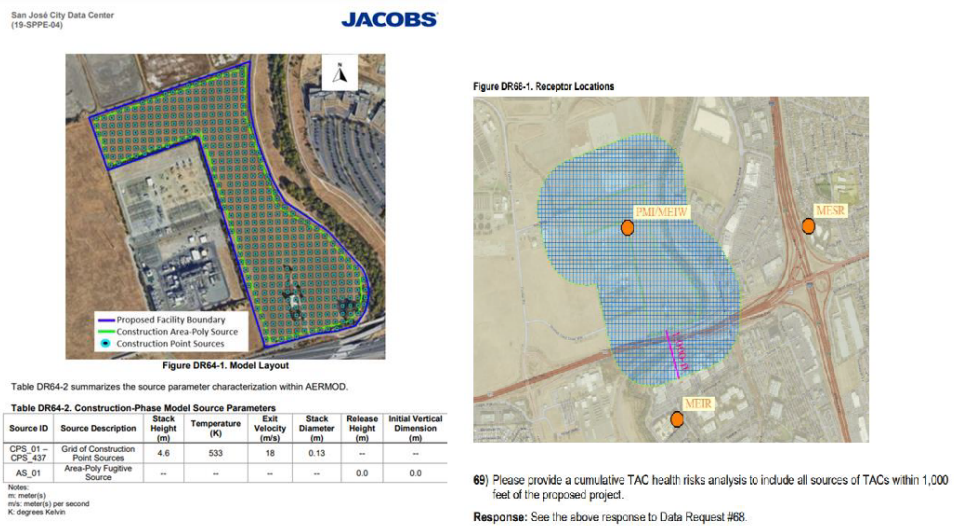


Figure 13: The applicant's modeling provided by Jacobs (TN# 240407), p.4 and (TN#240082), p.5 (2021) .

- The HRA does not comply with the most current Air District Risk Assessment Guidelines.[48]
- The CEC staff did not use the BAAQMD Air Quality Data (TN#237463, submitted on 4/15/2021) for the PMI, MESR, MEIW, MEIR, and the mobile health risk for 2014 (Table 3).
- To provide power to the Project, it will have two new 115 kV underground 1,100-foot-long cables that will connect from the new SJDC Substation to the existing Los Esteros Power Plant Facility, the HRA must analyze the health impacts of existing conditions plus the proposed Project (Figure 15).
- Please provide the total number of existing Data Centers within a six-mile radius of the community of Alviso and within the city of San Jose. How many data centers is the CEC reviewing and approved within the last two years? According to online research: California has a total of 136 data centers. A total of 55 data centers are located within San Jose/Santa Clara County.
- The HRA did not include all stationary and mobile sources within the Alviso census tract which the Project is within a vulnerable community per the federal, state, and regional agencies.
- "CUMULATIVE IMPACTS

  A Lead Agency's analysis shall determine whether TAC and/or PM2.5 emissions generated as part of a proposed project would expose off-site receptors to risk levels that exceed BAAQMD's applicable Thresholds of Significance for determining cumulative impacts.

  A project would have a cumulative significant impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius (or beyond where appropriate) from the fence line of a source, or from the location of a receptor, plus the contribution from the project, exceeds the following:

  • An excess cancer risk levels of more than 100 in one million or a chronic hazard index greater than 10 for TACs; or

  • 0.8 µg/m3 annual average PM2.5. (BAAQMD CEQA Guidelines, 2017, p. 5-16)

B-12 continued

Consequently, air quality impacts to sensitive receptors are significant.

[48] https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-permits?rule_version=2021%20Amendments

Table 3: BAAQMD submission for Mobile Source Health Risk -YR2014 and Stationary Sources (TN#237463).

THRESHOLDS OF SIGNIFICANCE BASED ON CEQA GUIDANCE:

Local community risk and hazard impacts are associated with Toxic Air Contaminants (TACs) and fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less ($PM_{2.5}$) because emissions of these pollutants can have significant health impacts at the local level. If emissions of TACs or $PM_{2.5}$ exceed any of the Thresholds of Significance, a project would result in a significant impact.

	SIGNIFICANCE THRESHOLD (CUMULATIVE)
CANCER	100 in a million
AMBIENT PM2.5	0.8 ug/m^3

B-12 continued

RECEPTOR ID: PMI		37.4230326377571, 121.928701731414
	Type	Risk
Cancer	Highway	46.597
	Major Street	1.529
	Rail	0.648
PM2.5	Highway	0.909
	Major Street	0.037
	Rail	0.001

RECEPTOR ID: MESR		37.4225072385361, 121.90639731508
	Type	Risk
Cancer	Highway	15.808
	Major Street	1.648
	Rail	0.493
PM2.5	Highway	0.333
	Major Street	0.039
	Rail	0.001

RECEPTOR ID: MEIW		37.4230326377571, 121.928701731414
	Type	Risk
Cancer	Highway	46.597
	Major Street	1.529
	Rail	0.648
PM2.5	Highway	0.909
	Major Street	0.037
	Rail	0.001

RECEPTOR ID: MEIR		37.4185964451612, 121.927529766093
	Type	Risk
Cancer	Highway	15.178
	Major Street	2.193
	Rail	0.559
PM2.5	Highway	0.311
	Major Street	0.053
	Rail	0.001

B-12 continued

Permitted Facilities

FID	OBJECTID	FACID	Name	Address	City	St	Zip	County	Cancer (per million)	Hazard	PM_2.5 (ug/m3)	Type	Latitude	Longitude	x	y
1511	1,511	13289	Los Esteros Critical Energy Facility	800 Thomas Foon Chew Way	San Jose	CA	95134	Santa Clara	63.63	0.4	122.75	Turbine (5), Fire Pump (1), Boiler (4), Cooling Tower (1)	37.426	-121.933	-1.4E+07	4498686
1538	1,538	13399	KLA Tencor	Technology Drive	Milpitas	CA	95035	Santa Clara	84.53	0.16	0.35	Generator (6), Solvent Cleaning (4), Boiler (3)	37.419	-121.93	-1.4E+07	4497664
1936	1,936	14171	Pacific Gas and Electric	66 Ranch Drive	Milpitas	CA	95035	Santa Clara			0.0029	Natural Gas Generator (2)	37.426	-121.925	-1.4E+07	4498636
5020	5,020	21154	Fairfield Development, LP	501 Murphy Ranch Rd	Milpitas	CA	95035	Santa Clara	0.32	0	0	Generators	37.418	-121.928	-1.4E+07	4497552
7955	7,955	111148	McCarthy Ranch Chevron & Carwash	367 Cypress Dr	Milpitas	CA	95035	Santa Clara	0.03	0	0	Gas Dispensing Facility	37.421	-121.922	-1.4E+07	4498016

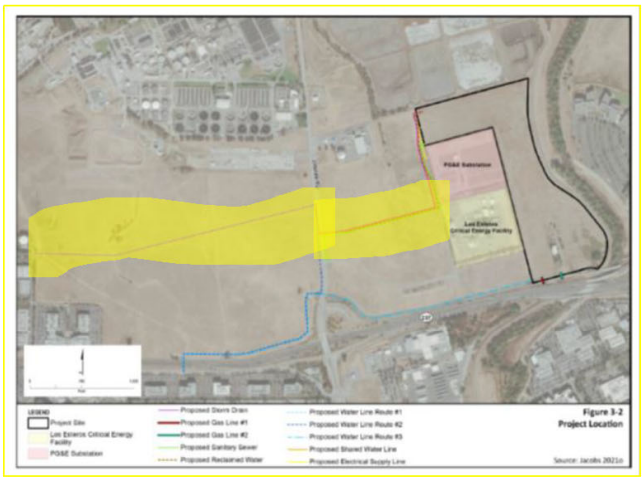


Figure 14: The yellow highlighted area was not included in the air impact analysis by the CEC Staff.

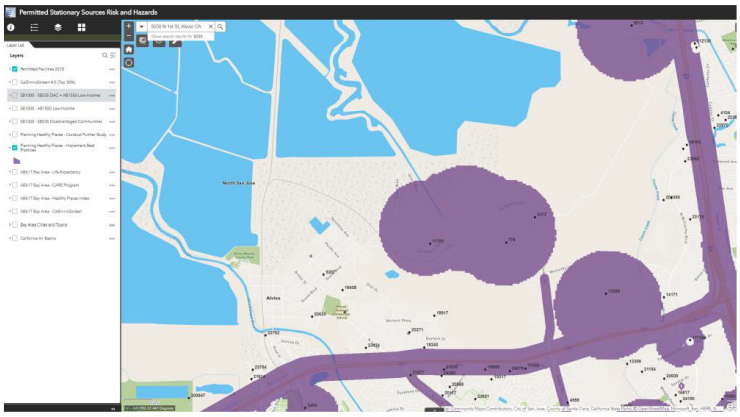


Figure 15: Areas within Alviso need to implement Best Practices per BAAQMD (Map by Marquez, 2022).

B-12 continued

BIOLOGICAL RESOURCES (pp. 4.4-1 to 4.4-37) (§15380, CA Migratory Bird Protection Act, The Bald and Golden Eagle Protection Act, CDFW code 1601-1603, 3503, 3503.5, 3513, 3800)
The Microsoft SJ Data Center offsite infrastructure alignment areas will run through the San Jose-Santa Clara Regional Wastewater Facility Bufferlands Management Area (Figure 16)[49] which provides habitat to numerous legally protected flora and fauna (Figure 16).[50] As noted in our NOP comment letter, Alviso is located adjacent to the San Francisco Bay Don Edwards Wildlife Refuge, a biological hotspot, and one of the few remaining locations for burrowing owls; and golden eagles recorded in the valley for the first time in 128 years. The DEIR failed to analyze and mitigate the impacts for the active golden eagle nest. The recommended buffer zones for nesting site of golden eagles in California, depending on human activities is from one mile to two miles (Appendix C) , U.S. Fish and Wildlife Service, 2020).[51] The construction phase of the proposed storm drain and proposed water line will have short-term, long-term, and cumulative, irreversible significant impacts to nesting and/or wintering burrowing owls (Figure 17 and Figure 18), golden eagles (Figure [52], and the congdon tarplant. The mitigation measures must include the entire project area, and not only the project footprint. The DEIR must also disclose the "alterations to ecological systems" §15126.2. The San Jose-Santa Clara Regional Wastewater Facility Bufferlands Management area are public lands; it belongs to the residents of San Jose. The SJ Data Center offsite infrastructure alignment areas are included in the project, Microsoft does not own these public lands. The current and future generations of San Jose residents and the community of Alviso are entitled to full disclosure and information of the cumulative loss of species and habitat (Figure 20). The CEC Staff must mitigate all areas of the project; therefore, the impacts are significant. The CEC Staff

B-13

[49] San José – Santa Clara Regional Wastewater Facility Construction Gives Wide Berth to Golden Eagles | Environmental Services News | City of San Jose (sanjoseca.gov)
[50] U.S. Fish and Wildlife Service: Final Environmental Assessment for the Issuance of a Short-Term Eagle Take Permit for SJ Wastewater Facility Headworks Improvements (2021).
[51] USFWS_PacificSouthwestRegion_GoldenEagle_NestBuffers_Oct_2020.pdf
[52] U.S. Fish & Wildlife Service - Migratory Bird Program | Conserving America's Birds (fws.gov)

should contact the biologists at the City of San Jose and the Santa Clara Valley Habitat Agency for adequate mitigation measures.[53]

B-13 continued

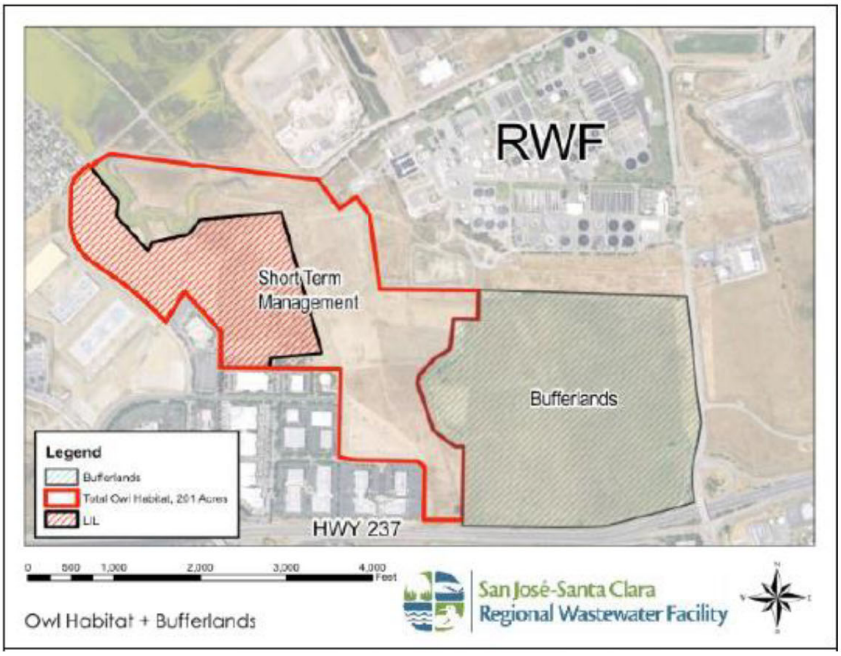


Figure 16: Burrowing Owl Management Area at the San Jose-Santa Clara Regional Facility (RWF).

[53] About Us | Santa Clara Valley Habitat Agency, CA (scv-habitatagency.org)

Figure 17: Observations during a survey for burrowing owls east of the burrowing owl management area within the Bufferlands/RWF facility on 9 November 2021 (Santa Clara Valley HCP).

Figure 18: Three single males inside a hacking enclosure during soft-release as part of the Juvenile Overwintering Project in February 2021 (Santa Clara Valley HCP).

B-13 continued

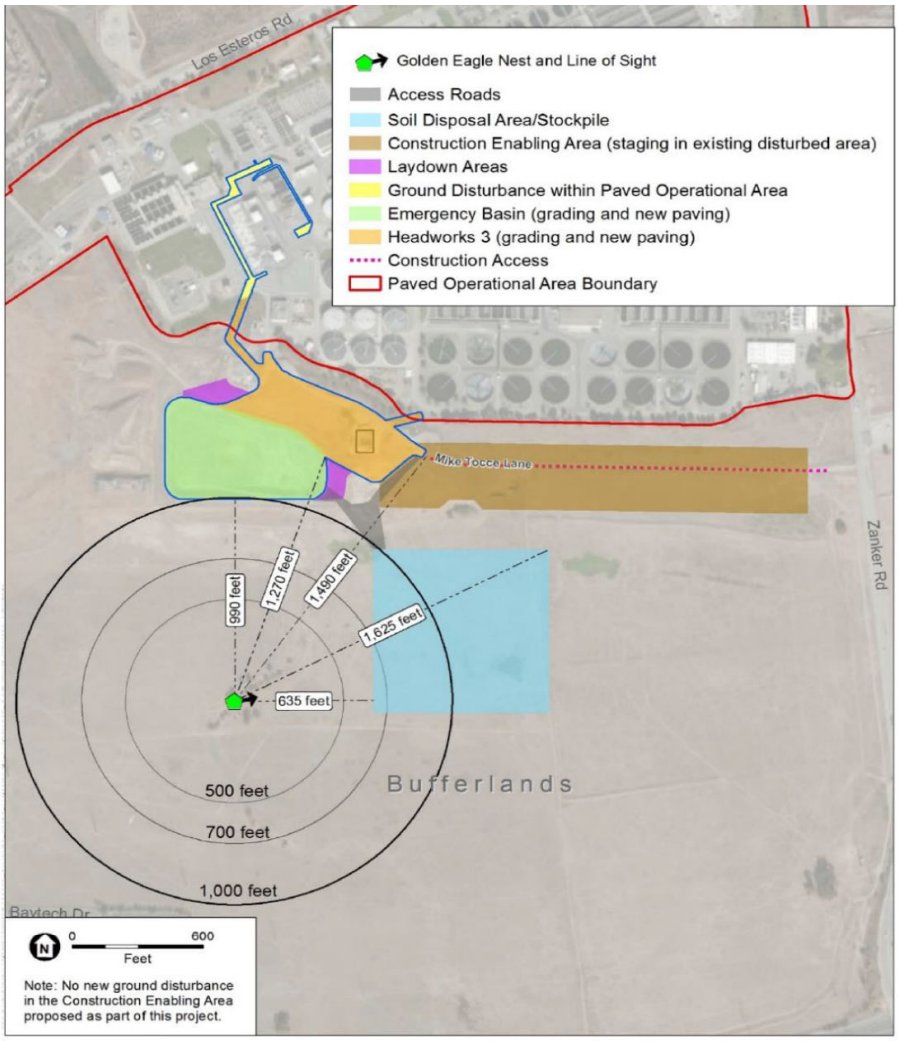


Figure 2. San José Headworks Improvements and New Headworks Project areas and golden eagle nest location and distance from project areas (Source: City of San José/ Environmental Science Associates)

ENVIRONMENTAL ASSESSMENT 5 SAN JOSÉ WASTEWATER FACILITY HEADWORKS IMPROVEMENTS

Figure 19 : The Microsoft SJDC Project will have direct impacts to golden eagles and burrowing owls.

B-13 continued

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B-13
continued

Figure 20: Since 2010, instructor Ada Márquez and students from SJSU's Department of Environmental Studies volunteer with field experts to enhance habitat for endemic flora and fauna in Alviso. Students constructed artificial burrows at the Bufferlands/RWF facility Habitat Management Area (Fall 2018). SJSU is a Minority Serving Institution (Hispanic, Asian American, and Native American Pacific Islander) per the U.S. Department of Education.[54]

[54] SJSU Institutional Information | Office of Research

§15065 Mandatory Findings of Significance[55] (2021) (SJDC DEIR, p.4.20-1)

(a) Biological Resources: This letter provides substantial evidence that biological resources were not adequately analyzed for short-term, long-term, direct, and indirect impacts. The Project's footprint and offsite infrastructure improvements will directly impact the City of San Jose's Bufferlands/RWF facility which is critical habitat for various species including the golden eagles. The analysis did not analyze the cumulative impacts of the loss of foraging habitat, interference in wildlife corridor movements, and effects of habitat fragmentation. The CEC Staff should contact the Santa Clara Valley Habitat Agency to obtain the most recent data for biological resources within the Project area. The DEIR also lacked to disclose the long-term impacts of ecological systems and the benefits of carbon sequestration due to climate change. Governor Newsom in October 2020 signed the Pathways to 30X30 (Executive Order N-82-20), to conserve 30% of lands and coastal waters by 2030. The City of San Jose's Bufferlands belong to the residents of San Jose, and not the Applicant Microsoft.

B-14

(b) Cumulatively considerable: The Project conflicts with the General Plan and the City of San Jose's Greenhouse Gas Strategy. The General Plan had many amendments and citing the General Plan's Program DEIR significant unavoidable impacts does not provide substantial evidence. For example, the CEC Staff did not include a list of past, current, and future projects within the Alviso Master Plan, a disadvantaged community per SB1000, AB 617, AB1550, and AB535. The aforementioned comments provide substantial evidence that this project will have significant impacts at the project level and cumulatively.[56] Per CARB's comments: "Compliance with laws and regulations should not be used exclusively to mitigate the Project's impact on air quality."; "implement all feasible mitigation measures to reduce the Project's

B-15

[55] (a) A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur:
(1) The project has the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.
(2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
(3) The project has possible environmental effects that are individually limited but cumulatively considerable. "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.
(4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

[56]

significant and unavoidable impact on air quality prior to implementing an offset program or paying into the Bay Area Clean Air Foundation."; not rely solely on existing regulations and off-site credits to mitigate the Project's air quality impacts. CEQA requires that all feasible mitigation measures be incorporated into the EIR before a lead agency can determine if an impact is still significant and unavoidable (see California Public Resources Code§ 21081; title 14 CCR § § 15092, 15126.2(b))." (Appendix B)

B-15 continued

(c) Substantial adverse effects on human beings, either directly or indirectly: The CEC Staff omitted the Project's environmental and health impacts to the Alviso community. The DEIR did not consider the children's health at George Mayne Elementary School and the future attendance at Santa Clara Unified School District's Agnews East School Campus Project SCH# 2018032018, located at 3500 Zanker Road, San Jose, CA. The HRA must be revised with the most current HRA guidelines. On behalf of the Alviso community, the CEC Staff should contact the experts at the BAAQMD (APPENDIX D) and CARB for air quality analysis.

B-16

The DEIR states that it would be too expensive to find an alternative location; yet the applicant Microsoft is one of the most successful companies on the planet. Microsoft committed in January of 2020 to become a carbon negative company by 2030 and by 2050 "remove from the environment all the carbon that Microsoft has emitted directly or through electricity use since the company was founded in 1975". The residents of San Jose and decision-makers must have full disclosure whether this environmental commitment will follow through in Alviso, as well. The CEC Staff, Commissioners, and Microsoft should develop an environmental justice and community benefits agreement with the families in Alviso. For example, convert the City of San Jose's WPCP/RWF Bufferlands to a permanent wildlife sanctuary, a climate change carbon sequestration area for adaptation and mitigation, PTA parent fellowships, retrofit George Mayne Elementary School to protect children's health, and university scholarships for the children of Alviso.[57] This comment letter includes Appendices A-D, as substantial evidence that the Microsoft San Jose Data Center Draft EIR is inadequate with significant unmitigated environmental impacts per CEQA.

B-16

Sincerely,
Ada E. Márquez
3189 Salem Drive
San Jose, CA 95127
adaedithmarquez@gmail.com

Attachments: Appendix A: Air Quality; Appendix B: CARB; Appendix C: Biotics; Appendix D: BAAQMD

cc: See next page

[57] The Google Project in San Jose created a Fund for many community benefits. NEWS RELEASE: San José Announces Unprecedented Community Investment From Google Project | News | City of San Jose (sanjoseca.gov)

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Response to Comments Set B: Ada Marquez

B-1 The commenter makes a general assertion that the DEIR failed to adequately describe the existing baseline conditions. No changes to the DEIR are required in response to this comment. Section 15125 of the CEQA Guidelines sets forth the requirements for the agency to describe the environmental setting which is typically the physical environmental conditions in the vicinity of the project as they exist at the time the notice of preparation is published. The environmental setting described in an EIR by the lead agency will normally constitute the baseline physical conditions by which the lead agency determines whether an impact is significant (CEQA Guidelines, § 15125(a)).

The DEIR contains a detailed description of the environmental setting and baseline conditions at the beginning of each technical area emphasizing aspects of the environmental setting most relevant to the technical area. The commenter identifies several features near the project site including the community of Alviso, the Los Esteros Energy Center, and the Don Edward National Wildlife Refuge. **Sections 4.3 Air Quality** and **4.4 Biological Resources** of the DEIR also identify these features as part of the environmental setting and baseline conditions. There is nothing in the comment indicating that the characterization of the environmental setting contained within the DEIR is incorrect or does not reflect the conditions around the site at the time of the notice of preparation which was published on February 1, 2021.

The commenter states that the community of Alviso is a disadvantaged community with a higher pollution burden and implies the DEIR did not address these impacts. No changes are required in response to this comment. **Sections 4.3 Air Quality** and **4.2 Environmental Justice** of the DEIR contain detailed analysis of impacts going out six miles from the project site. Census tract 6085504602, which covers the community of Alviso, is not identified under the current version of CalEnviroScreen (4.0) as a disadvantaged community as the overall percentile for this census tract, 67 percent, is below the top 25th percentile used to identify a disadvantaged community based on to the most recent designation in 2017 pursuant to Senate Bill 535.

The Bay Area Air Quality Management District (BAAQMD) recommends a 1,000-foot influence zone for any proposed project. The residential area in the Alviso community (Alviso Village) is beyond this 1,000-foot influence zone (approximately 1.6 miles northwest based on Figure 3 in the Alviso Master Plan[1], and the closest point at the project parcel boundary). However, as there were no sensitive receptors within 1,000 feet, staff enlarged the area of analysis for the HRA until they found sensitive receptors, at approximately 0.5 mile northeast and 0.7 mile east of the project boundary of (**Figure 4.3-1** and page 4.3-13). According to the

1 The Alviso Master Plan is available online at: https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/citywide-planning/specific-plans

results of health risk assessment (HRA) in **Table 4.3-9** (construction) and **Table 4.3-10** (operation), the risks of receptors are all below the BAAQMD threshold, meaning the health effects from the project would be less than significant. Also, the results of cumulative HRA, **Table 4.3-11** to **Table 4.3-13** (cumulative sources), also show that the project would contribute "essentially zero" to the existing exceedances and the contribution would therefore not be cumulatively considerable, and the project would not cause cumulatively considerable impacts.

On pages 4.3-12 to 4.3-13, staff also explained, "Staff previously used a 6-mile radius for cumulative impacts analyses of power plant cases. Based on staff's modeling experience, beyond 6 miles there is no statistically significant concentration overlap for non-reactive pollutant concentration between two stationary emission sources. The 6-mile radius is more appropriate to be used for the turbines with tall stacks and more buoyant plumes. Both the natural gas and diesel emergency standby engines would result in more localized impacts due to shorter stacks and less buoyant plumes. The worst-case impacts of the natural gas and diesel emergency standby engines would occur at or near the fence line and decrease rapidly with distance from fence line. This also explains why the BAAQMD recommends 1,000 feet as the boundary for the cumulative health risks assessment in the BAAQMD CEQA Guidelines."

B-2 The commenter makes a general statement regarding the small power plant exemption process and the role of the city of San Jose and the BAAQMD. No changes to the DEIR are required in response to this comment as the comment is not about a significant environmental issue but acknowledges that if the project is exempted from CEC jurisdiction, the project will need to seek approval from the city of San Jose.

The comment refers to State CEQA Guidelines Section 15281, pertaining to federal operating permits that may be issued pursuant to the Title V program of the federal Clean Air Act (BAAQMD Regulation 2, Rule 6, Major Facility Review). Issuance of an operating permit normally results in no physical or operational change to the source or facility. This is in contrast with the New Source Review program, which focuses on new or modified sources that may result in physical or operational changes. The Title V program normally prohibits modification of a source or change in operation (BAAQMD Rule 2-6-309), and the Title V program addresses ongoing operation of sources that have previously been subject to New Source Review requirements for authorities to construct and permits to operate as set forth in BAAQMD Regulation 2, Rules 1 and 2. As shown in BAAQMD Regulation 2, Rule 1, General Requirements, the BAAQMD must review the project in accordance with CEQA during the process of issuing the authority to construct (BAAQMD Rule 2-1-310).

B-3 The commenter states that the environmental impacts of the linears are required to be evaluated. No changes to the DEIR are required in response to this comment.

The DEIR addresses the impacts of the linears in the relevant technical areas. (See pages: 1-1, 4.4-32, 4.5-9, 4.15-6, 4.20-2.)

Staff presented construction-phase impacts for all features of the proposed project, as described in DEIR **Section 3 Project Description**, including off-site linear facilities. Construction emissions presented by staff (Table 4.3-5) include the offsite activities, as derived from the Applicant's Supplemental Filing (Jacobs 2021s, Appendix 3.3A [TN 239413]). The types of equipment used offsite include concrete trucks, excavators, loaders and horizontal directional drilling equipment (Jacobs 2021s, Appendix 3.3A, Table 7 [TN 239413]). Potential air quality impacts during construction of the offsite facilities are therefore included in the evaluation of project impacts. When compared with onsite activities, construction along the linear routes of these components would occur during only a portion of the overall construction period and would be subject to mitigation measure **AQ-1**, ensuring that the exposure of any individual sensitive receptor would be limited.

B-4 The commenter erroneously infers that the DEIR did not analyze impacts to the Alviso community because the Alviso community is not specifically identified in the **Section 4.21 Environmental Justice** in the DEIR. No changes to the DEIR are required in response to this comment. The analysis in the DEIR uses a six-mile range when considering the direct and cumulative impacts from the project. On pages 4.3-12 to 4.3-13, staff explained, "Staff previously used a 6-mile radius for cumulative impacts analyses of power plant cases. Based on staff's modeling experience, beyond 6 miles there is no statistically significant concentration overlap for non-reactive pollutant concentration between two stationary emission sources. The 6-mile radius is more appropriate to be used for the turbines with tall stacks and more buoyant plumes. Both the natural gas and diesel emergency standby engines would result in more localized impacts due to shorter stacks and less buoyant plumes. The worst-case impacts of the natural gas and diesel emergency standby engines would occur at or near the fence line and decrease rapidly with distance from fence line. This also explains why the BAAQMD recommends 1,000 feet as the boundary for the cumulative health risks assessment in the BAAQMD CEQA Guidelines."

While the residential area in the Alviso community is well beyond the fence line of the project, the Alviso and other communities around the project were still considered and evaluated for project impacts related to environmental justice. Although the census tract for the residential area in the Alviso community is not a disadvantaged community based on current CalEnviroScreen 4.0 data, inclusion of CalEnviroScreen data is only one data set staff uses to evaluate a project's potential environmental justice impacts. Only the disadvantaged census tract numbers and corresponding boundary are displayed on **Figure 4.21-1** and data included in **Tables 4. 21-4** and **4.21-5**. Based on Census race and ethnicity data and low-income status based on California Department of Education data, the population living in the residential area in the Alviso community is considered an environmental justice population and staff has considered potential project impacts

to this community and the other environmental justice populations residing within a six-mile radius of the project site.

The environmental justice analysis related to air quality can be found in the DEIR on pages 4.21-13 to 4.21-19 where staff considered the impacts to the region around the project from ozone, PM2.5, NO2, diesel, pesticide use, and toxic releases. As shown under the Health Risk Assessment for Toxic Air Contaminants analysis on page 4.3-37 and under the air quality analysis on page 4.21-13, staff's health risk assessment for the project was based on a highly conservative health protective methodology that accounts for impacts on the most sensitive individuals in a given population including those in disadvantaged and environmental justice communities.

B-5 The CEC staff conducted an environmental justice analysis and identified environmental justice populations within the 6-mile radius of the project site. See response B-4 above. CalEnviroScreen was developed by CalEPA and its Office of Environmental Health Hazard Assessment (OEHHA), to identify disadvantaged communities pursuant to Senate Bill (SB) 535. CalEnviroScreen 4.0 uses the census tract unit as the scale of analysis. Census tracts are made up of multiple census blocks, which are the smallest geographic census unit for demographic data such as total population by age, sex, and race. To identify environmental justice populations by race and ethnicity the CEC staff uses the census block unit as the scale of analysis, which provides the race demographics at the most granular level available. No changes to the DEIR are required in response to this comment.

B-6 The majority of this comment does not relate to a significant environmental issue from the project but is commentary regarding the BAAQMD, the city of San Jose's general plan, legislative bills, and a mitigated negative declaration for an unrelated warehouse project. The commenter seems to imply that the BAAQMD's 2017 CEQA Air Quality Guidelines are inadequate to determine the significance of potential air emissions because the BAAQMD has not fully updated methodologies and some technical information related to the updated Air Quality Guidelines. No changes to the DEIR are required in response to this comment.

As discussed on page 4.3-22 in the DEIR staff evaluates project emissions against the BAAQMD emissions thresholds and also analyzes the project's potential to expose sensitive receptors to increased concentrations of criteria pollutants. The AAQS are health protective values, so staff uses these health-based regulatory standards to help define what is considered a substantial pollutant concentration. The BAAQMD thresholds of significance are an important aspect of staff's air quality analysis. Therefore, staff's analysis determines whether the project would be likely to exceed any ambient air quality standard or contribute substantially to an existing or projected air quality violation, and if necessary, proposes mitigation to reduce or eliminate these pollutant exceedances or substantial contributions.

The comment points to staff's use of the BAAQMD CEQA Air Quality Guidelines (BAAQMD, 2017b) and notes that the BAAQMD is in the process of updating the guidelines. The EIR analyses for air quality and GHG emissions follow the most-recent guidelines as adopted by and published by the BAAQMD. Use of these guidelines follows the recommendation in the State CEQA Guidelines, Appendix G, which indicates "...the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following [significance] determinations..." and is consistent with State CEQA Guidelines Section 15064.7, which allows lead agencies to consider those thresholds previously adopted by other agencies. Additionally, consistent with BAAQMD's guidelines, the analysis evaluates the Project's consistency with the BAAQMD 2017 Clean Air Plan and the City of San Jose General Plan (Draft EIR pp. 4.3-23 to 24, and pp. 4.8-20 to 25). The comment also mentions a City Ordinance about transportation demand management, which is addressed in Draft EIR Table 4.8-5 and in Section 4.17, Transportation. The current BAAQMD guidelines include thresholds to identify where emissions of toxic air contaminants could result in potentially significant impacts to sensitive receptors, including disadvantaged communities.

The comment incorrectly states that "Although the BAAQMD provides CEQA comments letters for air quality and greenhouse gas emissions analysis, lead agencies cannot legally implement them unless the thresholds and mitigation measures are included in the adopted BAAQMD CEQA thresholds." An agency is not limited to using only thresholds adopted by another agency when considering the impacts of a project. In the development of the SJDC DEIR analysis and mitigation, staff considered input from the BAAQMD and the California Air Resources Board. While, staff could consider other thresholds, the adopted 2017 BAAQMD thresholds represent well developed and supported thresholds that ensure the projects impacts are appropriately screened and when needed, robust mitigation is developed.

The current BAAQMD rules do not include a Regulation 13, as mentioned by the comment. BAAQMD Regulation 14 includes one currently potentially applicable rule that relates to transportation demand and requirements for regional commuter benefits programs applicable to employers with 50 or more full-time employees: BAAQMD Regulation 14, Rule 1 implements the regional commute benefits ordinance authorized by California Government Code section 65081 to reduce emissions by decreasing traffic congestion and encouraging employees to commute to work by transit and other alternative commute modes.

B-7 The comment suggests the DEIR is inadequate and does not comply with case law, specifically *Sierra Club v. County of Fresno* (Dec. 24, 2018) 6 Cal.5th 502 (Friant Ranch). In Friant Ranch the EIR at issue quantified how many tons per year the project will generate of reactive organic gases and NO_x (both of which are ozone precursors), but did not quantify how much *ozone* these emissions will create. Although the EIR explained that ozone can cause health impacts at

exposures for 0.10 to 0.40 parts per million, the EIR did not estimate how much ozone the Project will generate. The EIR also did not disclose at what levels of exposure PM, carbon monoxide, and sulfur dioxide would trigger adverse health impacts.

The Court held that an EIR must reflect a reasonable effort to discuss relevant specifics regarding the connection between and the estimated amount of a given pollutant the project will produce, and the health impacts associated with that pollutant. Further, the EIR must show a reasonable effort to put into a meaningful context the conclusion that the project will cause a significant air quality impact. Although CEQA does not mandate an in-depth health risk assessment, CEQA does require an EIR to adequately explain either (a) how bare emissions numbers translate to or create potential adverse health impacts; or (b) what the agency does know, and why, given existing scientific constraints, it cannot translate potential health impacts further.

The Friant Ranch EIR did not provide enough information for the public to translate the bare numbers provided into adverse health impacts or to understand why such translation is not possible at this time. No changes to the DEIR are required in response to this comment.

While the Friant Ranch decision stated that CEQA does not mandate an in-depth health risk assessment, the San Jose Data Center DEIR did exceed CEQA requirements by containing an in-depth Air Quality Impact Analysis (AQIA) and health risk assessment (HRA) that fully analyzed the adverse health impacts from project emissions.

In the DEIR staff did discuss sensitive receptors from page 4.3-12 to page 4.3-14 in **Section 4.3 Air Quality**. The Air Quality Impact Analysis (AQIA) for criteria pollutants and Health Risk Assessment (HRA) for toxic air contaminant were both conducted in relation to sensitive receptors according to BAAQMD CEQA Guideline. As for criteria pollutants, **Table 4.3-6** shows that the project operation would not be expected to result in a cumulatively considerable net increase of criteria pollutants during the lifetime of the project. **Table 4.3-8** also shows that the project's natural gas-fired generators, with the two diesel generators, would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant. As for toxic air contaminants, please see staff's response in B-1.

The BAAQMD guidance document suggests that individual projects can be evaluated using a photochemical grid model (PGM) to estimate the incremental increases in concentrations of criteria air pollutants and apply the results through a U.S. EPA program called the Benefits Mapping and Analysis Program (BenMAP), to estimate the resulting health effects from the modeled increases in concentration. By following the emissions thresholds in the BAAQMD CEQA Air Quality Guidelines (BAAQMD, 2017b), staff applies the guidance of the applicable

air district for this project, and the emissions thresholds are indicative of the project's potential to expose sensitive receptors to increased concentrations of criteria pollutants. The incremental increases in concentrations for criteria pollutants other than ozone were modeled by staff, and the results are presented in DEIR **Table 4.3-8**

B-8 The commenter suggests that the DEIR's baseline ambient air quality pollutant numbers omitted data from the cities of San Jose and Santa Clara and therefore the ambient numbers in the DEIR were not accurate. The commenter suggests using the Envision 2040 San Jose Draft General Plan EIR Appendix D Existing Conditions Report as well as a 2016 PM modeling report by the BAAQMD. No changes to the DEIR are required in response to this comment. Existing conditions for criteria air pollutants including PM2.5 are shown based on actual monitored data for five years of records from the Jackson Street station in San Jose (**Table 4.3-3**). The DEIR at pages 4.3-7 to 4.3-8 discusses the ambient data and how the numbers were determined. The PM2.5 data in the DEIR is consistent with the information presented in the comment. The Envision 2040 San Jose Draft General Plan EIR Appendix D Existing Conditions Report is dated from 2009 and the BAAQMD PM modeling report is from 2016. Staff does not believe the two references cited in the comment provide any different or more accurate data than the monitoring station data used by staff that covers the more-recent period of 2016-2020. No changes to the DEIR are required in response to this comment.

B-9 The commenter raised concerns that impacts to sensitive receptors were not considered. No changes to the DEIR are required in response to this comment. As noted in the response to B-1, BAAQMD recommends a 1,000-foot influence zone for any proposed project. The residential area in the Alviso community is beyond this 1,000-foot influence zone (approximately 1.6 miles). However, as there were no sensitive receptors within 1,000 feet, staff enlarged the area of analysis for the HRA until they found sensitive receptors, at approximately 0.5 mile northeast and 0.7 mile east of the project boundary (**Figure 4.3-1**). According to the results of health risk assessment (HRA) in **Table 4.3-9** (construction) and **Table 4.3-10** (operation), the risks of the receptors are all below the BAAQMD threshold, meaning the health effects from the project would be less than impact. Also, the results of cumulative HRA, **Table 4.3-11** to **Table 4.3-13** (cumulative sources), also show that the project contributes "essentially zero" to the existing exceedances and the contribution is therefore not cumulatively considerable, and the project does not cause cumulatively considerable impacts.

Staff also explained on page 4.3-39 and page 4.3-41. it should be noted that the risk values shown in **Table 4.3-9** and **Table 4.3-10** are the highest of those modeled for each type of sensitive receptors. The risk values at other locations for each type of sensitive receptors would be lower than those shown in **Table 4.3-9** and **Table 4.3-10**. Health risks at nearby worker/residential/sensitive receptors would all be below the significance thresholds. The health risks from project construction would be less than significant, and no mitigation would be necessary.

The residential area in the Alviso community is much further than the sensitive receptors staff addressed, so its risks would be even lower.

B-10 The comment points to "85 control measures" that appear in the BAAQMD 2017 Clean Air Plan (BAAQMD 2017a). Of these control measures, staff identified three measures: Decarbonize Electricity Generation (EN1), Green Buildings (BL1), and Bicycle and Pedestrian Access and Facilities (TR9) potentially applicable to the project. Implementation of the project in compliance with the City of San Jose General Plan would ensure that each of these air quality plan strategies are reflected by the project (Draft EIR pp. 4.3-23 to 24, and pp. 4.8-20 to 25).

The comment also concerns compliance with the City of San Jose, Natural Gas Infrastructure Prohibition. Prior to publication of the Final EIR, the applicant submitted a copy of the City determination that the project would qualify for an exemption from the natural gas prohibition (TN 241513, 2/10/2022). No changes to the DEIR are required in response to this comment.

B-11 The comment identifies the stationary sources that would be included with the project and other stationary sources. Emissions of stationary sources in the region and mobile sources are reflected in the actual ambient air quality conditions of the baseline conditions in San Jose (Table 4.3-3). Emissions estimates for project-related sources are derived from a variety of references, including the applicant's use of CalEEMod (version 2016.3.2) for certain smaller categories of sources related to facility upkeep during operation. Although a newer version of CalEEMod became available in June 2021, the process of estimating the emissions within the review was already substantially complete. Because the project review was sufficiently in process, staff did not require reanalysis of these emissions. The criteria pollutant emissions for facility upkeep using CalEEMod are well below the applicable thresholds of significance (Table 4.3-6). It is common for agencies to allow a grace period where a prior version of software may be used for analyses that began before the new version became available. Modeling with the newer version CalEEMod is unlikely to result in a meaningful change in emissions estimates and would not change the conclusions identified in the DEIR.

The comment refers to comments from California Air Resources Board on a different case (Sequoia Data Center), which involved a substantially different project design and generator technology. Accordingly, the comments on that case are not pertinent to the San Jose Data Center DEIR.

Response to B-10 addresses compliance with the City of San Jose, Natural Gas Infrastructure Prohibition and notes that the applicant submitted evidence of an exception (TN 241513, 2/10/2022). No changes to the DEIR are required in response to this comment.

B-12 Please also see responses in B-1, B-7, and B-9.

The commenter stated that "The Sacramento Metro Air District published the Guidance to Address the Friant Ranch Ruling for CEQA46. The CEC Staff analysis is inadequate and does not comply with current case law." The project is located within the jurisdiction of BAAQMD. Therefore, staff conducted the analyses according the BAAQMD CEQA Guideline, not the guideline issued by the Sacramento Metro Air District. No changes to the DEIR are required in response to this comment.

The commenter stated that "The CEC staff did not include the Alviso community in the SJDC DEIR analyses and did not provide an adequate environmental and health baseline conditions for the community of Alviso." The residential area in the Alviso community is beyond the 1,000-ft influence zone (approximately 1.6 miles). However, as there were no sensitive receptors within 1,000 feet, staff enlarged the area of analysis for the HRA until they found sensitive receptors, at approximately 0.5 mile northeast and 0.7 mile east of the project boundary (**Figure 4.3-1**). According to the results of health risk assessment (HRA) in **Table 4.3-9** (construction) and **Table 4.3-10** (operation), the risks of receptors are all below the BAAQMD threshold, meaning the health effects from the project would be less than significant. Also, the results of cumulative HRA, **Table 4.3-11** to **Table 4.3-13** (cumulative sources), also show that the project would contribute "essentially zero" to the existing exceedances and the contribution would therefore not be cumulatively considerable, and the project would not cause cumulatively considerable impacts. No changes to the DEIR are required in response to this comment.

The commenter also stated that the link between air pollution and COVID deaths and other existing health data must be included. The study of "Fine particulate matter and COVID-19 mortality in the United States A national study on long-term exposure to air pollution and COVID-19 mortality in the United States" found that higher historical PM2.5 exposures are positively associated with higher county-level COVID-19 mortality rates after accounting for many area-level confounders. However, this is an ecological study and does not demonstrate that a causal association exists. It is also stated in the conclusion that "despite inherent limitations of the ecological study design, our results underscore the importance of continuing to enforce existing air pollution regulations to protect human health both during and after the COVID-19 crisis." Staff's air quality evaluation did ensure the project would comply to all the air quality regulation to protect public health. No changes to the DEIR are required in response to this comment.

The commenter stated that "The CEC staff did not disclose that City of San Jose has AB 617 protected communities; the Alviso community is located within the same census tract as the proposed Microsoft Project; and vulnerable communities are legally protected per SB 1000, SB 535, and AB 1550." The residential area in the Aliviso community (Alviso Village) is in the same census tract as the proposed project, Census tract 6085504602. As noted in prior responses the residential area in the Alviso community is approximately 1.6 miles from the project site and given

the characteristics of the natural gas generators both in stack height and plume buoyancy, air quality impacts would not move much beyond the fence line.

In 2012, the Legislature passed Senate Bill 535, directing that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. Relevant to the comment, the legislation gave CalEPA responsibility for identifying disadvantaged communities. The DEIR, **Section 4.21 Environmental Justice** identifies those communities, as defined by SB 535 and CalEPA as disadvantaged communities. It should be noted that the purpose of the identification under SB 535 is to be eligible for additional cap and trade funded projects. Census tract 6085504602, which covers the residential area in the Alviso community, is not identified under the current version of CalEnviroScreen (4.0) as a disadvantaged community as the overall percentile for this census tract, 67 percent, is below the top 25th percentile used to identify a disadvantaged community based on to the most recent designation in 2017 pursuant to Senate Bill 535.

AB 1550 modified the investment minimums to disadvantaged communities and increased percentage of funds directed -at least 25 percent- that should go to projects within and for the benefit of disadvantaged communities and at least an additional 10 percent to go for low-income households or communities.

While the residential area in the Alviso community is well beyond the fence line of the project and is not a disadvantaged community, the Alviso and other communities around the project were still considered and evaluated for project impacts related to environmental justice. Based on Census race and ethnicity data and low-income status based on California Department of Education data, the residential area in the Alviso community is an environmental justice population and staff considered potential project impacts to this community and the other environmental justice populations residing within a six-mile radius of the project site. See DEIR Section 4.21 covering environmental justice.

AB 617 requires the California Air Resources Board (CARB) to prepare a monitoring plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems. The bill also requires CARB to select, based on the monitoring plan, the highest priority locations in the state for the deployment of community air monitoring systems. The bill requires an air district containing a selected location, to deploy an air monitoring system in the selected location. Finally, the bill authorizes the air district to require a stationary source that emits air pollutants in, or that materially affect, the selected location to deploy a fence-line monitoring system, or other specified real-time, on-site monitoring.

In the BAAQMD, the communities selected for the local Community Air Protection Program under AB 617 include West Oakland and Richmond-San Pablo. Certain neighborhoods in the City of San Jose may be in future consideration for an air

monitoring system. Nothing in the DEIR prohibits the BAAQMD from continuing to implement AB 617 or require fence-line real-time monitoring at the project as part of its permitting process and obligations under AB 617. AB 617 does not impose any requirements on the CEC in regards to the SJDC EIR. Areas south of Montague Expressway and approximately 1.5 miles south of the project site, are within the BAAQMD's 2013 areas of cumulative impact, as defined the BAAQMD Community Air Risk Evaluation (CARE) task force. The DEIR (pages 4.3-33, 4.3-36, and 4.3-44) demonstrates that the worst-case air quality and public health impacts of the natural gas and diesel emergency standby engines would occur at or near the fence line and decrease rapidly with distance from fence line. The region's AB 617 communities and CARE communities are outside the project area, and because they are much more than 1,000 feet from the project site, they would not experience any notable air quality or public health impacts as a result of the project.

SB 1000 relates to the development of local general plans by cities and does not impose a requirement on the CEC in relation to the SJDC DEIR. The bill adds to the required elements of a local general plan an environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities, within the area covered by the general plan of the city, county, or city and county, if the city, county, or city and county has a disadvantaged community. The bill also requires the environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, to identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities, as specified, identify objectives and policies to promote civil engagement in the public decision-making process, and identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

The commenter referenced California Code of Regulations, Title 14 section15064 (b)(1) but made no specific comment about the provision. "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area." §(2) Compliance with the threshold does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant." Staff conducted the analyses according to BAAQMD Guidelines to assess significant effects.

The commenter said that "CEC staff did not include an analysis of impacts to sensitive receptors within 1,000 feet of construction activity, the truck routes, and location of equipment for staging areas for the offsite infrastructure improvement areas." No changes to the DEIR are required in response to this comment. Response to B-3 describes how off-site infrastructure is included in the construction emissions estimates and would be subject to the requirements of project-specific mitigation. Construction along a linear facility is usually very short-

term and the locations of the sources change continuously as the equipment moves along the linear work alignment. Because the sources move from place to place, no single location along the alignment would experience a notable change in air quality impacts, and the temporary impacts are mitigated by the dust control measures.

The commenter said that "the construction analysis and mitigations measures are required for the entire Project, including all offsite infrastructure improvements. Moreover, the project must include an analysis as shown in the yellow highlighted areas, as well". No changes to the DEIR are required in response to this comment. Response to B-3 describes how off-site infrastructure is included in the construction emissions estimates and would be subject to the requirements of project-specific mitigation. Construction truck haul routes would be subject to review by the City, although the proposal would route construction vehicles through the SR 237/McCarthy Boulevard interchange and away from residential neighborhoods and dense employment areas (DEIR p. 4.17-10).

The commenter had three separate comments: (1) "the modeling assumptions for construction workers and the location of sensitive receptors are erroneous" but didn't explain why; (2) "The impact analysis must also include the community of Alviso and George Mayne Elementary School," and (3) "The analysis did not disclose and analyze the truck routes for construction and project operations, and of the tanker trucks when refueling the backup generators at the SJDC." No changes to the DEIR are required in response to this comment.

(1) As described in page 4.3-12 to 4.3-14, the SPPE application shows the results of a sensitive receptor search conducted within two kilometers and finds that there are no sensitive receptors within 1,000 feet of the project site. The sensitive receptor locations near the project site, but outside of the 1,000-foot zone, include primarily schools, preschool through elementary-level; daycares; health centers; and a senior care center. The nearest residential neighborhood is located approximately 1,650 feet (0.3 mile) south of the project site along Murphy Ranch Road in Milpitas (Jacobs 2021o, pg. 3.3-23). Also, there are two groups of sensitive receptors near the project. One is located 0.5-mile northeast of the project boundary, another is located 0.7 miles east of the project boundary. **Figure 4.3-1** shows the map of sensitive receptors near the project.

(2) Dispersion modeling for criteria air pollutant impacts during construction and operation includes a receptor grid covering all locations within 10 kilometers (approximately 6 miles), with receptor spacing originally described by the applicant in the transmittal for the updated modeling (8/20/2021, TN 239409, p. 3.3-22). These modeled receptors are consistent with those used in the HRA and ensure that the residential area in the Alviso community and George Mayne Elementary School are included within the modeling domain.

Emissions during construction of the offsite facilities are included in the comparison of project construction emissions with the emissions-based thresholds (DEIR, Table 4.3-5). All onsite construction activities are included in the Air Quality Impact Analysis (AQIA) to determine the maximum ambient air quality impacts (DEIR, Table 4.3-7) that may be caused by onsite equipment and vehicles, as well as onsite fugitive dust emissions (Jacobs 2021aa; Response to Data Request 64, Table DR64-3).

With regards to cumulative HRA, the residential area in the Alviso community and George Mayne Elementary School are beyond the 1,000-ft influence zone (approximately 1.6 miles) and consistent with the BAAQMD guidance, were not included in staff's HRA.

(3) Response to B-3 describes how off-site infrastructure is included in the construction emissions estimates and would be subject to the requirements of project-specific mitigation. Construction along a linear facility is usually very short-term and the locations of the sources change continuously as the equipment moves along the linear work alignment. Because the sources move from place to place, no single location along the alignment would experience a notable change in air quality impacts, and the temporary impacts are mitigated by the dust control measures.

The commenter states that "The HRA does not comply with the most current Air District Risk Assessment Guidelines." No changes to the DEIR are required in response to this comment. Staff reviewed and conducted the HRA according to the most current BAAQMD Guidelines which were available. The BAAQMD Air Toxics Control Programs Health Risk Assessment Guidelines the commenter mentioned was updated on December 15, 2021. At that time, the DEIR was about to be published (on December 23, 2021). Therefore, the BAAQMD Air Toxics Control Programs Health Risk Assessment Guidelines updated on December 15, 2021 was not cited in DEIR. However, staff checked the updated Guideline, and confirmed that the update of BAAQMD HRA guideline won't change staff's HRA results and conclusions.

The commenter stated that "The CEC staff did not use the BAAQMD Air Quality Data (TN#237463, submitted on 4/15/2021) for the PMI, MESR, MEIW, MEIR, and the mobile health risk for 2014." No changes to the DEIR are required in response to this comment. The BAAQMD Air Quality Data (TN#237463, submitted on 4/15/2021) was the outdated one. Staff requested the same information twice (April 2021 and October 2021) because the applicant changed the technology, then the receptors were also changed. The following is the data BAAQMD provided and staff used:

10/27/2021

MOBILE SOURCE HEALTH RISK – YR2014

RECEPTOR ID: PMI		37.42860362, -121.9314705
	Type	**Risk**
Cancer	Highway	12.51
	Major Street	1.08
	Rail	0.64
PM2.5	Highway	0.25
	Major Street	0.03
	Rail	0.00

RECEPTOR ID: MESR		37.42853982, - 121.9165308
	Type	**Risk**
Cancer	Highway	61.4
	Major Street	0.99
	Rail	0.91
PM2.5	Highway	1.25
	Major Street	0.02
	Rail	0.00

RECEPTOR ID: MEIW		37.42860362, - 121.9314705
	Type	**Risk**
Cancer	Highway	12.51
	Major Street	1.08
	Rail	0.64
PM2.5	Highway	0.25
	Major Street	0.03
	Rail	0.00

RECEPTOR ID: MEIR		37.41814583, - 121.9275362
	Type	**Risk**
Cancer	Highway	14.15
	Major Street	2.25
	Rail	0.57
PM2.5	Highway	0.29
	Major Street	0.05
	Rail	0.00

The commenter stated that "there will be two new 115 kV underground 1,100-foot-long cables connecting from the new SJDC Substation to the existing Los Esteros Power Plant Facility, the HRA must analyze the health impacts of existing conditions plus the proposed Project." This comment is not correct. The two new lines are between the Los Esteros substation and the new SJDC substation. The DEIR covered the two lines in the context of a reliability and environmental impact discussion. Response to B-3 describes how off-site infrastructure is included in the construction emissions estimates and would be subject to the requirements of project-specific mitigation. Construction along a linear is usually very short-term and the locations of the sources change continuously as the equipment moves along the linear work alignment. Because the sources move from place to place, no single location along the alignment would experience a notable change in air quality impacts, and the temporary impacts are mitigated by the dust control measures. Therefore, air emissions for linear work result in less impacts and are not modeled or included in the HRA.

The commenter said that the "HRA did not include all stationary and mobile sources within the Alviso census tract which the Project is within a vulnerable community per the federal, state, and regional agencies." No changes to the DEIR are required in response to this comment. Please see response to comment B-1. As mentioned above, the residential area in the Alviso community is beyond the 1,000-ft influence zone (approximately 1.6 miles) and was not included in staff's HRA.

The commenter copied the BAAQMD's thresholds of significances but made no specific comment. No changes to the DEIR are required in response information. To the extent the commenter implies the DEIR's cumulative air quality impact analysis was deficient staff notes that it did conduct a cumulative health risk assessment set forth on pages 4.3-41 to 4.3-46. Staff's discussion addressed the impacts from cumulative sources in comparison to the BAAQMD thresholds of significance for risk and hazards from cumulative sources. The cumulative HRA is an assessment of the project's impact summed with the impacts of existing sources within 1,000 feet of the project. The results of this cumulative HRA are compared to the BAAQMD CEQA cumulative thresholds of: no more than 100 cancer cases per million; a chronic Hazard Index of no more than 10.0; and PM2.5 concentrations of no more than 0.8 µg/m3 annual average PM2.5 concentrations. Staff concluded that the project does not cause cumulatively considerable impacts.

B-13 The commenter states that the DEIR failed to address impacts and identify mitigation to golden eagles and other animal and plant species. Beginning on page 4.4-3 in **Section 4.4 Biological Resources** includes an overview of the regulatory framework, including those specific to golden eagles. The proximity of biologically rich and diverse adjacent areas is noted on page 4.4-2, which states: "Importantly, the site is immediately southeast of the San Francisco Bay, which empties into the Guadalupe and Alviso sloughs, and is less than 2 miles southeast of the Don Edwards San Francisco Bay National Wildlife Refuge (Don Edwards

NWR). In general, areas surrounding the project site are rich in abundance and diversity of flora and fauna, including the San Jose/Santa Clara Regional Wastewater Treatment Plant (RWT) sludge drying beds to the north, which provide habitat for shorebirds and waterbirds." Staff has added language on page 4.4-2 to clarify the location of the associated Bufferlands of the RWT.

As noted beginning on page 4.4-11, the CEC staff consulted with USFWS (including the biologist attached to the Don Edwards NWR), CDFW, the San Francisco Bay Observatory, and the Santa Clara Valley Habitat Agency (SCVHA) in its review of the project. In addition, staff ran a current California Natural Diversity Database (CNDDB) search to determine known occurrences of special-status species. Golden eagles are adequately protected by mitigation measures **BIO-1** through **BIO-3**, **BIO-13**, and **BIO-20.** Habitat impacts (no nests have been documented onsite, but a pre-construction survey will be performed as per **BIO-1**) are mitigated through the Santa Clara Valley Habitat Plan, which is habitat-based, as opposed to species-based. None of the resource agencies, such as CDFW or USFWS, the city of San Jose, or the SCVHA have indicated that any direct, indirect, or cumulative impacts are less than fully mitigated. Staff agrees with the commenter that the USFWS does indeed have recommended buffer zones from active golden eagle nests[2]. Again, this is a recommended buffer of one mile from active construction, and staff further notes that this same document, footnote b, notes that "Many existing nest sites experience some level of intermittent and on-going low levels of disturbance from these types of human activities, and the resident pair of eagles may have acclimated to these existing levels of disturbance. However, increases in human activity may not be tolerated by nesting eagles." As staff has conducted extensive outreach to USFWS and other local agencies without having concerns expressed, no changes to golden eagle mitigation have been made.

Offsite linear alignments and impacts (ecological alterations) were fully analyzed; considered part of the project, and are mitigated through the SCVHP, such as through measures **BIO-3** and **BIO-20**. Please also refer to subsection "4.4.2 Environmental Impacts", which analyzes habitat impacts that could in turn adversely affect species foraging habitat through nitrogen deposition. Congdon's tarplant is mitigated through staff's proposed preconstruction survey measure **BIO-15**, as well as **BIO-8**, **BIO-10**, **BIO-13**, **BIO-14**, and **BIO-19**. Offsite impacts such as lighting and storm water runoff are discussed on page 4.4-25. No changes to the DEIR are required in response to this comment.

Bufferlands and burrowing owl: Burrowing owl have been documented in the San Jose/Santa Clara Regional Wastewater Treatment Plant (RWT). On pages 4.4-2

2 USFWS. 2020. Recommended Buffer Zones for Ground-based Human Activities around nesting sites of golden eagles in California and Nevada. Available at: https://www.fws.gov/cno/conservation/MigratoryBirds/pdf-files/USFWS_PacificSouthwestRegion_GoldenEagle_NestBuffers_Oct_2020.pdf

and 4.4-13, staff has added language consistent with the comment, to bolster public understanding of potential impacts. Potential burrowing owl habitat was acknowledged, and impacts would be mitigated (with input from CDFW) pursuant to **BIO-3**, **BIO-4**, **BIO-5**, and **BIO-20**. Language specific to the comment was also added to **Section 4.20**, on page 4.20-2.

B-14 Please see response B-13 for a response regarding the CEC staff's outreach and coordination with resource agencies. "Critical habitat" is a federal term that refers to habitat designated as critical by the USFWS. Critical habitat is analyzed in subsection "4.4.2 Environmental Impacts" on pages 4.4-10 through 4.4-22. No critical habitat for golden eagle has been designated, as this species is no longer federally listed. Foraging habitat for this species is, however, present, and impacts would be mitigated pursuant to measures **BIO-3** and **BIO-20.** Please see response to comment B-13 for additional golden eagle information. No changes to the DEIR are required in response to this comment.

Staff is not aware of any quantifiable threshold or data for assessing or mitigating potential carbon sequestration impacts in the state of California for agricultural lands, nor is this an impact considered under the SCVHP. Further, as this is fallowed agricultural land, which is regularly disked (and therefore releases carbon dioxide[3] (CO2)); carbon sequestration is considered negligible.

The commenter implies that the lands around the project site (buffer lands) may or should be preserved as part of the state's land preservation program. Executive Order N-82-20 directs the California Natural Resources Agency (CNRA) (among others) to develop and report strategies for how to conserve at least 30 percent of California's land and coastal waters by 2030. "CDFW staff are assisting CNRA in development of the Pathways to 30x30 document and the CA Nature mapping tool. In February 2022, the Pathways to 30x30 document and CA Nature tool will be released"[4]. The status of the bufferlands would be under the jurisdiction of the city or county and in the event that the lands are subject to a future preservation designation the city can address that at the time the project is under consideration for approval. Currently there is no formal CNRA or SCVHP directive regarding the buffer lands that would require any changes to the DEIR.

Cumulative impacts are addressed through mitigation measures imposed through the SCVHP in **Section 4.20 Mandatory Findings of Significance**, **Table 4.20-1**. Cumulative impacts are addressed through the SCVHP in section 4, page 4-2

3 Climate Policy Watcher. 2020. Agricultural Sequestration. Available at: https://www.climate-policy-watcher.org/greenhouse-gases-2/agricultural-sequestration.html#:~:text=Carbon%20sequestration%20occurs%20in%20soils%20and%20agricultural%20crops,and%20roots%20also%20contribute%20carbon%20to%20the%20soil.

4 California Department of Fish and Wildlife (CDFW). 2022. Available at: https://wildlife.ca.gov/Science-Institute/Biodiversity#:~:text=Executive%20Order%20N-82-20%20directs%20CNRA%20to%20develop%20and,document%20and%20CA%20Nature%20tool%20will%20be%20released.

through 4-3; "Accordingly, the Plan addresses the cumulative effects of public or private activities that could result from individually minor but collectively significant actions that take place over time. Cumulative effects of all projects with a federal nexus will be analyzed under NEPA and will not be addressed in the Plan in accordance with the ESA regulatory guidelines." There is no federal nexus for this project, and the resource agencies have already been contacted, as described in response to comment B-13. Therefore, mitigation measures proposed consistent with the SCVHP, such as **BIO-3** and **BIO-20**, provide habitat compensation, which accordingly mitigate direct, indirect, and cumulative mitigation impacts.

B-15 The comment asserts that the project would conflict with the applicable General Plan and GHG Reduction Strategy. The analysis for air quality and GHG emissions impacts considers the potential for conflicts with the BAAQMD 2017 Clean Air Plan and the City of San Jose General Plan, including the City of San Jose's 2030 GHG Reduction Strategy (GHGRS) and finds the project to be consistent with mitigation (Draft EIR pp. 4.3-23 to 24, and pp. 4.8-20 to 25). The analysis considers the effects of past, present and future development projects that may contribute to the region's air quality conditions on a cumulative basis, and the analysis provides evidence (Draft EIR pp. 4.3-41 to 46) that demonstrates the contribution of the project is not cumulatively considerable. The analysis does not rely on or identify off-site credits as part of the necessary mitigation.

Responses to B-4 and B-5 address the concern of how the analysis evaluates project-specific impacts as related to the community of Alviso and projects within the Alviso Master Plan.

B-16 The commenter said: (1) "The CEC Staff omitted the Project's environmental and health impacts to the Alviso community. The DEIR did not consider the children's health at George Mayne Elementary School and the future attendance at Santa Clara Unified School District's Agnews East School Campus Project SCH# 2018032018…"; and (2) "The HRA must be revised with the most current HRA guidelines. On behalf of the Alviso community, the CEC Staff should contact the experts at the BAAQMD (APPENDIX D) and CARB for air quality analysis." (1) The community of Alviso is beyond the 1,000-ft influence zone (around 2.24 miles) and thus was not included in staff's HRA analyses. Therefore, the George Mayne Elementary School and the Santa Clara Unified School District's Agnews East School Campus Project SCH# 2018032018 were not included, either. (2) The update of BAAQMD HRA guideline won't change staff's HRA results and conclusions. The CEC's air quality and public health experts collaborate with other technical experts at the BAAQMD and CARB during the development of the DEIR.

The commenter also submitted a number of documents that the commenter claims provides substantial evidence that the DEIR is inadequate with significant unmitigated impacts. The documents include comments by CARB on a different project that uses different technology and is located in a different city. A USFWS finding of no significant impacts for a waste water treatment facility in San Jose.

Finally, a January 2022 document from the BAAQMD that covers permitted stationary source risk and hazard screening tool. Staff has reviewed these documents and find they are either not relevant to the project or do not result in the need to make any changes to the DEIR.

Comments Set C: Bay Area Air Quality Management District

February 7, 2022

Lisa Worrall
Senior Environmental Planner
California Energy Commission
715 P Street, MS 40
Sacramento, CA 95814

RE: San Jose Data Center Project – DRAFT Environmental Impact Report

Dear Ms. Worrall,

Bay Area Air Quality Management District (Air District) staff have reviewed the DRAFT Environmental Impact Report (DEIR) for San Jose Data Center project (Project). The applicant proposes to construct and operate two single-story data center buildings located at 1657 Alviso-Milpitas Road in San Jose, California. The Project includes 224 natural gas-fired generators (emergency backup power) with a maximum electrical load of 99 MW. In addition, the Project includes two Tier 4 diesel-powered generators (emergency backup power) for building operations. The project also includes an onsite 115 kilovolt (kV) substation located in the northwestern corner of the project site with two 115 kV underground electrical supply lines (approximately 0.2 mile) that would connect to PG&E's Los Esteros Substation, located adjacent to the site.

Microsoft Corporation (Microsoft or applicant) is seeking a Small Power Plant Exemption (SPPE) from the California Energy Commission's (CEC) jurisdiction to proceed with local approval rather than requiring certification by the CEC. The objective of the project is to provide electrical power to support data center uses during utility outages to avoid onsite electrical equipment interruptions or failure, and for load shedding, demand response, and behind-the-meter resource adequacy (RA) ancillary services to support transmission-level grid reliability. The DEIR estimates that all 224 natural gas-fired generators would operate for 509 hours per year load for maintenance, testing, load shedding, demand response and behind the meter RA capabilities.

The project site is located in the Alviso neighborhood, an area with high cumulative environmental burdens as identified through CalEPA's CalEnviroScreen 4.0. As such, the Air District is concerned about air pollution emissions or exposures impacting the nearby community.

C-1

Greenhouse Gas and Climate Impacts

The Air District supports the project's stated intent to use renewable fuels and other efforts to reduce greenhouse gas emissions from data center operations. However, staff is concerned that the DEIR's finding of less than significant hinges on future, ongoing procurement of renewable fuels with insufficient assurances that this measure will be enforced. Staff strongly recommends that all such measures behind the finding of less than significant be supported by clear, enforceable commitments that are required as a condition of approval. Air District staff recommends the CEC further clarify the project's features and climate goals to address these concerns, including:

C-2

1. Mitigation Measure GHG-1 should require ongoing enforcement of the requirement to exclusively use renewable fuels in the natural gas-fired and diesel-fired generators and should be revised to require annual documentation that renewable fuels are being used for the life of the project. Mitigation Measure GHG-1 should also be incorporated into all land use permits as a condition of approval.

C-3

2. The California Public Utilities Commission has prohibited the use of certain resources from load-shedding and demand response programs. As outlined in Decision 16-09-056, prohibited resources include distributed generation technologies using diesel, natural gas and other fossil fuels. For PG&E's Base Interruptible Program, the prohibited resources ban is further detailed in Electric Schedule E-BIP. Applicable requirements for operation of the project's generators during load-shedding and demand response should be discussed in the EIR.

C-4

3. For transparency, the applicant should discuss how the project aligns with Microsoft's publicly stated 2030 and 2050 climate goals and commitments. Microsoft has pledged to be carbon negative by 2030 and by 2050 to remove from the environment all carbon the company has emitted either directly or by electrical consumption since it was founded in 1975. Microsoft has also announced a $1 billion climate innovation fund to accelerate the global development of carbon reduction, capture, and removal technologies.

C-5

Consutruction Emissions and Mitigations

The DEIR states that construction-related emissions were found to be less than significant with mitigations and that the project will apply Air District best management practices (BMP) to control fugitive dust emissions. The Air District recommends that additional measures beyond the standard BMPs be added to help limit impacts to the overburdened community of Alviso. The following additional mitigation measures should be included into AQ-1 to further address construction-related impacts:

C-6

- 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 trucks used for material delivery or hauling shall have engines that meet or exceed 2010 CARB emissions standards.

- Where grid power is available, portable diesel engines should be prohibited.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

C-6 continued

Certain sources at the project will require permits from the Air District. For more information on applying for an Air District permit, please visit the following webpage for further instructions: https://www.baaqmd.gov/permits/apply-for-a-permit or contact Barry Young, Senior Advanced Projects Advisor, at byoung@baaqmd.gov or (415) 940-9641 to discuss permit requirements.

We encourage the CEC to contact Air District staff with any questions and/or to request assistance during the environmental review process. If you have any questions regarding these comments, please contact Matthew Hanson, Environmental Planner II, at mhanson@baaqmg.gov (415) 749-8733 or Amy Dao, Senior Environmental Planner, at adao@baaqmd.gov (415) 749-4933.

Sincerely,

Greg Nudd
Deputy Air Pollution Control Officer

cc:
BAAQMD Director Margaret Abe-Koga
BAAQMD Director Cindy Chavez
BAAQMD Director Rich Constantine
BAAQMD Director Rob Rennie

Response to Comments Set C: Bay Area Air Quality Management District

C-1 The comment notes that the project site is in the Alviso neighborhood, an area with high cumulative environmental burdens. It is true that the project site is in the Alviso Planning area, as identified in the Alviso Master Plan and on page 4.11-2 in DEIR **Section 4.11 Land Use**. As noted in response to B-4 and shown on Figure 4.21-1 in DEIR **Section 4.21 Environmental Justice**, the residential area in the Alviso community is in a Census tract not identified as a disadvantaged community based on current CalEnviroScreen 4.0 data. However, the population within this residential area is considered an environmental justice population and impacts to this and other environmental justice populations within a 6-mile radius of the project site have been analyzed for potential project impacts. See **Section 4.21 Environmental Justice** for the analysis.

C-2 The comment expressed concern about the availability of renewable natural gas and the DEIR's conclusion of less than significant impact hinges on this availability. The applicant filed a comment in the project's docket (TN 241625) responding to this comment. The applicant explains that the natural gas generator supplier, Enchanted Rock, confirms that significant new supplies of renewable natural gas from 158 specific projects are planned or under construction due to the state's decade long leadership in low carbon fuel standards. Enchanted Rock has also confirmed with their preferred RNG supplier that they can provide the volume renewable natural gas identified for this project, to cover up to 509 hours of annual generator operating time for up to 99 megawatts, starting in 2024.

C-3 The comment recommends requiring ongoing enforcement of the renewable fuel requirements in mitigation measure GHG-1 on page 4.8-26 in **Section 4.8 Greenhouse Gas Emissions**. The Final EIR includes revisions to GHG-1 to ensure that the project owner submits annual reports demonstrating the use of renewable resources for 100 percent of total energy use. Staff expects this mitigation measure would be incorporated into any land use conditions of approval established by the City of San Jose. Because the CEC is not approving the project which if exempted would be submitted to the City of San Jose for consideration, the CEC would not be imposing or enforcing any of the mitigation. Staff has worked closely with the city to develop a mitigation and monitoring plan consistent with section 15097 of the CEQA Guidelines that the city could use to track and ensure project compliance with mitigation.

C-4 The applicant filed a comment (TN 241625) in the project's docket responding to this comment. The CPUC modified Decision 16-09-056 on June 21, 2018, with Resolution E-4906 to allow the use of the natural gas generators using renewable fuels. Specifically, E-4096 modifies the prohibition of Decision 16-09-056. In the Findings of Resolution E-4906 at paragraph 102 is the operative text, "102. If a fuel has received renewable certification from the California Air Resources Board, it is exempt from the prohibited resource policy in D.16-09-056." The project evaluated by the CEC included up to 509 hours of emergency generator operations

to which includes testing as well as any hours operated under the BIP program. If the project does not end up operating under the BIP program because it is never called, the hours operated would be less than 509. Based on information set forth in the DEIR at page 3 of **Appendix B** even with participation in the BIP program the actual expected hours of operations was well below 509 and likely under 30 hours. Given the conservative approach regarding the number of hours evaluated, there is no need to make any changes to the DEIR if the applicant is not able to participate in the BIP program because any impacts would be even less than those assessed. No changes to the DEIR are necessary in response to this comment.

C-5 Staff encourages the applicant to provide the requested information on how Microsoft is meeting its corporate climate change goals, but such information is outside the scope of the DEIR and not required to be included in the DEIR. No changes to the DEIR are necessary in response to this comment.

C-6 The comment recommends additional measures beyond the standard BAAQMD recommendations to control fugitive dust. The comment identifies a series of additional Best Management Practice to further address dust and to reduce emissions from construction vehicles and equipment. The Final EIR includes revisions to mitigation measure **AQ-1** on pages 4.3-50 and 4.3-51 in **Section 4.3 Air Quality** to reflect the BAAQMD recommendations in the comment.

Comments Set D: Claire Warshaw

Though uncertain of opinions on delivering a 470-page DEIR to make a California Energy Commission (CEC) Small Power Plant Exemption (SPPE) determination, it seems intelligent that CEC examined the new data center project thoroughly. It might make sense if the CEC could have new ways of simply accepting or rejecting these SPPEs. From an outside standpoint, recent data center project SPPE submittals seemed 'obnoxious.' Wealthy construction developers, corporations, utilities and community choice aggregates seemingly easily rejected clean energy goals with an installation of numerous backup generators, often diesel specified. I was somewhat thankful to see natural gas backup generation replacing diesel. However, I might guess this plan does not solve clean energy goals as quickly and easily as some clean energy leaders might wish and advocate for.

The EIR 'eyeball straining' method of holistic construction and design education is a quandary to ponder. I quickly skimmed the document, probably missing important citations. In the EIR's current form, all who chose or have the time and ability to read, might be able to help produce more skilled construction labor and design in California, plus make numerous, definite intelligent considerations for our air, land and water, biological, energy and cultural resources. At the moment, our population's professional edification might be this - due to human information/data, time, energy and personal sacrificial overloads. Controversies remain difficult to "Tweet" and character limit without repercussions. Conflict is not obvious either. Optometrists and eye wear companies probably currently benefit from this DEIR's length, but readers of other professions might not.

Thanks for exposing the public to biological species involved in this project area. Sincere thanks for the air quality, noise, dust and pollutant health symptom details. Medical education systems ought to read these details. After some reading, I more clearly understand that ozone can be made from unregulated NO in the presence of light (and/or heat). Sincere thanks for mitigation measures, e.g., GHG-1. I am not certain 2016 + designing professionals were aware of local renewable diesel capacity lack and/or health issues surrounding diesel particulate matter. I am not certain the public would choose to construct with renewable fuels instead of utilizing such for transportation instead. I doubt they would notice where resources went. I am not yet convinced cumulative effects of numerous combustion fuel backup generators, including other proposed regional data center projects, are curtail-able, especially when used with Demand Response concepts.

Possible city and Community Choice Aggregate (CCA) staffing relationships might need analysis, if the reason for the EIR is to determine if the permitting agencies can accomplish proper project jurisdiction (as cited in the DEIR Introduction section 2-1). I am not sure a project ought to necessarily be 'pushed to completion' simply due to paid hours spent by a small number of employed people, when public health is at stake. D-1

Please add Fahrenheit or Celsius to 727-783 degrees citations. Please add "cat" to "Ringtail"; I assumed this was a rat in several citations. Please if possible place species scientific names at beginning sections of the EIR. Please assume skimming. Please also consider highlighting your extensive efforts possibly by employing creative specialist(s) to transform the DEIR's written word into a movie or summary audio, if possible, to help prevent more eyeball strain and for broader audience understandings. Thanks again! D-2 D-3

February 7th, 2022 docket comments for The California Energy Commission (CEC) Staff's December 2021, Draft Environmental Impact Report (DEIR), San Jose Data Center proposed by applicant Microsoft on approximately 64.5 acres of land at 1657 Alviso Milpitas Road. Claire A. Warshaw

Response to Comments Set D: Claire Warshaw

D-1 Considering the City of San Jose and Community Choice Aggregate staffing relationship is outside the scope of a CEQA analysis. No changes to the DEIR are necessary in response to this comment.

D-2 Thank you for your comments. The ringtail (*Bassarirscus astutus*) is formally known as simply "ringtail", but because it is often colloquially called "ringtail cat" owing to your comment, staff added clarifying language in **Section 4.4 Biological Resources**, page 4.4-2.

D-3 According to the California Energy Commission writing standards, scientific names are provided when species are introduced, and then not repeated. The bulk of scientific names are available on pages 4.4-2 and 4.4-3.

Comments Set E: Microsoft

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February 7, 2022

Attn: Lisa Worrall, Project Manager
California Energy Commission
715 P Street
Sacramento, California 95814
E-Mail: lisa.worrall@energy.ca.gov

Subject: **San José Data Center (19-SPPE-04) Draft Environmental Impact Report Comments**

Dear Ms. Worrall:

On behalf of the Microsoft Corporation, the Applicant for the proposed San José Data Center Project (Project), we are providing the enclosed relatively minor comments on the California Energy Commission's Draft Environmental Impact Report (DEIR) issued on December 23, 2021, which are being submitted for the limited purpose of further clarifying and amplifying the analysis in the DEIR.

If you have any questions on this comment letter, please contact me at (916) 769-8919.

Sincerely,

Jerry Salamy
Project Manager

Enclosure: Applicant Comments on Draft EIR

Comments on Draft EIR[1]

1. SUMMARY

Page 1-1, Project Summary, 1st paragraph, 4th sentence – The sentence states the project includes 244 natural gas generators. Please correct the sentence to read as follows. This typographic error also occurs on pages 4.14-3, 4.15-1, and 4.20-11. E-1

> … the project includes ~~244~~ 224 0.45-MW natural gas generators to provide electrical power to support the data center uses during utility outages, …

Page 1-1, Project Summary, 1st paragraph, 5th sentence – The sentence states the project's estimated electrical load is 77 megawatts (MW). In the response to Data Request Set 6 (Transaction Number 240082 response #70), the Applicant revised the estimated electrical use to 96 MWs. Please correct the sentence to read as follows. This typographic error also occurs on pages 3-4, 3-5, 3-10, and Appendix A page 1. E-2

> The maximum electrical load of the project would be 99 MW, although the estimated load is ~~77~~96 MW, …

Page 1-1, Project Summary, 1st paragraph, second to last sentence: Please revise the sentence below to clarify the Project's use of natural gas. The remainder of the Draft EIR correctly states that the project will use natural gas for comfort heating. E-3

> "~~No natural gas would be used onsite.~~ Natural gas is also proposed for comfort heating of the data center buildings."

Page 1-2, Section 1.2, 3rd paragraph, second to last sentence – Add a period to the end of the sentence. E-4

Page 1-6, Section 1.2, BIO-3: Please see the requested revisions to Mitigation Measure BIO-3 identified below regarding burrowing owl. E-5

Page 1-8, Section 1.2, BIO-12: Please see the requested revisions to Mitigation Measure BIO-12 identified below regarding tree replacement. E-6

Page 1-11, Section 1.2, BIO-20: Please see the requested revisions to Mitigation Measure BIO-20 pertaining to the Santa Clara Valley Habitat Plan (SCVHA) Land Cover Fee. E-7

Page 1-16, Section 1.2, Summary of Environmental Impacts and Mitigation Measures, Greenhouse Gas Emissions, GHG-1: Mitigation Measure GHG-1 does not include any provision for emergency conditions where the supply of renewable fuels may be restricted or in high demand and also does not reflect the fact that it is not possible for the Applicant to control the actual type of natural gas delivered by PG&E through its exclusive pipeline system to the site. The Applicant will purchase renewable natural gas that will be injected into the PG&E system, but it is impossible to track the renewable natural gas particles to the site. Since Mitigation Measure GHG-1 requires the "use" of renewable natural gas, it is impossible for the Applicant to comply with the measure as currently drafted. Therefore, the Applicant suggests E-8

[1] Additions are shown in blue underlined text. Deletions are shown in black ~~strikethrough text~~.

the following change to GHG-1 to reflect that all the Applicant can do is "purchase" the renewable natural gas. The net effect is the same, as the Applicant will "purchase" an amount of renewable natural gas equivalent to the natural gas used as the site.

In addition, to match the Applicant's commitment but to acknowledge that renewable diesel may not be available in sufficient quantities during an emergency, the Applicant proposes the following modifications regarding the use of renewable diesel.

> **GHG-1:** The project owner shall ~~exclusively use~~ purchase renewable natural gas in an amount equivalent to the total energy use of the ~~and renewable diesel in the~~ natural-gas fired ~~and diesel-fired~~ generators, which may require securing renewable fuel from PG&E and other suppliers as feasible. The project owner shall use renewable diesel fuel for the administrative diesel-fired generators to the extent feasible. During an emergency where renewable diesel fuel supplies may be limited, the project owner will document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The project owner shall provide documentation to the Director or Director's designee with the City of San Jose Planning, Building and Code Enforcement (PBCE) to verify the amount of renewable natural gas purchased, and the amount administrative diesel fuel used by the administrative diesel-fired generators. ~~that renewable fuels are used for 100 percent of total energy use by the generators upon commencing operation of the project.~~

E-8 continued

In addition to the modifications to Mitigation Measure GHG-1 above, minor consistent changes should be made to the term "use" of renewable natural gas to reflect "purchase" of renewable natural gas contained in the discussion on pages 4.6-5, 4.8-14, 4.8-15, and 4.8-18.

Page 1-16, Greenhouse Gas Emissions, GHG-2: In Mitigation Measure GHG-2, Staff has included a measure to ensure the project would comply with the City of San Jose Greenhouse Reduction Strategy adopted in 2020 (GHGRS). Staff's mitigation measure differs from the mitigation measure adopted in the Great Oaks South Data Center (GOS). The mitigation measure for GOS was agreed to by the City of San Jose as it acknowledges that compliance with GHGRS can be accomplished with an Alternative Measure. Staff's proposed Mitigation Measure GHG-2 for the project also acknowledges that the project owner can comply with the GHGRS by use of an Alternative Measure; however, the structure of the mitigation (the use of bullets) creates inconsistency. The following modifications are proposed to ensure that Mitigation Measure GHG-2 allows three independent ways to demonstrate compliance with the GHGRS: 1) participation in the San Jose Clean Energy at the Total Green level; 2) negotiating a electricity contract with SJCE that accomplishes the same goals as the Total Green level; or 3) providing documentation and annual reporting to the Director or Director's designee with the City of San Jose PBCD that confirms the Alternative Measures achieve the same 100 percent carbon free electricity as the SJCE Total Green level, with verification by a qualified third-party auditor specializing in greenhouse gas emissions.

E-9

> **GHG-2:**
>
> - The project owner shall participate in the San Jose Clean Energy (SJCE) at the Total Green level (i.e., 100 percent carbon-free electricity) for electricity accounts associated with the project, or shall negotiate an electricity contract

with SJCE or participate in a clean energy program that accomplishes the same goals as the Total Green level, to ensure compliance with the City's 2030 Greenhouse Gas Emissions Reduction Strategy.

- ~~The project owner shall provide documentation to the Director or Director's designee with the City of San Jose Planning, Building and Code Enforcement (PBCE) of enrollment and annual reporting of continued participation in the SJCE Total Green level. If not enrolled in SJCE Total Green level, the project owner shall provide documentation and annual reporting to the Director or Director's designee with the City of San Jose PBCD that confirms that alternative measures achieve the same 100 percent carbon free electricity as the SJCE Total Green level, with verification by a qualified third-party auditor specializing in greenhouse gas emissions.~~

- During operation, the project owner shall submit annual reports to the Director or Director's designee with the City of San Jose PCBE documenting either continued participation in SJCE at the Total Green level or documentation that alternative measures continue to provide 100% carbon-free electricity, as verified by an independent third-party auditor specializing in greenhouse gas emissions.

E-9 continued

In the alternative, the current version of Mitigation Measure GHG-2 can be deleted and replaced with the language provided in Mitigation Measure GHG-1 for GOS, which was approved by the Commission in the FEIR and Final Decision for the GOS project, as reflected below.

[Option 2]

MM GHG-2: The project owner shall participate in the San Jose Clean Energy (SJCE) at the Total Green level (i.e., 100% carbon-free electricity) for electricity accounts associated with the project, or enter into an electricity contract with SJCE or participate in a clean energy program that accomplishes the same goals of 100% carbon-free electricity as the SJCE Total Green Level.

We request Staff make make corresponding changes to the discussion to acknowledge the City of San Jose allows Alternative Measures for complying with its GHGRS at Page 1-16 and at pages 4.8-25 and 4.8-26.

Page 1-19, Noise, 4th paragraph, 1st sentence – This sentence includes a typographic error indicating the Norman Y. Mineta San Jose International Airport is 13.4 miles away, while other sections indicate the nearest airport is 3.4 miles away. Please confirm this information and correct this typographic error.

E-10

3. PROJECT DESCRIPTION

Page 3-4, Section 3.5 Project Objectives, 4th bullet – Please note the roadway improvements also include a new bike trail; therefore, the Applicant suggests the following addition.

E-11

Design the proposed data center such that it can be provided with operational electric power via an electric 115/230-kilovolt (kV) substation, and efficiently

3

extend, connect to, or otherwise install other utility infrastructure to adequately serve the project, including water, storm drainage, sanitary sewer, electric, natural gas, and telecommunications, as well as new roadway and bike trail improvements.

E-11 continued

Page 3-7, Section 3.7 Facility Operation – The Applicant suggests the following changes to this paragraph.

> The project is proposing to operate differently from other previous data center projects, which have used ~~using~~ solely diesel backup generators. The standby generation system for the project consists of 224 renewable natural gas generators, and two Tier 4 diesel-fired standby generators to support administrative functions only. The project's natural gas standby generators would be run primarily for testing and maintenance purposes, and otherwise would not operate unless there is an interruption of the electrical supply or pursuant to dispatch for load shedding, demand response, and behind the meter resource adequacy (RA).

E-12

Page 3-11, Section 3.6.1 Electrical Generation Equipment, 1st paragraph, 2nd and 3rd sentence – The Enchanted Rock engines include two, 3-way catalyst per engine with one catalyst system installed on each bank of the V-12 engine. Applicant suggests the following changes to this paragraph and on page 4.3-18, 5th paragraph.

> Each engine includes two ~~sets of~~ 3-way catalysts that control air emissions, with one ~~set of~~ catalyst~~s~~ installed on each bank of 6 cylinders in the V-12 engine. ~~The catalysts sets are designated in series with a primary and secondary catalyst.~~ Each bank of cylinders also includes its own exhaust stack, with two exhaust stacks per engine.

E-13

4. ENVIRONMENTAL SETTING AND ENVIRONMENTAL IMPACTS

4.3 AIR QUALITY

Page 4.3-13, Sensitive Receptors, 1st full paragraph – The Applicant suggests the following clarifications to document that no sensitive receptors exist within 1,000 feet of the project site.

> The SPPE application shows the results of a sensitive receptor search conducted within two kilometers and finds that there are no sensitive receptors within 1,000 feet of the project site. T~~t~~he sensitive receptor locations near the project site, but outside of the 1,000-foot zone, include primarily schools, preschool through elementary-level; daycares; health centers; and a senior care center.

E-14

Page 4.3-41, Table 4.3-10, Footnotes 1 and 2 – Table 4.3-10 shows that the Acute Non-Cancer Hazard Index for the Point of Maximum Impact (PMI), Maximally Exposed Individual Resident (MEIR), Maximally Exposed Individual Worker (MEIW) are all the same value (0.00498), noting MEIR for the acute hazard index is at the project boundary. Based on this footnote, it appears that staff used the acute non-cancer hazard index occurring at the PMI (at

E-15

the property boundary) to assess compliance with the Bay Area Air Quality Management District's California Environmental Quality Act threshold. If this assumption is correct, the Applicant suggests that the CEC revise the footnote to clarify its assessment. In addition, the Applicant suggests the following revisions to the changes to Table 4.3-10, footnotes 1 and 2

1 Maximally Exposed Individual Resident (MEIR). The MEIR for cancer risk impact and chronic HI is at the residence (on Murphy Ranch Road) located about 0.3 miles southeast of the project boundary. The MEIR for acute HI is at the project boundary which provides a conservative assessment of the acute HI.

2 Maximally Exposed Individual Worker (MEIW). The MEIW for cancer risk impact and chronic non-cancer HI is at the same location of PMI, at the project boundary. The MEIW for acute HI is also at the project boundary which provides a conservative assessment of the acute HI.

E-15 continued

Page 4.3-45, Cumulative, Table 4.3-11 – The values in the Total - Cumulative Sources row are not correct. The Applicant suggests the following change to the Total – Cumulative Sources totals to ensure accuracy.

E-16

TABLE 4.3-11 CANCER RISKS (PER MILLION) FROM CUMULATIVE SOURCES

Total - Cumulative Sources	~~20.155~~17.79	27.914	~~17.045~~14.68	63.59

Page 4.3-45, Cumulative, Table 4.3-12 The values in the Total - Cumulative Sources row are not correct. The Applicant suggests the following change to the Total – Cumulative Sources totals to ensure accuracy.

E-17

TABLE 4.3-12 CHRONIC HAZARD INDICES FROM CUMULATIVE SOURCES

Total - Cumulative Sources	~~0.02201~~0.067	0.0856	~~0.06701~~0.05261	0.007042

4.4 BIOLOGICAL RESOURCES

p. 4.4-12 last paragraph and p. 4.4-13, 1st and 2nd paragraphs: The Applicant requests the following clarifications and revisions concerning the discussion of burrowing owl to ensure accuracy.

E-18

The project applicant has agreed to pay applicable fees to the City Director or their designee, based on SCVHP fees (Jacobs 2019a). New land acquisitions and maintenance/monitoring are discussed in Chapter 5 of the SCVHP (2012). No burrowing owls have been located on site based on recent surveys, however, if ~~If~~ a covered activity occurs in an area that is mapped as "~~occurs in~~ occupied burrowing owl nesting habitat as defined in Figure 5-11" of the SCVHP, "a burrowing owl fee will be paid by the project applicant. This fee will be in addition to the land cover fee. The burrowing owl fee is charged on the area on which land cover fees are levied." (page 9-33 SCVHP 2012). These fees must be paid

5

before or at the time that the grading permit for the project is issued (page 9-42 SCVHP 2012); ~~according to Table 9-6 (SCVHP 2012), the per acre burrowing owl fee was $50,438, and is currently at $60,825 per acre (SCVHA 2020) (but~~ the project proponent must pay the most up-to-date fees as reported by the SCV Habitat Agency~~)~~. The fee for mapped ~~B~~burrowing owl habitat is considered outside of Land Cover Fee Zones as established by the SCVHP (2012) as mentioned above, and therefore is additional to Land Cover Fee Zone payments for land cover types as described above (the SCVHP (2012) is "habitat-based" and therefore, fee payments are based on conversion of habitat, such as planned for potential burrowing owl habitat). Here, the only portions of the Project that would be located within the SCVHP mapped "occupied habitat" areas are portions of the off-site linear features to the west of Zanker Road. The main project site is not located within a mapped "occupied habitat" area. Temporary impact fees are also assessed for burrowing owls as shown in SCVHA (2020) and SCVHP (2012) and are based on the amount of the burrowing owl fee adjusted for duration of the impact ~~currently $60,825 per acre~~. **BIO-3** and **BIO-20** would mitigate permanent and temporary impacts to mapped burrowing owl habitat.

The project site consists of short-term fallowed agriculture, (Figure 3.4-1, Jacobs 2019a), along with much of the offsite linear alignments, and as mapped by the SCVHA GeoBrowser (SCVHA 2021). This type of habitat is considered Fee Zone B, ~~and, per SCVHA (2020), currently costs $15,043 per acre, subject to~~ and the project applicant shall pay the updated fee calculations as available from the SCVHA at the time of payment. The project applicant (Jacobs 2019a) stated that the project site was mapped as Fee Zone A: Ranchland and Natural Lands, consisting of grassland, oak woodland and chaparral (page 9-24 and Table 9-7a of SCVHP 2012) covering the development area and offsite utility alignments. However, based on staff's assessment and research, including accessing the SCVHA GeoBrowser (2021), the site is mapped as Fee Zone B. Pursuant to the SCVHP, mitigation for temporary and permanent impacts for habitat conversion is provided as BIO-20; implementation of this measure would ensure that impacts to habitat are fully mitigated. This measure also ensures that foraging habitat for wildlife is replaced, protected, and monitored in perpetuity, pursuant to the SCVHP. With incorporation of BIO-3 through BIO-5 and BIO-20, impacts to burrowing owls would be reduced to a less than significant level.

E-18 continued

p. 4.4-27, Section 4.4.3 Mitigation Measures, BIO-3: Consistent with the revisions made above regarding the discussion of burrowing owl, the Applicant requests the following clarifications to the mitigation measure below.

> **BIO-3:** To mitigate impacts to ~~occupied~~ mapped burrowing owl habitat, the project applicant shall pay the applicable B~~b~~urrowing O~~o~~wl F~~f~~ee as specified in the SCVHP for each acre of ~~occupied~~ mapped burrowing owl nesting habitat impacted as a result of the project's off-site linear features west of Zanker Road~~buildout~~. ~~Fees shall also be required from the loss of foraging habitat on the habitat offsite (approximately 64.5 acres). Pursuant to the SCVHP (2012), impacts to both temporary and permanent burrowing owl nesting habitat are~~

E-19

~~(currently) to be mitigated at a rate of $60,825 per acre (SCVHA 2020), however,~~ ~~t~~The project owner must pay the most up-to-date fees as reported by the Santa Clara Valley Habitat Agency. Fees are to be paid to the Director or Director's designee with the City of San Jose Department of Planning, Building and Code enforcement, before or at the time that the grading permit for the project is issued.

E-19 continued

Page 4.4-25, third paragraph: The Applicant requests the following changes to the discussion of tree removal to reflect that the City of San Jose's tree ordinance provides for the replacement of removed trees. Related edits are proposed to Mitigation Measure BIO-12 further below.

> If tree(s) need to be removed, a tree removal permit would be required from the City should any ordinance-sized trees be removed and this permit process requires the replacement of removed trees; this would reduce any adverse impacts to a less than significant level and thus the project would not conflict with local policies or ordinances protecting biological resources. Additionally, a WEAP (**BIO-13**) would ensure no significant impacts to trees would occur. With implementation of **BIO-12** and **BIO-13**, impacts to ordinance-sized trees (including non-natives as specified within City policy) would be reduced to a less than significant level.

E-20

Pages 4.4-29 and 4.4-30, BIO-12: The DEIR proposes Mitigation Measure **BIO-12** to ensure compliance with the City's Tree Preservation Ordinance. The tree ordinance provides for the replacement of removed trees and therefore Mitigation Measure **BIO-12** has been modified to include replacement of trees to be included in the Tree Protection Plan (TPP) to be submitted to the City of San Jose for approval.

> **BIO-12:** Prior to ground disturbance, the project applicant shall ensure that the project site, including linear alignments and the bike path have been surveyed by a certified arborist or biologist and prepare a report. The report, a Tree Protection Plan (TPP), shall be submitted to the Director or Director's designee with the City of San Jose Department of Planning, Building, and Code Enforcement for trees to be preserved and/or replaced. The TPP shall include, but is not limited to, the following:
>
> - Number of trees and location of trees to be protected
> - Final landscaping proposal
> - Tree Protection Zone (TPZ)
> - Size and location of TPZ
> - Specific recommendation and suggestions or recommendation for each TPZ if applicable
> - Maintenance methodology for tree protection zones during the entire demolition and construction period
> - Irrigated schedule
> - Pruning schedule for preserved trees, if applicable Herbicides and other products recommended to be used on preserved trees
> - Tree replacement strategy for removed trees.

E-21

7

Page 4.4-12, 2nd paragraph, 5th sentence: The primary component of the SCVHP's development fees is what is called a "Land Cover Fee," which mitigates for impacts associated with the loss or degradation of habitat within the Plan Area for covered species and natural communities. The fee is paid according to the land type of the Project Site and is separate from the Burrowing Owl Fee, which is identified under BIO-3. In addition, the SCVHP includes a Temporary Impact Fee, which accounts for the small, localized, temporary impacts on natural land cover types. The Applicant requests the following clarifications to the language found on Page 4.4-12 describing the various fees, as well as associated edits below to BIO-20.

> Staff proposes **BIO-3**, the payment of the SCVHP Burrowing Owl Fee, ~~and **BIO-20** to mitigate the temporary and permanent loss of burrowing owl habitat, as required under the SCVHP. Additionally,~~ and **BIO-20**, ~~includes the requirement for~~ the payment of the SCVHP Land Cover Fee and Temporary Impact Fee to mitigate for the permanent and temporary loss of agricultural land classified as Fee Zone B, under the SCVHP.

E-22

Page 4.4-32, BIO-20: The Applicant requests the following revisions to Mitigation Measure BIO-20 to clarify the purpose of the SCVHA's Land Cover Fee and Temporary Impact Fee.

> **BIO-20**: The project owner shall pay, before or at the time that the grading permit for the project is issued, the Santa Clara Valley Habitat Plan (SCVHA) Land Cover Fee and Temporary Impact Fee, which mitigate for the direct and indirect loss or degradation of habitat related to permanent and temporary impacts, respectively, on any non-exempt land cover type. The project owner shall pay such fees according to the updated SCVHA fee schedule at the time of payment. ~~temporary and permanent impact fees for loss of habitat onsite and along the project linears and road improvements, as necessary and appropriate for construction and temporary impacts. Currently, Fee Zone B, pursuant to SCVHA (202) is valued at $15,043 per acre, subject to updated fee calculations as available from the SCVHA.~~

E-23

4.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

Page 4.5-27, Mitigation Measure CUL-2. The Applicant suggest including specificity in how the subsurface testing will be performed and suggests the following text.

> **CUL-2:** Prior to the issuance of any grading permit, the project will be required to complete subsurface testing to determine the extent of possible resources onsite. Subsurface testing shall be completed by a qualified archaeologist. Methodologies and procedures for completing the subsurface testing will be developed through completion of a testing plan. The testing plan will identify locations where testing will occur, depth and extent of testing. Testing will not require the use of mechanized equipment (i.e., geo-probe, backhoe, etc.), and up to 10 testing locations will be considered. The testing plan will be submitted to the Director or Director's designee of the City of San Jose Department of Planning, Building and Code Enforcement for approval prior to the completion of any testing. If ~~Based on~~ the findings of the subsurface testing confirm there are significant cultural resources on-site, then~~,~~ an archaeological resources treatment plan shall be

E-24

prepared by a qualified archaeologist and submitted to Director or Director's designee of the City of San Jose Department of Planning, Building and Code Enforcement for approval prior to the issuance of grading permits.

E-24 continued

4.8 GREENHOUSE GAS EMISSIONS

E-25

p. 4.8-26, Section 4.8.3, Please see the discussion above regarding proposed revisions to Mitigation Measures GHG-1 and GHG-2.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Page 4.9-8 –The sentence contains a typographical error. Please revise as follows:

E-26

Less Than Significant Impact. The project would consist of 224 renewable natural gas-fired generators, each with a standby capacity of ~~1.5~~ 0.45 MW and two administrative diesel-fired generators, rated 1.25 MW and 0.5 MW.

4.11 LAND USE AND PLANNING

Page 4.11-5, 4th full paragraph, 2nd sentence – The sentence indicates rooftop mechanical equipment results in the tallest structure being 31 feet. However, the project does not include rooftop equipment. The adjacent fluid coolers (noted in SPPE Figures 2-3gR and 2-4eR) are the tallest project feature at 31 feet. Please correct the sentence to read as follows. Also please see Section 4.13 (Noise) for references to rooftop mechanical equipment.

E-27

The ~~rooftop~~ mechanical equipment would bring the project height ~~of the data center buildings~~ to approximately 31 feet above ground level.

4.17 TRANSPORTATION

Page 4.17-17, Mitigation Measure TRA-1 – MM TRA-1 requires several measures that all address the potential impacts during operations of the project; yet the first sentence of the measure requires implementation of all of the measures prior to "the issuance of any City of San Jose Public Works clearances". This timeline would be appropriate if the measures were mitigating construction impacts. However, as the analysis on page 4.17-11 through 13, all of the measures contained in **TRA-1** are intended to mitigate potential impacts that only will occur *after* the project becomes operational. Therefore, we propose the following modification to the first sentence of Mitigation Measure **TRA-1**:

E-28

TRA-1: Prior to the issuance of ~~any~~ City of San Jose occupancy permit ~~Public Works clearances~~, the project shall implement the following:….

9

Response to Comments Set E: Microsoft

E-1 Edit has been made in **Section 1 Summary** on page 1-1 to correct the number of generators.

E-2 Edit has been made on page 1-1 to revise the electric load to 96 megawatts. Also, edits have been made on pages 3-4 and 3-5 in **Section 3 Project Description**.

E-3 Edit has been made on page 1-1 to remove reference to no natural gas being proposed for the project. The project proposes natural gas for comfort heating, but would likely need to use an alternative fuel source due to the natural gas infrastructure prohibition (Municipal Code Section 17.845.045).

E-4 Edits have been made on page 1-2 to add a period.

E-5 Please see response under E-18.

E-6 Please see response under E-20 and E-21.

E-7 Please see response under E-23.

E-8 The comment suggests revisions to the mitigation measure GHG-1 to allow for situations where the supply of renewable diesel fuel may be difficult to obtain and to clarify how renewable natural gas would be purchased rather than physically delivered to the site. Staff reviewed the proposed modifications to the mitigation measure. The Final EIR includes the clarifying revisions with modifications to GHG-1 to improve the enforceability of the performance standard requiring use of renewable resources for 100 percent of the energy used by the generators.

E-9 The comment suggests revisions to the mitigation measure GHG-2 to clarify the different approaches available to achieve a supply of electricity that is 100 percent carbon-free. Staff reviewed the proposed modifications to the mitigation measure. The Final EIR includes revisions to GHG-2 to clarify that the electricity supply may be obtained from San Jose Clean Energy or another supplier as long as the supply is verified to be 100 percent carbon-free.

E-10 Edit has been made on page 1-19 in **Section 1 Summary** to change the distance to the airport to 3.4 miles.

E-11 Edit has been made on page 3-4 in **Section 3 Project Description** to include bike trail improvements in the list of objectives.

E-12 Edits have been made on page 3-15 in subsection "3.7 Facility Operation" to clarify operation of the natural gas generators and administrative diesel-fired generators.

E-13 Edits have been made on page 3-12 in subsection "3.6.1 Electrical Power Delivery" to update the electrical generation equipment details.

E-14 Edits have been made on page 4.3-13 in **Section 4.3 Air Quality**, Sensitive Receptors, 1st full paragraph to add the clarification that there are no sensitive receptors in 1,000 feet of the project.

E-15 Edits have been added on page 4.3-41, **Table 4.3-10**, to footnotes 1 and 2.

E-16 Edits have been made on Cumulative, **Table 4.3-11**. The values in the Total - Cumulative Sources row are correct, but there were some typos in the row of Los Esteros Critical Energy Facility.

E-17 Edits have been made on Cumulative, **Table 4.3-12**. The value in the Total - Cumulative Sources row for PMI has been updated from 0.02291 to 0.0671. The value in the Total - Cumulative Sources row for MEIW is correct, but there was one typo in the row of Los Esteros Critical Energy Facility.

E-18 Unless otherwise noted below, applicant's suggested edits were accepted and incorporated into the FEIR. Staff has rejected adding suggested language that "No burrowing owls have been located on site based on recent surveys" for several reasons. Burrowing owls are known to occur along the linear routes, which are part of the site. Further, protocol surveys for the burrowing owl were last conducted in 2016 (Jacobs 2021o, page 3.4-18); these are not considered "recent" survey efforts. Staff edited the remainder of the sentence as follows, incorporating and clarifying applicant's comments: If a covered activity occurs in an area mapped as occupied burrowing owl nesting habitat as defined in Figure 5-11 of the SCVHP, a burrowing owl fee will be paid by the project applicant".

Staff did not delete the summation of per acre burrowing owl fees, as a matter of public disclosure; however, the fee amounts were updated per SCVHA 2022. Regarding applicant's suggested addition that temporary impact fees are "based on the amount of the burrowing fee adjusted for duration of the impact", staff was unable to substantiate this language through the 2012 SCVHP, and therefore, language was not added.

E-19 The SCVHA performs their own burrowing owl surveys and updates what constitutes mapped occupied burrowing owl as appropriate, on an annual basis. While currently only portions of the offsite linear features of the project are mapped burrowing owl habitat, this habitat may become occupied and subsequently mapped by the SCVHA in the future (and prior to project construction), therefore, staff declined to add language which, as stated, would seem to curtail mitigation to "offsite linear features west of Zanker Road". Staff, did, however, incorporate other edits; please see updated language within **BIO-3**, also based on informal coordination with the SCVHA (Gerry Haas) on page 4.4-28 and page 1-6 in **Section 1 Summary**.

E-20 Edit made to note tree replacement requirements with minor grammatical changes on page 4.4-26.

E-21 Edits made, with minor modifications (staff avoids "and/or" statements in CEQA documents) on page 1-30 and page 4.4-31.

E-22 Edits made related to the burrowing owl fee as suggested on page 4.4-13.

E-23 Edits incorporated except for the portion of the sentence that states "…which mitigate for the direct and indirect loss or degradation of habitat related to permanent and temporary impacts, respectively, on any non-exempt land cover type". Staff excluded this portion as it appears to be more appropriate to the impact analysis, and therefore not suitable to a mitigation measure, on page 1-11 through 1-12, and page 4.4-33.

E-24 Staff agrees that requiring a subsurface testing plan is a best practice and provides more specificity in the measure. Staff does not believe the mitigation measure should specify the testing actions to be taken before a testing plan is devised and approved. Therefore, the language of **CUL-2** on page 4.5-27 in **Section 4.5 Cultural Resources** has been revised to include the applicant's suggestion for a testing plan, but staff has declined to incorporate the applicant's language regarding specific testing actions. The changes clarify, amplify, and make insignificant modifications to the DEIR. They do not alter the analysis, or the conclusions reached.

E-25 Please see responses to E-8 and E-9 for proposed revisions to mitigation measures GHG-1 and GHG-2.

E-26 The edit to show the administrative generator as 0.45 MW has been made on page 4.9-8 in **Section 4.9 Hazards and Hazardous Materials**.

E-27 Staff made the applicant's suggested edit on page 4.11-5 in **Section 4.11 Land Use** to correct the inaccurate statement that rooftop equipment (which the project does not have) is the tallest project feature.

E-28 Edits have been made on page 4.17-17 in **Section 4.17 Transportation** to adjust the timing of the mitigation.

Appendix A

Project's Jurisdictional and Generating Capacity Analysis

Appendix A: Project's Jurisdictional and Generating Capacity Analysis

The San Jose Data Center (project) would include 224 natural gas internal combustion engine generators (ICE) that would provide emergency backup power supply for the data center only during interruptions of electric service from Pacific Gas and Electric Company (PG&E), during an emergency, or part of a load shedding program to support grid reliability. The ICEs would be electrically isolated from the PG&E electrical transmission grid with no means to deliver electricity offsite of the data center (the distribution line would only allow power to flow in one direction – from PG&E to the data center).

Each natural gas ICE would have a nameplate output capacity of 0.45 megawatts (MW) and continuous steady-state output capacity of 0.34 MW to provide electrical power to support the data center uses during utility outages, certain onsite electrical equipment interruptions or failure, and for load shedding, demand response and behind-the-meter resource adequacy ancillary services. (Jacobs 2021o, Section 2.1). The maximum total generating facility load requirements would not exceed 99 MW. The maximum electrical load of the project would be 99 MW, although the estimated load is 77 MW, inclusive of information technology (IT) equipment, ancillary electrical/ telecommunications equipment, and other electrical loads (administrative, heat rejection, and safety/ security).

The California Energy Commission (CEC) is responsible for reviewing, and ultimately approving or denying, all applications for thermal electric power plants, 50 MW and greater, proposed for construction in California. (Pub. Resources Code, § 25500.) The Energy Commission 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 Energy Commission's jurisdiction and proceed with local approval rather than requiring an Energy Commission certificate. The 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 Pub. Resources Code, § 25541.)

Staff calculated a net deliverable or useable electricity capacity of more than 50 MW and less than 100 MW from the data center, qualifying it for a Small Power Plant Exemption under the capacity criterion. The following provides a summary of the factors supporting this conclusion, with a more detailed discussion of these factors following after.

1. The natural gas ICEs use a thermal energy source.
2. The ICEs and the associated data center equipment that they would support would all be located on a common property under common ownership sharing common utilities and the 224 ICEs should be aggregated and considered as one thermal power plant facility with a generation capacity of greater than 50 MW.
3. While the data center has an apparent installed generation capacity slightly greater than 100 MW (224 ICEs, each with 0.45 MW peak capacity), the "extra" MW installed

are redundant. In no case would the maximum facility-wide load demand exceed 99 MW due to physical constraints built into the project.

4. Jurisdictional analyses are based on the net MWs that can be delivered for "use" (i.e., to a data center facility or the electricity grid), not the gross or nameplate rating. Unlike a traditional power plant supplying electricity to the grid, for a data center the maximum load being served is determinative and not the combined net capacity of the installed ICEs. Here, the maximum facility-wide data center load requirement would be 99 MW.
5. The backup ICEs would be exclusively connected to the data center buildings to provide electrical power during utility outages, certain electrical equipment interruption or failure, and for load shedding, demand response and behind-the-meter resource adequacy ancillary services. The ICEs would not be capable of delivering electricity to any other user or to the electrical transmission grid (Jacobs 2021o, Section 2.0). The proposed redundancies built into the design of the facility are to ensure performance reliability, not to generate and supply the data center with more than 99 MW of electricity.
6. The restriction on the facility's load demand is hardwired through various control systems. It would be physically impossible for the ICEs to generate more electricity than the buildings require. Excess electricity would damage components or at a minimum, isolate the data center loads from the backup generators.

In order to make a jurisdictional recommendation, staff assessed the generating capacity of the power plant site, using the following:

1. The natural gas ICEs are a thermal power plant under the Energy Commission's definition.

The Warren-Alquist Act defines a thermal power plant "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." (Pub. Resources Code, § 25120.) The project is made up of ICEs that use natural gas fueled engines to convert the thermal energy in the natural gas fuel[1] into electricity from a rotating generator, thus - each ICE is an electrical generating device that uses a source of thermal energy. The facility proposes to use 224 such ICEs to service the data center.

The 224 ICEs, and the associated data center that they would support, would all be located on a common property under common ownership sharing common utilities. The ICEs would be deployed in redundant configuration and would operate at less than 100 percent capacity to provide up to the maximum of 99 MW of backup electricity to the data center when its connection to the grid is lost. The ICE system includes a 4-to-make-3 design configuration, meaning that only 75 percent of a standby ICE generator's

1 Natural gas fuel is composed of a mixture of hydrocarbons, containing chemical energy. When ignited, this chemical energy is converted to thermal energy.

capacity is required to support load in the event of a utility failure. Any ICE can function either as a back up to the grid or a back up to the grid back up ICEs, so there is not a functional difference in the type of engine or generator between each ICE. All of the backup ICEs at the data center would share a common trigger for operation during an emergency: the transfer switch isolating the data center from the grid.

2. Title 20, California Code of Regulations section 2003 does not control.

Title 20, California Code of Regulations, section 2003 specifies how the Energy Commission calculates "generating capacity" for jurisdictional determinations, including the 50 MW threshold for the definition of a thermal power plant under section 25120. However, section 2003, which uses nameplate capacity in addition to consideration of other factors, only addresses steam and combustion turbines, not natural gas-fueled ICEs as used in the data center, and is therefore not controlling here. There are also other reasons to conclude that simply focusing on nameplate capacity here is not appropriate.

For a typical power plant, outside the factors identified in section 2003, there is almost no limit on what might be generated and provided to the grid, so the approach outlined in that provision identifies the potential maximum generating capacity and is reasonable for those facilities. This is not the case with data centers, where producing electricity in excess of what the data center requires would be economically wasteful and likely result in damage to the facility.

In traditional turbine-based power plants, parasitic loads (fans, pumps, and heaters) are external to the turbine; the generating capacity is the total MWs at the switchyard bus; that is, gross MWs less parasitic loads. If the grid "demands" more, the power plant cannot deliver more electricity unless it burns fuel at a higher rate or reduces parasitic loads. Even then, equipment would have to have the physical capacity to burn more fuel and convert thermal energy into rotational energy, and then operate the generator at a higher output. The calculations assume normal conditions, where generation would be under average operating conditions, and assumes the onsite loads (often called parasitic loads) are also average (e.g., a filter backwash pumping load would not be included if that operation only occurs monthly or annually). Typically, at a traditional power plant, no redundant generating equipment is installed.[2] Generating capacity is determined based on the net capacity of all of the electric generators that are proposed to be installed because they are to be connected to the grid where there is almost no limitation on the amount of MWs the grid can "take" from the facility.

Typically, backup generating facilities serving data centers are not physically able to send excess electricity to the grid and all electricity generated must be absorbed by the data

2 At modern power plants, some equipment design includes 50 to 100 percent redundancy. The redundant equipment is generally limited to certain critical components like transformers, which are often custom items with long lead times for fabrication, or boiler water feed pumps, which are intended to protect the steam boiler components from damage from too much heat if circulating water flow is interrupted.

center itself. Data centers are designed with precise loads, assuming full build-out, and providing electricity in excess of these loads is not only economically wasteful (burning fuel for no benefit or reason) but can result in damage to the sensitive components located inside these data centers, as well as to the heating, ventilation, air conditioning (HVAC) unit and other systems serving the buildings. Therefore, for purposes of evaluating the capacity of backup generating facilities serving data centers, it is reasonable for staff to consider that the controlling factor in how much electricity is capable of being generated to be the building load.

3. *Data Centers are analyzed differently than conventional power plant facilities for a number of reasons.*

To determine the net generating capacity of a collection of backup generators[3] for data centers, the approach is slightly different but consistent with that used on a traditional power plant. The differences are: 1) the end user is the building and data servers, not the grid, and 2) extra ICEs or generating capacity are installed to provide electricity not only for building and data server loads, but to provide redundancy that achieves a statistical reliability that can be marketed to data customers.

Staff's approach is consistent with widely practiced standards. For example, ASHRAE's (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Energy Standards for Data Centers do not use the nameplate or gross capacity, but the net generating capacity of data centers, or the actual cooling and IT server loads.[4] These ASHRAE standards are performance-based as opposed to prescriptive standards, advocating the position that determination of load requirements should be based on project-specific operational characteristics.

Staff's approach to calculating generating capacity has also been devised based on the International Organization for Standardization (ISO), which sets standards for different industries including the energy industry. The ISO standards are widely accepted by, and used throughout, the energy industry. Consistent with staff's method, the ISO specifies that generating capacity should be the net capacity at average annual ambient conditions.[5]

In the case of a data center, the load served acts as a limit to the generation levels from the ICEs in the backup generating facility. This factor is not present in a capacity generation determination for a typical power plant feeding to the grid because the grid does not act in the same way the "data center grid" does. If the breakers between the data center building and the ICEs were to trip due to excess generation, the data center

3 Backup generators, by definition, generally have the following characteristics: reliable starts, fast starting to full load, cheap to maintain as they sit idle most of the time, use cheap and stable fuel as the fuel sits unused most of the time, and use high-density fuels to limit storage volumes onsite so the project can operate if "islanded."

4 American National Standards Institute (ANSI)/ASHRAE Standard 90.4-2016, www.ashrae.org.

5 ISO 3046-1 Reciprocating Internal Combustion Engines – Performance, www.iso.org/standards.

would be isolated from the backup generators, the servers and building cooling would be forced to shut down. This subverts the intention of using the backup generators to maintain reliable and high-quality electricity. Excess electricity would damage components or at a minimum, isolate the load from the backup generators. If building cooling load were to increase (e.g., the day gets warmer), the ICE(s) would open the engine fuel throttle to increase generation output and match demand but would still not exceed the combined 99 MW IT and building demand.

4. The data center's capacity will not exceed 99 MW.

The exact number of backup generators that could operate in an emergency depends on actual cooling and IT server loads, and the reliability and performance of the backup generators. In no case would the combined output of backup generators exceed the prescribed maximum load of 99 MW. As explained above, it would be physically impossible for the ICEs to generate more electricity than the buildings require. The applicant would stipulate, in an agreement with the utility, to a contractual limit in the amount of electricity available from PG&E's system to a maximum of 99 MW. The applicant would operate the ICEs for 500 hours per year for the purpose of grid support through load shedding, demand response, and behind-the-meter Resource Adequacy (RA) ancillary services. At no time during the load shedding, demand response and behind-the-meter RA services would the project generate electricity for the electrical grid. The generators would continue to deliver electricity for the data center building and would not be interconnected to the grid. The natural gas generators would operate bi-weekly for approximately 20 minutes.

The maximum demand of 99 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. The cooling equipment's maximum demand would be fixed by the specification and installation of equipment that have an upper physical limit of cooling capacity and would include some redundant cooling equipment. Such redundant equipment could only be operated if a primary component fails and could not be operated in addition to the primary components, which would damage the data center. The data center would be served from the grid or from the emergency ICEs with electricity that matches and does not exceed demand for operations of the data server bays and buildings.

The heat rejected by the IT servers has to be removed from each server bay or else the server equipment and data would be damaged. Any attempt to add more servers to a bay would result in direct, immediate, and dire consequences because the building and equipment would have been designed for an upper critical IT load. It is important to note that the maximum combined facility load of 99 MW is based on 100 percent critical IT load with maximum cooling on the hottest day. In actuality, the critical IT load and related cooling load would typically be less than this worst-case scenario.

In recent years, the power and energy industries have advanced in terms of software development and hardwired digital control to permanently limit generation capacity. The generation by the data center and backup generation facility would be regulated by each building and each bay in that building. Software would be used to operate the ICEs in a manner that meets the bay and building demand. If the demand decreases (i.e., less mechanical load for cooling, etc.), the generator sets would automatically adjust the loading and corresponding electrical output. If a generator or the software were to malfunction and attempt to generate more electricity than the building demand, individual electrical generator controllers would shut down.

For the maximum generating capacity to increase, the project would have to be redesigned to physically fit more servers in a server bay or add more bays. The project owner would have to address the unplanned increase in electricity demand for normal operations, because the existing electrical equipment would not be sized for the higher electricity throughput. Additionally, the project owner would have to install additional cooling equipment units to address the increased heat rejected by the server bays and buildings, and install additional redundant cooling equipment, additional uninterruptable power supply (UPS) battery units, and additional ICEs to maintain the level of backup and reliability to match the new higher levels of load. This is an unlikely outcome because such changes are not trivial and would result in a cascade of design and physical changes to the facility.

When the data center is at full load, its worst-case day combined IT and building load[6] would not exceed 99 MW. The project proposes generators that total more than 99 MW for purposes of redundancy. The combined generating capacity of the installed operational ICEs is autonomously determined by the electrical equipment in the data center server bays and building equipment in use at the time of an emergency. The northern building (SJC02) would consist of 140 standby ICEs. The southern building (SJC03) would consist of 84 standby ICEs. The project has been designed with eight colocation units (colos) with supporting amenities, with five colos for the northern building and three for the southern building. The emergency operation of each lineup is fully automated. Once the data center loses connection to the local grid, the transfer switch isolates the data center from the local PG&E grid and all of the ICEs assigned to a server bay set initiate startup up to 75 percent of their full load capacity. As the ICEs start, synchronize, and take up load associated with their server bays and building equipment, the UPS system supplies up to 10 minutes[7] of power to smoothly transition the data center customer's data servers from the grid to the emergency ICEs (Jacobs 2021o Section 3.5.1). If an ICE or two fail to start or synchronize, the ICEs in the 4-to-make-3 server bay initiates a ramp up to higher output levels. The output of the ICE assigned to a server bay set match (meet but cannot exceed) the data center data customer's IT

6 Based on the hottest, most humid day of the year and with all IT servers in use at their full usage rate

7 The ICEs are expected to be on and synchronized within a minute or less, but the UPS can supply up to 10 minutes of power at 100 percent full-load UPS to ensure a complete transition from the grid to the gensets.

demand in the respective server bay and also the server bay's HVAC demand. The combined output of the server bay set is autonomously determined by the electrical equipment in the data center server bays and building equipment.

Combined output would be limited by sizing the electricity handling equipment that would throttle transfer capacity to no more than 99 MW, which would prevent damage to IT servers and building equipment. Therefore, it would be physically impossible for the ICEs to generate more electricity than what the data center would use, or more than 99 MW.

References

Jacobs 2021o – Jacobs (Jacobs). (TN 239409). SJDC SPPE Application Supplemental Filing Volume 1, dated August 20, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-04

Appendix B

Pacific Gas and Electric Company Los Esteros Substation Details

Appendix B: Pacific Gas and Electric Company Los Esteros Substation Details

This appendix includes a discussion of the Pacific Gas and Electric Company's (PG&E) electrical system reliability (including supporting information) and emergency operations.

Electrical System Reliability

Apart from readiness testing, the backup generators are designed to operate only when the electric system is unable to provide power to the data center. To understand the potential for the backup generators to operate during emergencies, one needs to know the conditions under which the electric system is unable to provide power to the data center. There are essentially five conditions that might result in the operation of the backup generators:

1. A fault occurs (power supply interruption) or planned maintenance is required on the equipment interconnecting the data center to the PG&E grid and the data center's electricity needs cannot be met.
2. An outage or fault occurs on the utility transmission system and PG&E is unable to provide power to the data center.
3. A Public Safety Power Shutoff (PSPS) impacts the utility transmission system and the data center is not able to receive power from PG&E.
4. An energy shortage crisis similar to the one in late Summer 2020 where the utility (e.g. PG&E) is unable to supply electricity to the data center or the data center operators voluntarily disconnect from the utility and relies on backup generators to provide the needed electricity.
5. The generators could also run when the utility/the California Independent System Operator (California ISO) calls for participants in the Baseline Incentive Program (BIP) to reduce loads.

Due to the design of the data center interconnection with PG&E, the design of the PG&E transmission network, and the historical and expected impacts of PSPS, staff expects the backup generators would only be used in rare events outside of testing and maintenance and participation in the BIP program.

The proposed data center interconnection to PG&E includes redundant facilities that will allow the data center energy needs to be met even when maintenance is required on the transmission system. Thus, transformer or transmission line maintenance could be performed without interrupting the supply of electricity from PG&E.

The PG&E Los Esteros Substation currently has six 115 kV lines and two 230 kV lines connected to substation. Two additional 115 kV underground cables would be built to connect the SJDC Substation to the Los Esteros Substation. Each cable could supply the

full data center loads. The SJDC Substation is also designed to include three 60 MVA transformers when only two are required to supply the full loads of the data center. Thus, transformer or transmission line maintenance could be performed without interrupting the supply of electricity from PG&E. The proposed design of the PG&E interconnection facilities provides redundancy such that the backup generators would not be needed during transmission system maintenance.

The California ISO and PG&E are responsible for the reliability of the transmission network and are required to maintain compliance with national, regional, state and local standards. These standards are complicated but, generally speaking, they require that no loads be dropped, customers shut off, when any single element of the bulk electric system is forced out of service. For the SJDC this means that PG&E should be able to supply power whenever any single part of the transmission system is out of service, sometimes called an N-1 or single contingency condition. This is the equivalent of, at a minimum, providing a looped system for the SJDC.

The interconnection to the Los Esteros Substation provides better reliability than a looped system as the substation could receive power from either the 230 kV lines (Los Esteros-Metcalf and Newark-Los Esteros) or through six 115 kV lines connected to the substation. The PG&E outage data provided in the applicant's Data Request Set 2 Response shows the value of the redundant interconnections. The data response indicated that from 2003 to 2018 there were twenty-four outages of the either the Los Esteros-Metcalf 230 kV line or the Newark-Los Esteros 230 kV line and only one of the outages resulted in customers losing service. Even though there are outages on the 230 kV lines they rarely result in customers not being served.

The PG&E outage data provided in the applicant's Data Request Set 5 Response indicated there have been five outages of the 115 kV lines feeding the Los Esteros substation: two outages in 2008, two outages in 2010, and one outage in 2014. The outages occurred in 2008 with a collective outage duration of 18 hours and 20 minutes. Since 2010, the duration of outages for these 115 kV lines is less than 3 minutes. None of the outages were due to PSPS events.

Wildfire policies could impact PG&E's ability to supply power to SJDC if curtailments on the transmission system interrupt supplies to the Los Esteros Substation. A PSPS essentially de-energizes power lines in order to prevent the lines from causing or being damaged by wildfires. The PSPSs to date have been generally limited to high fire risk zones and only implemented under special conditions. A line de-energization in one of PG&E's high-risk fire zones to reduce the risk of lines causing a wildfire could reduce the electricity transmission access and supply to the Los Esteros Substation.

As indicated in the Data Request Set 5A Responses, dated March 3, 2021, the Newark-Los Esteros 230 kV line is not in a high fire risk zone (Tier 1). The Los Esteros-Metcalf 230 kV line is routed through a Tier 2 high fire risk zone. It is unlikely that a PSPS event

would result in both 230 kV lines being taken out of service.

The future impact of safety shutoffs on the PG&E system are not currently known – to date, two broadly implemented PSPSs in PG&E service territory last fall had no impact on the Los Esteros Substation. As the utilities and regulators try to balance the costs and benefits of PSPS by fine tuning and targeting the implementation, the mostly likely outcome is that future PSPS events will have even fewer potential effects on PG&E's territory.

CEC Staff expects the SJDC backup generators to be required to supply data center loads only rarely due to utility outages or certain onsite electrical equipment interruptions or failure. According to Data Response #6, SJDC anticipates participating in the BIP which would obligate SJDC to run the backup generators to supply data center loads when requested by PG&E or the California ISO for purposes of load shedding to support grid stability.

While the applicant used 500 hours when estimating air emissions, the applicant's responses to Data Request Set #6, state that the "BIP currently requires a 30-minute response to an event dispatch and requires participants to be available up to 180 hours per year []; however, historically it has not been called more than 30 hours annually in the last 12 years []." (Jacobs 2021y).

While SJDC would be available up to 500 hours, based on the reliability of the PG&E's regional grid supporting the SJDC and the historical BIP data, it can be expected that overall, the generators will rarely operate, especially outside of the BIP program and routine testing. The generators will not be used when maintenance is performed on the transmission line or substation connecting the data center to the PG&E grid.

The PG&E system around the Los Esteros Substation can supply power to the data center from multiple sources including two 230 kV and several 115 kV transmission lines. These interconnections make the energy supply to the data center at least as reliable as a looped system but likely even more reliable. Finally, PSPS events have not impacted customers directly connected to the Los Esteros Substation and as we expect the effects of PSPS events to decrease over time we do not think this will be an issue for the SJDC going forward.

Energy shortages, like those that occurred on two occasions in 2020, could prevent a utility from supplying the data center electricity needs and the data center would then rely on backup generators. Recently, the California Public Utilities Commission (CPUC) has adopted a new pilot program (D.21-03-056), currently in effect through 2025, which ordered PG&E, Southern California Edison and San Diego Gas and Electric to administer the Emergency Load Reduction Program (ELRP). Data centers could voluntarily participate in the ELRP and in the event of an energy shortage emergency, they would disconnect from the grid and use their on-site generators to supply electricity. The ELRP provides a mechanism for utilities to measure the load reduction and provide financial compensation

to the participants. The ELRP does not affect the likelihood of emergency shortage events. The last time an energy shortage event occurred, like those in 2020, was 2001. If the past is indicative of future shortage, they are rare events. The project can participate in the ELRP even if they are in the BIP program. The applicant would only be paid and counted for the load reductions in the ELRP beyond those committed to in the BIP.

Electrical Reliability Supporting Information

Energy Commission staff provided a series of questions to PG&E designed to understand when, why, and for how long backup generators would need to operate for any purpose, including PSPS, other than readiness testing or maintenance at the proposed data center in the PG&E service area.

This supporting information includes the following:

1. SJ Data Request Set 2 Response on February 13, 2020 to staff questions (including tables listing outage history between 2003 – 2018 of the Los Esteros-Metcalf 230 kV and Los Esteros-Newark 230 kV lines.
2. SJ Data Center Data Request Set 5 Responses on October 30, 2020 to staff's questions (including a table listing outages between 2007 – 2020 of the Los Esteros Substation 115 kV systems).
3. SJ Data Request Set 5A Response on March 1, 2021: PG&E's Response to staff questions on Set 5.
4. SJ Data Center Response to Data Request Set #6 on October 15, 2021.

February 13, 2020: Response to Staff Data Request Set 2 (46 – 49)

46) Please provide information that reviews the frequency and durations of historic outages of the 230 kV facilities that would be likely to trigger a total loss of service to the proposed onsite substation and lead to emergency operations of the diesel-powered generators. This response should identify the reliability of service historically provided by PG&E to other similar data centers in its service territory.

Response: Tables DR46-1 and **DR46-2** presents the outage historic, frequency, and duration for the Los Estero-Metcalf and Los Esteros-Newark 230 kilovolt (kV) transmission lines supplying the 230-kV bus at the Los Esteros Substation. The Applicant will request PG&E provide information regarding the reliability of service historically provided by PG&E to other similar datacenters in its service territory and will docket this information when received.

47) Please provide information on the historic outages of the 230-kV portion of the Los Esteros Substation.

Response: See the response to Data Request #46.

Table DR46-1 Los Esteros-Metcalf and Los Esteros-Newark 230 Kilovolt Line Outage History

kV	Transmission Line	Date/ Time Out	Durn (mins)	Cause Category	Cause Detail	Secondary Cause	Comments	Cust Affected
230	LOS ESTEROS-METCALF	03/21/07 03:49	91	Unknown	Patrol found nothing	NONE	Relayed, properly didn't test (has underground section so no auto test); no customers out; weather clear; patrol found no evidence for why line relayed; eventID=4600	0
230	LOS ESTEROS-METCALF	05/27/08 19:50	16	Unknown	Patrol found nothing	NONE	Relayed, did not test (Newark_LosEsteros-230kV); open ending this line at Metcalf & Newark 230kV static var compensator tripped offline; no customers out; weather clear	0
230	LOS ESTEROS-METCALF	06/05/08 18:38	222	External contact	Foreign object	COND	Relayed, didn't test; at same time, Metcalf_MossLanding #2-230kV open ended at ML; no customers out; weather clear, breezy; patrol found marsh grass on conductor at twr 1/10	0
230	LOS ESTEROS-METCALF	09/05/08 20:30	8,793	Equipment failure	Arrestor	ARRS	Relayed, properly did not test; no customer interruptions; on trouble, Newark_LosEsteros open ended at Newark by out of section tripping, reclosed OK (eventID=5986); weather clear; line later cleared to repair failed lightning arrestor on twr L4/10B on 'A' phase; eventID=5999	0
230	LOS ESTEROS-METCALF	04/25/09 11:39	426	External contact	Foreign object	COND	Relayed, did not test as designed due to UG cable on lineTLine; approx 1/2-mile out from LosEsteros sub on A Phase at TSP L6/25 found flashed hot end yoke plate, cause for this flashing though could not be confirmed; this is 3rd time in a year that we've had this type of event--1st 2 events were found to be balloons between middle & top phases; ET to work with Engg to come up with a solution to gain more separation between conductor & lower arm; eventID=6539	0
230	LOS ESTEROS-METCALF	06/22/12 14:42	159	Disaster	Fire	NONE	Relayed, did not test by design; caused by a small grass fire by tower LO/06B; no equipment damage; no customer interruption; weather clear; 1721 line manually tested OK; TARGETS: SET "A' LINE DISTANCE & OC RLY # 221/267NA-4 = NO TARGETS SET "B" LINE DISTANCE & OC RLY #221/267NB-4 = COMM, ZONE 2, A PHASE GROUND, 43.82 MILES, GROUP 1 BREAKER BU RLY 250/262BF-4 = 50 A, N. OPERATIONS; patrol found no damage, unsure what caused fire	0
230	LOS ESTEROS-METCALF	09/17/13 02:29	541	Unknown	Patrol found nothing	NONE	Relayed - 09/17/13, 0229 LosEsteros-Metcalf 230kV relayed, did not test by design (partial UG circuit); no customer interruption; weather clear; 1130 line returned to service after patrol of UG found no trouble	0
230	LOS ESTEROS-METCALF	05/14/15 13:46	156	Weather	Lightning	UG	Relayed - 05/14/15, 1346 LosEsteros-Metcalf relayed, properly did not test due to UG section; no customer interruption; rain, lightning; B-G fault 23 mi from Metcalf near twr 22/99, +/- 4.0 mi; 1621 line manually tested OK after crew found no trouble; 1622 line returned normal; coincident lightning strike shown in GIS across structure 019/088, patrol found no damage	0
230	LOS ESTEROS-METCALF	08/06/15 21:32	104	Weather	Lightning	NONE	Relayed - 08/06/15, 2132 LosEsteros-Metcalf relayed, properly did not test; no customer interruption; lightning; A-G fault 6.48 MI FROM Metcalf near structure 006/031, +/- 3 mi; 2315 line manually tested OK; 2316 line returned to service; air patrol found no damage, no specific cause (probable lightning); eventID=11376	0
230	LOS ESTEROS-METCALF	05/03/16 23:27	98	Equipment failure	Insulator-line	INSL	Relayed - 05/03/16, 2327 LosEsteros-Metcalf relayed, did not test by design due to UG section; no customer interruption; light rain; 5/04/16, 0105 the line returned to normal; A-G fault 13.5 mi from Metcalf near twr 013/063, +/- 3.0 mi; found flashed insulator bells at TWR 13/61 MIDDLE PHASE, will schedule hot wash	0
230	LOS ESTEROS-METCALF	01/19/17 10:09	265	Unknown	Patrol found nothing	NONE	Relayed - 01/19/17, 1009 LE-Metcalf relayed, did not by design; no customers interrupted; rain, lightning; A-B-G fault 8.84 mi from Metcalf & 36.88 mi from LosEsteros (w/in OH section near structure 8/42 (accuracy might be compromised due to mixed OH and UG sections, as well as super bundle sections), +/- 4 mi; 1425 line patrol complete, no trouble found; 1432 line manually tested OK after no trouble found; 1434 line returned normal	0
230	LOS ESTEROS-METCALF	01/23/17 19:59	83	Equipment failure	Connector/ hardware	COND	Forced - 01/23/17, 1959 to 2122 LE-Metcalf 230kV forced out to remove fiber optic cable wrapped in conductor bet structures L7/27-28; no customers interrupted	0
230	LOS ESTEROS-METCALF	02/24/17 10:44	38	Equipment failure	Switch-station	DISC	Forced - 02/24/17, 1044 to 1122 LE-Metcalf 230kV open-ended after Metcalf CB-262 forced out due to arcing Metcalf SW-269; no customers interrupted;	0
230	LOS ESTEROS-METCALF	04/03/18 19:31	38,859	Equipment Failure	Equip Fail-bushing	UG	Forced - 04/03/18, 1931 LosEsteros-Metcalf forced out to repair cable oil leak at 'B' phase pothead; no customers interrupted; ETOR 05/08/18 to await manufacturer's arrival, diagnosis & any repair recommendations; 04/30/18, 1910 LE-Metcalf 230kV cable returned to service after repair of oil leak on "B" phase pothead at LosEsteros	0
230	NEWARK-LOS ESTEROS	02/20/07 22:32	4,320	Equipment failure	Other-line	UG	Relayed, did not test; SUS NewarkDist; 2356 NewarkDist restored; found blown pothead next day @ structure L4/10A; est 03/07/07; 03/22 cable returned to service after repair of cable sect B; eventID=4582	10,209

Table DR46-1 Los Esteros-Metcalf and Los Esteros-Newark 230 Kilovolt Line Outage History

kV	Transmission Line	Date/ Time Out	Durn (mins)	Cause Category	Cause Detail	Secondary Cause	Comments	Cust Affected
230	NEWARK-LOS ESTEROS	05/21/07 07:11	729	Other	Safety clearance	UG	Forced out to inspect 'B' side UG cable terminals	0
230	NEWARK-LOS ESTEROS	05/27/08 19:50	247	Unknown	Patrol found nothing	NONE	Relayed, did not test (UG); LosEsteros_Metcalf-230kV open ended at Metcalf & Newark 230kV static var compensator tripped offline; no customers out; weather clear	0
230	NEWARK-LOS ESTEROS	09/05/08 20:30	1	Equipment failure	Relay	RELY	Relayed (open ended at Newark, reclosed OK) by out of section tripping coincident with the relay, proper no test of LosEsteros_Metcalf-230kV (eventID=5999); no customer interruptions; weather clear; LosEsteros_Metcalf later cleared to replace failed lightning arrestor on twr L4/10B on 'A' phase; eventID=5986	0
230	NEWARK-LOS ESTEROS	10/12/08 06:27	228	External contact	Foreign object	COND	Relayed, properly didn't test due to UG portion; no interruptions; weather clear; 1015 no trouble found on patrol, line returned to service (target ~7 mi out of Newark, outside of UG portion); ET & Asset Strategy did air patrol; at structure L7/28 middle phase conductor yoke plate had arc marks, indicating arc occurred between hot end hardware & grounded steel arm; no definitive cause found, however dozens of large tumble weeds in LosEsteros sub owned by PG&E, just outside the SantaClaraValley Power sub, operated by CalPine; composite insulators were also identified as heavily contaminated; will wash insulators & re-configure structure to gain maximum clearance from the conductors to the structure; ET will also ensure tumble weed condition is cleared at the Station location; reinvestigation determined most likely cause was metallic balloons, which were found near the station w/ burn marks; eventID=6079	0
230	NEWARK-LOS ESTEROS	04/25/09 11:39	1	Equipment failure	Relay	RELY	Relayed (open ended) coincident w/ relay, no test of LosEsteros_Metcalf after Newark Distribution CBs 940 & 880 opened, reclosed OK via autos; appears 940/880 Set B line relay is over-reaching per System Protection; eventID=6526	0
230	NEWARK-LOS ESTEROS	01/14/17 13:14	1,412	Equipment failure	Arrestor	ARRS	Relayed - 01/14/17, 1314 Newark-LE relayed, properly did not test by design; no customers interrupted; weather clear; A-G fault 3.73 mi from Newark Dist sub near UG cable section @ crossing of Newark-Milpitas#2 bet twrs 002/035-036, +/- 2 mi; 2258 line manually tested NG; 01/15/17, 1246 line returned to service after removal of blown lightning arrestor at L4/10A bottom phase	0
230	NEWARK-LOS ESTEROS	01/19/17 10:18	58	Unknown	Patrol found nothing	NONE	Relayed - 01/19/17, 1018 Newark-LE relayed, did not test by design; no customers interrupted; rain, lightning; 1114 Newark-LE manually tested OK, no trouble found; 1116 line normal	0
230	NEWARK-LOS ESTEROS	01/23/17 20:11	82	Equipment failure	Connector/ hardware	COND	Forced - 01/23/17, 2011 to 2133 Newark-LE 230kV forced out to remove fiber optic cable wrapped in conductor bet structures L7/27-28 on LE-Metcalf; no customers interrupted	0
230	NEWARK-LOS ESTEROS	10/13/18 09:22	146	Equipment Failure	Equip Fail-switch-line	LS	Forced - 10/13/18, 0922 to 1148 Newark-Los Esteros forced out to repair SW-889; no customers interrupted	0

Table DR46-2 Los Esteros-Metcalf and Los Esteros-Newark 230 Kilovolt Line Outage Frequency and Duration

		2003		2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		2003 thru 2018								2014 thru 2018							
kV	Line Name	Accum Freq F	Accum Durn (mins) D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	F	D	1st Year of Avail	Accum Freq Since 1st Yr	Accum Durn Since 1st Yr	No of Yrs	MTBF (yrs)	MTBF (mos)	MTTR (mins)	Availability 2003-2018 **(A1)**	Accum Freq Since 2014	Accum Durn Since 2009	No of Yrs	MTBF (yrs)	MTBF (mos)	MTTR (mins)	Availability 2014-2018 **(A2)**	Availability: % Improvement/ Degradation (A2-A1)/A1
230	LOS ESTEROS-METCALF	1	32	1	4,320	1	138	1	4,320	2	4,411	4	5,196	1	426	0	0	0	0	1	159	1	541	0	0	2	260	1	98	3	386	1	4,320	**2003**	**20**	**24,607**	**16**	**0.80**	**9.6**	**1,230**	**99.7074%**	**7**	**5,064**	**5**	**0.71**	**8.6**	**723**	**99.8%**	0.1002%
230	NEWARK-LOS ESTEROS	2	620	0	0	0	0	0	0	2	5,049	3	476	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1,552	1	146	**2003**	**12**	**7,844**	**16**	**1.33**	**16.0**	**654**	**99.9067%**	**4**	**1,698**	**5**	**1.25**	**15.0**	**425**	**99.9%**	0.0287%

48) Please describe whether a loss of the 230-kV portion of the Los Esteros Substation could cause a loss of service to the proposed data center.

Response: The SJC02 electrical interconnection to the Los Esteros Substation is through two interconnection points to two different 230-kV bus locations (PG&E proposes to add a second new bay with two breakers installed to support SJC02 interconnection). This interconnection design provides highly reliable service as SJC02 will be connected to the substation with 230-kV lines connected at different bays. Losing a 230-kV bus or a breaker at the Los Esteros Substation will not interrupt service.

49) Please describe whether the existing Newark-Los Esteros or Metcalf-Los Esteros 230 kV circuits could be looped into the data center's onsite substation and if feasible, whether doing so would increase or decrease electric service reliability to the data center.

Response: PG&E proposed two 230-kV interconnecting within the Los Esteros Substation at two separate buses to provide reliable electric. The Applicant will consult PG&E to determine if looping in the existing Newark-Los Esteros or Metcalf-Los Esteros 230 kV circuits into the SJC02 substation is feasible. The Applicant will docket PG&E's response when received.

October 30, 2020: Response to Staff Data Request Set 5 (58 – 63)

58) Please provide the proposed 115 kV underground cables' name, type, current carrying capacity, and size. Would each individual cable be rated high enough to serve the total data center load, or are both underground cables required to serve the rated load?

Response: The tie-lines connecting the San Jose Data Center project (SJC02) to Pacific Gas & Electric Company's (PG&E) Los Esteros substation are connecting to two separate bays, bays 7 and 8, configured in a breaker-and-a-half (BAAH) scheme. Therefore, an outage in either of the SJC interconnections will not cause an outage at SJC02. If a breaker in either bay 7 or 8 failed to open, it may result in the loss of one of the 115 kV lines serving SJC02, but the other SJC02 interconnection would still supply the entire SJC02's electrical demand. As a result, SJC02, with redundant electrical interconnections, typically would only experience power quality impacts when there is a transmission outage. A line outage could occur with force majeure events (such as an earthquake), however, bays 7 & 8 at the Los Esteros substation are served from the Los Esteros Critical Energy Facility (LECEF) (LECEF #1 and #2) via 115 kV underground cables, which may be less prone to outages associated with overhead power lines.

The tie-lines connecting the SJC02 to Los Esteros substation are 1,250 kcmil copper XLPE extruded dielectric cables capable of transmitting 150 MVA. These lines are currently planned to be underground lines. PG&E has indicated that overhead lines may also be used, but they have not provided any additional information about the number or types of poles required for an overhead interconnection.

59) Would the design of the system prevent both 115 kV lines from going out of service at the same time? If so, how?

Response: As noted in the response to Data Request #58, the SJC02 is supplied by two redundant interconnections, with each interconnection tied to a different bay in the Los Esteros substation. A loss of both breakers in both bays in the substation is a possible but unlikely event.

60) The Los Esteros Substation one-line diagram indicated that there are six existing 115 kV transmission lines connected to the Los Esteros Substation 115 kV bus. Are the 115 kV lines able to provide power to the Los Esteros Substation when one or both of the 230 kV lines (Metcalf-Los Esteros and Newark-Los Esteros) are out of service?

Response: The Applicant is waiting for a response from the utility on this request. Once received, a response will be filed.

61) Please describe any outages or service interruptions, including Public Safety Power Shutoffs (PSPS), on the 115 kV systems that would serve the proposed San Jose City Data Center:

a. How long were any outages, when did they occur, and what were their causes?

Response: Table DR61 presents the outages for the 115 kV lines for the Los Esteros Substation from 2007 to 2020, including the reported causes.

PG&E has indicated there have been no planned outages this year. Table DR61 shows that since 2007, there have been five outages of the 115 kV lines feeding the Los Esteros substation. Two events (each) in 2008 and 2010 and one event in 2014, with a collective outage duration of 18 hours and 20 minutes.

Since 2010, the duration of outages for these 115 kV lines is less than 3 minutes. None of the outages were due to PSPS events.

b. Did PG&E implement equipment upgrades or operational changes to reduce the likelihood of a repeat of the events that led to an outage?

Response: PG&E's actions regarding each outage are described under the comment column of Table DR61.

c. What were the responses to the outage(s) by any existing data centers (i.e., initiated operation of some or all backup generation equipment, data off-shoring, data center shutdown, etc.)?

Response: The Applicant is waiting for a response from the utility on this request. Once received, a response will be filed.

62) Please provide historic information on the frequency and duration of outages of the 115 kV facilities, including the 115 kV portion of the Los Esteros Substation that would be likely to trigger a total loss of service to the proposed data center's onsite substation and lead to emergency operations of the diesel-powered generators. Please include the reliability of service historically provided by PG&E to other similar data centers in its service territory and located in Santa Clara County.

Response: Table DR61 provides the historic information on the frequency and duration of the 115 kV portion of the Los Esteros substation. The Applicant is waiting for a response from the utility on this request. Once received, a response will be filed.

63) How would local and regional PSPS events be implemented on the 115 kV system compared to PSPS events on the 230 kV system (in other words, would a customer who is extremely concerned about reliability prefer one system over another)?

Response: The Applicant is waiting for a response from the utility on this request. Once received, a response will be filed.

TABLE DR 61 OUTAGE HISTORY LOS ESTEROS 115 KV

FACILITY	Date Out	Time Out	MED	Duration (hr:min)	Duration (mins)	Date In	Time In	Out Cls	Cause Category	Cause Detail	Secondary Cause	Comments	Customers Affected
LOS ESTEROS-NORTECH	08/03/08	23:14	No	12:46	766	08/04/08	12:00	F	Equipment failure	Relay	RELY	Relayed, failed to reclose (LE CBs 632 & 732); no customer interruption; weather clear; forced out next day to investigate; eventID=5898	0
LOS ESTEROS-NORTECH	08/04/08	12:11	No	5:31	331	08/04/08	17:42	F	Equipment failure	Relay	RELY	Forced out Nortech CB-122 to investigate NG Set B and breaker failure relays, open ending this line (LosEsteros CBs 632 & 732 had relayed yesterday at 1211); found metal shavings in cabinet that may have contacted relay; eventID=5898	0
LOS ESTEROS-TRIMBLE	01/11/10	15:42	No	0:01	1	01/11/10	15:43	F	Equipment failure	Other-station	COMM	Relayed, tested OK; Trimble CB 332 opened, no fault on system; all relay event reports showed breaker opening, no fault & CB automatically closed by parallel feature; no customer interruptions; weather cloudy; extensive testing performed on LFCB relay, found to be in proper working order; initial relay problems caused by a malfunctioning communication channel bank card that has since been repaired; eventID=7015	0
LOS ESTEROS-TRIMBLE	04/09/10	8:40	No	0:01	1	04/09/10	8:41	F	Unknown	Patrol found nothing	NONE	Relayed, tested OK; no customer interruption; weather clear; patrol found no cause	0
LOS ESTEROS-MONTAGUE	11/19/14	16:34	No	0:01	1	11/19/14	16:35	F	Unknown	Patrol found nothing	NONE	Relayed - 11/19/14, 1634 LosEsteros-Montague 115kV open ended after Montague CB-132 tripped open, reclosed by automatics; MOM Montague #1 & #2-115/21kV xfmr (7,872); rain; no indication of any system disturbance that might have caused trip, so clearance has been set on 12/29/14 to do a functional test on CB-132	7,872

March 1, 2021: Response to Staff Data Request Set 5A (60, 61, and 63)

60) The Los Esteros Substation one-line diagram indicated that there are six existing 115 kV transmission lines connected to the Los Esteros Substation 115 kV bus. Are the 115 kV lines able to provide power to the Los Esteros Substation when one or both of the 230 kV lines (Metcalf-Los Esteros and Newark-Los Esteros) are out of service?

Response: Attachment DR-60 presents Pacific Gas and Electric Company's (PG&E) responses to Data Request #'s 60, 61c. and 63.

61) Please describe any outages or service interruptions, including Public Safety Power Shutoffs (PSPS), on the 115 kV systems that would serve the proposed San Jose City Data Center:

c. What were the responses to the outage(s) by any existing data centers (i.e., initiated operation of some or all backup generation equipment, data off-shoring, data center shutdown, etc.)?

Response: See Attachment DR-60.

63) Please provide the following regarding Public Safety Power Shutoff events:

a. Would historical Public Safety Power Shutoff events have resulted in the emergency operations at the proposed San Jose City Data Center?

b. Have there been changes to the PG&E system around the San Jose City Data Center that would affect the likelihood that future Public Safety Power Shutoff events would result in the operation of the project's emergency generators?

Response: See Attachment DR-60.

Pacific Gas and Electric Company's Response to DataRequest Data Request #'s 60, 61c. and 63

Questions for PG&E related to the proposed San Jose Data Center

Q1) The Los Esteros Substation one-line diagram indicated that there are sixexisting 115 kV transmission lines connected to the Los Esteros Substation 115 kV bus. Are the 115 kV lines able to provide power to theLos Esteros Substation when one or both of the 230 kV lines (Los Esteros-Metcalf and Newark-Los Esteros) are out of service?

Response: Yes, even with both 230 kV lines out of service, the 115 kV system connected into Los Esteros should be able to supply power to all customers – if local generation facilities are producing power. Two of the six 115 kV lines connected into Los Esteros Substation are the interconnection for Calpine's Los Esteros Critical Energy Facility (LECEF). That generation facility has a maximum output of 300 MW. The Agnews cogeneration facility, which has a maximum output of over 25 MW, is connected into Los Esteros via the Los Esteros-Agnews 115 kV Line. And Silicon Valley Power's DVR Power Plant, which is connected into the 115 kV, has maximum output of 145 MW.

The only problem in the area would be outages of the two 230 kV lines with LECEF off-line during summer peak conditions. That would result in overloadson the 115 kV lines from Newark into the San Jose area and slightly lower voltages in the area. However, that is not a likely event. The next question explains this unlikelihood in more detail.

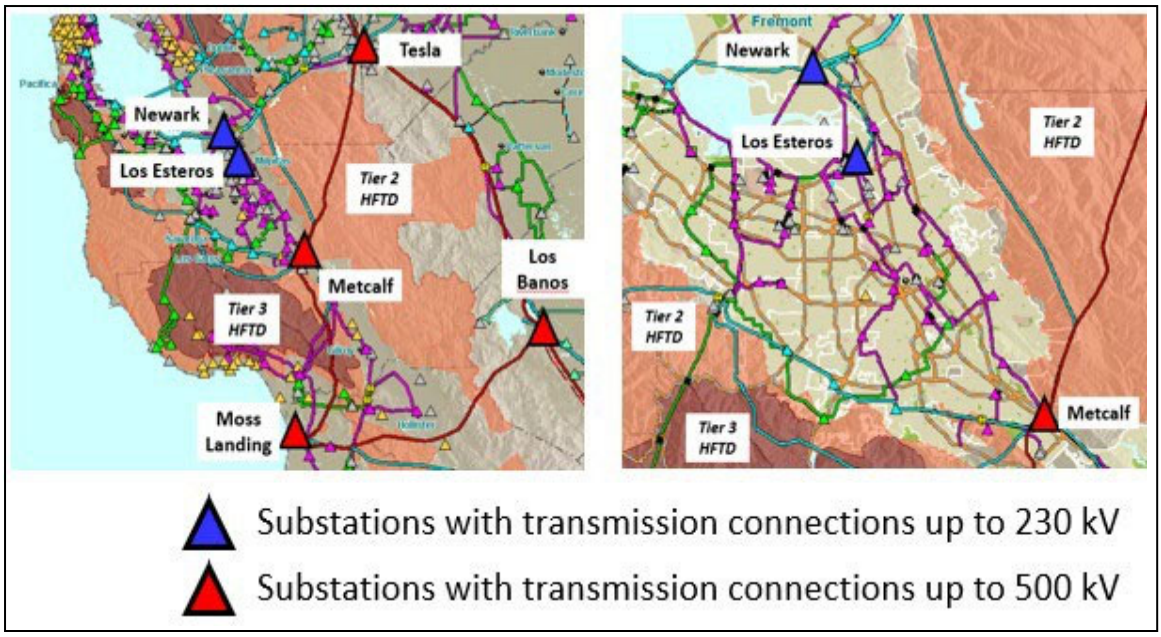
Q2) Please describe any past outages or service interruptions, including Public Safety Power Shutoffs (PSPS), on the 115 kV systems that wouldserve the proposed San Jose Data Center:

a. Did PG&E implement equipment upgrades or operational changes to reduce the likelihood of a repeat of the events that led to an outage?

b. What were the responses to the outage(s) by any existing data centers (i.e., initiated operation of some or all backup generationequipment, data off-shoring, data center shutdown, etc.)?

Response: The Microsoft San Jose Data Center will be connected into Los Esteros Substation via two, short 115 kV lines. The maps below show the high-fire threat districts (HFTD's) in the South Bay area. Almost all of the Silicon Valleyarea is in a Tier 1 HFTD, which is not a high-risk fire area. So there have beenno PSPS events in the area.

It is very unlikely that a PSPS event would result in outages of the 115 kV lines in the South Bay area. A PSPS event could potentially impact some of the 500 kV and 230 kV bulk transmission lines supplying power to Newark and Metcalf Substations, although it is very unlikely that an event would result in all of those lines being impacted.



The Los Esteros-Metcalf 230 kV Line is routed through a Tier 2 HFTD. The Newark-Los Esteros is not in a HFTD. So it is unlikely that a PSPS event would result in both 230 kV lines being taken out of service.

Most of the events that have impacted data centers in the Bay Area have been power quality events, where faults on the transmission system have resulted in momentary low voltages on the system. When installing equipment that couldpotentially result in momentary voltage sags on the system (such as shunt capacitors connected to the transmission system), PG&E does studies to confirm that switching the device on or off will not result in a power quality event.

Q3) How would local and regional PSPS events be implemented on the 115 kVsystem compared to PSPS events on the 230 kV system (in other words, would a customer who is extremely concerned about reliability prefer onesystem over another)?

Response: Events on both the 115 kV and 230 kV systems are implemented in the same way. The transmission lines that could be impacted by a major weather eventare evaluated to determine their potential risk of having a component failure inthe event. If that risk is high on a line, then PG&E would proactively de- energize that line to prevent a possible failure initiating a wildfire.

Q4) Please provide answers to the following questions regarding PSPSevents:

a. Would historical PSPS events have resulted in loss of power to theproposed San Jose Data Center?

b. Have there been changes to the PG&E system around the San Jose Data Center that would affect the likelihood that future PSPS events would result in loss of power to the proposed San Jose Data Center?

Response: None of the past PSPS events would have resulted in a loss of power to the proposed San Jose Data Center. And there have been no changes to the PG&E system in the area that would increase the likelihood that a future PSPS event would result in a loss of power to the proposed San Jose Data Center.

October 15, 2021: Response to Staff Data Request Set 6 (84) (Jacobs 2021y)

Data Request

84) Please explain how the backup natural gas generators would respond to load shedding, demand response and resource adequacy ancillary services when they are not connected to the grid.

Response: The natural gas generators will be available for grid services to CAISO, primarily through PG&E's Base Interruptible Program (BIP). BIP currently requires a 30-minute response to an event dispatch and requires participants to be available up to 180 hours per year[10]; however, historically it has not been called more than 30 hours annually in the last 12 years.[11] Table DR84-1 provides a summary of the BIP events and the number of hours of operation. The BIP is only called when CAISO determines a Stage 1, Stage 2, or Stage 3 emergency, or a transmission system contingency is needed to support the grid.

Table DR-84 Summary of PG&E BIP Events

Year	Sum of Hours	BIP Events
2009	2	1
2010	2	1
2011	2	2
2012	2	1
2013	8	2
2014	14	4
2015	8	3
2016	4	1
2017	3	2
2018	12	3
2019	8	3
2020	28	7
2021	2	1
Total	**95**	**31**

In a non-grid outage situation, PG&E will issue a dispatch notification to Microsoft and Enchanted Rock to reduce load within the 30-minute timeframe. Enchanted Rock and Microsoft will coordinate operations to start up the generators and transfer the facility load from the grid to the generation within the required timeframe. During the BIP event, Microsoft load will be completely disconnected from the utility to run on natural gas generators. Once PG&E ends the BIP event, Enchanted Rock and Microsoft will coordinate a transition back to grid power.

In a situation where a BIP event is called and grid power has been lost, Microsoft will already be running on backup generation and will remain on backup generation until the BIP event is over and grid power is restored.

[10] https://www.pge.com/en_US/large-business/save-energy-and-money/energy-management-programs/demand-response-programs/base-interruptible/base-interruptible.page

[11] https://www.pge.com/en_US/large-business/save-energy-and-money/energy-management-programs/demand-response-programs/case-studies/case-studies.page

References:

Jacobs 2021y – Jacobs (Jacobs). (TN 240082). SJC Data Center Response to Data Request Set #6, dated October 15, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-04

Appendix C

Land Evaluation and Site Assessment

Appendix C: California Agricultural LESA Model Analysis

The California Agricultural Land Evaluation and Site Assessment (LESA) system provides a model to rate the relative value of agricultural land resources in the state. A LESA model is created for a property to define and measure two sets of factors. The "land evaluation" (LE) factors measure the inherent soil-based qualities of land as they relate to agricultural suitability. The "site assessment" (SE) factors measure social, economic, and geographic attributes that contribute to the overall value of agricultural land.

Energy Commission staff consulted with staff at the California Department of Conservation (CDOC) to receive guidance on how to determine the feasibility of irrigated and dryland agriculture on a site, and the existence of any physical or economic restrictions potentially influencing the feasibility of agricultural production (components of the "water resource availability score"). Evidence indicates that an overall economic restriction exists making farming the project site (and nearby areas within the City) infeasible for either irrigated or dryland production (CEC 2020d). The following table shows the results of the LESA model analysis conducted by staff for the San Jose City Data Center site.

SAN JOSE CITY DATA CENTER FINAL LESA SCORE SHEET						
Factor	**Factor Score**		**Factor Weight**		**Weighted Factor Score**	
Land Evaluation (LE) Factors						
Land Capability Classification	60	x	0.25	=	15	
California Revised Storie Index	85.44	x	0.25	=	21.36	
LE subscore			*0.50*		*36.36*	
Site Assessment (SA) Factors						
Project size rating	70	x	0.15	=	10.5	
Water resources availability rating	0	x	0.15	=	0	
Surrounding agricultural land rating	0	x	0.15	=	0	
Protected resource land rating	0	x	0.05	=	0	
SA subscore			*0.50*		*10.5*	+
			Final LESA Score		**46.86** [1]	=
					Not Considered Significant (see footnote)	

Source: Based on CDOC instructional documents (CDOC 2011).

Data supporting staff's LESA model analysis were derived from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey tool (USDA 2020). The following table shows the results of the custom soil resource report for the project site and adjacent areas using the NRCS Web Soil Survey tool. The soil

1 According to LESA model scoring thresholds, a total score of 40 to 59 points is "considered significant *only* if LE and SA subscores are each greater than or equal to 20 points." As shown in the table above, the SA subscore is 10.5, which is below the 20-point threshold.

resource data contributed to determining the factor scores in the LESA model analysis, above.

DATA FROM NRCS CUSTOM SOIL RESOURCE REPORT	
Soil Unit, Class, Rating	**Description**
Soil Map Unit:	166 – Campbell silt loam, 0 to 2 percent slopes, protected (0.22 proportion of project site)
	168 – Elder fine sandy loam, protected, 0 to 2 percent slopes (0.78 proportion of project site)
Land Capability Classification (LCC) (nonirrigated):	IIIs – Class III soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both. Subclass "s" denotes soils that have limitations within the rooting zone.
CA Revised Storie Index Rating Class & Value:	Campbell silt loam – Grade 1 Excellent, Value 87
	Elder fine sandy loam – Grade 1 Excellent, Value 85
Project size score:	Score of 70, based on the LCC Class III soils at the site.
Water resources availability rating:	Neither irrigated nor dryland production is economically feasible on the project site, resulting in a water resource score of zero.
Surrounding agricultural land rating:	No agricultural land surrounds the project site, resulting in a surrounding agricultural land score of zero.
Protected resource land rating:	19.9 percent protected resource land is present in the "zone of influence" adjacent to Coyote Creek, which is below the 40 percent threshold required to receive a score above zero.

Source: Data from custom soil resource report (USDA 2020). Calculation of protected resource land based on Energy Commission staff's GIS mapping.

References

CEC 2020d – California Energy Commission (CEC). (TN 232026). Report of Conversation with Kerri Kisko, California Department of Conservation, dated February 13, 2020. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-04

CDOC 2011 – California Department of Conservation (CDOC). Land Evaluation & Site Assessment (LESA) Model. 1997 Instruction Manual; Appendix A, CA Agriculture Worksheets and Appendix B, CA LESA Project Scoring Example, corrections to appendices made January 2011. Documents downloaded and used January and February 2020. Available online at: https://www.conservation.ca.gov/dlrp/Pages/qh_lesa.aspx

USDA 2020 – U.S. Department of Agriculture, Natural Resources Conservation Service (USDA). Web Soil Survey. Custom Soil Resource Report for Santa Clara Area, California, Western Part. Custom report created January 23, 2020. Available online at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Appendix D

Nitrogen Deposition Modeling

Appendix D: Nitrogen Deposition Modeling

Nitrogen deposition is the term used to describe the input of reactive nitrogen species from the atmosphere to the biosphere. The pollutants that contribute to nitrogen deposition derive mainly from oxides of nitrogen (NOx) and ammonia (NH_3) emissions.

These pollutants are deposited as "atmospherically derived nitrogen" (ADN), primarily nitric acid (HNO_3). The chemical conversion from NOx and NH_3 to ADN takes place in the atmosphere over a period of hours after the pollutants are discharged from their sources.

Staff modeled the potential nitrogen deposition impacts from operation of the proposed data center facility within a six-mile radius of the project site. This region includes Bay checkerspot butterfly critical habitat areas.

The annual NOx emissions and potential nitrogen deposition impacts are based on each natural gas generator operating up to 509 hours per year for load shedding, demand response and behind -the -meter resource adequacy (RA) ancillary services, and each administrative diesel generator operating up to 42 hours per year for maintenance and testing (Jacobs 2021o).

Emissions of NOx and NH3 emissions are conservatively estimated for the two administrative diesel generators because these engines would be equipped with selective catalytic reduction (SCR) to reduce the NOx emissions to meet Tier 4 emission standards. In contrast, staff assumes these two generators would emit at Tier 2 levels that do not reflect the partial NOx emission reduction that could be achieved after the SCR warms up and becomes fully effective. Staff also assumes that NH_3 emissions would occur as a result of urea usage in the SCR, although NH_3 would only occur after warmup of the SCR.

Staff used the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) to evaluate the potential nitrogen deposition impacts of the project. The model overestimates nitrogen deposition impacts with the following assumptions:

- One hundred percent of the NOx and NH_3 conversion to ADN within the stack rather than allowing the conversion to occur over distance and time. It ignores the fact that the conversion process requires sunlight, moisture, and time. It is unlikely that there would be sufficient time for all of the emitted NOx or NH_3 to convert to ADN within a six-mile radius of the project.
- Maximum settling velocities derived from the parameters for HNO_3 (which, of all the depositional species, has the most affinity for soils and vegetation and the tendency to adhere to what it is deposited on) to produce maximum, or conservatively estimated, deposition rates.

As stated above, staff's analysis of nitrogen deposition impacts is overly conservative. It overestimates the nitrogen deposition impacts expected from routine operations,

including readiness testing and maintenance activities. In addition, the NOx emissions of the facility would be offset through the permitting process with the BAAQMD. The BAAQMD offsets would mitigate the project's effects on basin-wide nitrogen deposition.

References

Jacobs 2021o – Jacobs (Jacobs). (TN 239409). SJC Data Center SPPE Application Supplemental Filing Volume 1, dated August 20, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-04

Appendix E

Mailing List

Appendix E: Mailing List

The following is the mailing list for the San Jose Data Center project.

The following is a list of the State agencies that received State Clearinghouse notices and documents:

- California Air Resources Board (ARB)
- California Department of Conservation (DOC)
- California Department of Fish and Wildlife, Marin Region 7 (CDFW)
- California Department of Parks and Recreation
- California Department of Transportation, District 4 (DOT)
- California Department of Water Resources (DWR)
- California Energy Commission
- California Governor's Office of Emergency Services (OES)
- California Highway Patrol (CHP)
- California Natural Resources Agency
- California Public Utilities Commission (CPUC)
- California Regional Water Quality Control Board, San Francisco Bay Region 2 (RWQCB)
- California State Lands Commission (SLC)
- Department of Toxic Substances Control, Office of Historic Preservation
- San Francisco Bay Conservation and Development Commission (BCDC)
- State Water Resources Control Board, Division of Drinking Water
- State Water Resources Control Board, Division of Water Quality
- California Native American Heritage Commission (NAHC)
- California Department of Fish and Wildlife, Bay Delta Region 3 (CDFW)

Table E-1 presents the list of occupants and property owners contiguous to the project site.

Table E-2 presents the list of property owners within 1,000 feet of the project site and 500 feet of the project linears.

Table E-3 presents the list of agencies, including responsible and trustee agencies and libraries.

Table E-4 presents the list of interested parties including environmental justice and community-based organizations.

TABLE E-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE				
Name	**Address**	**City**	**State**	**Zip**
OCCUPANT	4160 ZANKER RD	SAN JOSE	CA	95134
J R FILANC CONSTRUCTION COMPANY	4160 ZANKER RD	SAN JOSE	CA	95134
SOUTH BAY WATER RECYCLING	4160 ZANKER RD	SAN JOSE	CA	95134
CALPINE - LOS ESTEROS CRITICAL ENERGY FACILITY	810 THOMAS FOON CHEW WAY	SAN JOSE	CA	95134

TABLE E-2 PROPERTY OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF LINEARS				
Name	**Address**	**City**	**State**	**ZIP**
CITY OF SAN JOSE	200 EAST SANTA CLARA STREET	SAN JOSE	CA	95113
OCCUPANT	175 NORTECH PKWY # PY	SAN JOSE	CA	95134-2310
BAYVP NORTECH PARKWAY LLC	25 CORNING AVE	MILPITAS	CA	95035
LAI CHENG	155 BAYTECH DR	SAN JOSE	CA	95134-2303
OCCUPANT	145 BAYTECH DR	SAN JOSE	CA	95134-2303
LINDSEY FAMILY LLC	18 CYPRESS AVE	KENTFIELD	CA	94904
OCCUPANT	4620 FORTRAN DR	SAN JOSE	CA	95134-2313
FORTRAN INVESTMENTS LP	792 MERIDIAN WAY, Ste A	SAN JOSE	CA	95126
ADDISON TECHNOLOGY INC	150 NORTECH PKWY # PY	SAN JOSE	CA	95134-2305
CITY OF SAN JOSE CITY	4235 ZANKER RD	SAN JOSE	CA	95134-1000
MICROSOFT CORPORATION	1 MICROSOFT WAY	REDMOND	WA	98052
S C V W D	5750 ALMADEN EXPY	SAN JOSE	CA	95118
MCCARTHY RICHARD I (TRUSTEE)	210 ALMENDRA AVE	LOS GATOS	CA	95030
CITY OF MILPITAS	455 E CALAVERAS BLVD	MILPITAS	CA	95035
OCCUPANT	4160 ZANKER RD	SAN JOSE	CA	95134-1002
S C V W D	5750 ALMADEN EXPY	SAN JOSE	CA	95118
PACIFIC GAS & ELEC CO	PO BOX 770000	SAN FRANCISCO	CA	94177
CITY OF SANTA CLARA	1500 WARBURTON AVE	SANTA CLARA	CA	95050
OCCUPANT	810 THOMAS FOON CHEW WAY	SAN JOSE	CA	95134
NORTH SAN JOSE ENERGY CENTER LLC	4160 DUBLIN BLVD	DUBLIN	CA	94568

TABLE E-2 PROPERTY OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF LINEARS				
Name	**Address**	**City**	**State**	**ZIP**
ESTATE OF MC CARTHY RICHARD I (TRUSTEE) ET AL	210 ALMENDRA AVE	LOS GATOS	CA	95030
CITY OF SAN JOSE	700 LOS ESTEROS RD	SAN JOSE	CA	95134
CITY OF MILPITAS	3331 N 1ST ST, #B	SAN JOSE	CA	95134
OCCUPANT	11 RANCH DR	MILPITAS	CA	95035
TMS MCCARTHY LP	260 CALIFORNIA ST	SAN FRANCISCO	CA	94111
OCCUPANT	50 RANCH DR	MILPITAS	CA	95035-5103
IN N OUT BURGERS	4199 CAMPUS DR	IRVINE	CA	92612
OCCUPANT	12 RANCH DR	MILPITAS	CA	95035-5103
HOURET FAM LP	5570 SANCHEZ DR, Ste 230	SAN JOSE	CA	95123
OCCUPANT	30 RANCH DR	MILPITAS	CA	95035-5103
OCCUPANT	40 RANCH DR	MILPITAS	CA	95035-5103
LL MILPITAS, L P	591 W PUTMAN AVE	GREENWICH	CT	06830
IN N OUT BURGERS	13502 HAMBURGER LN	BALDWIN PARK	CA	91706
OCCUPANT	135 N MCCARTHY BLVD	MILPITAS	CA	95035-5102
CAMPUS 237 OWNER LLC	1301 SHOREWAY RD, Ste 250	BELMONT	CA	94002
OCCUPANT	155 N MCCARTHY BLVD	MILPITAS	CA	95035-5102
SANTA CLARA COUNTY TRANSIT DIST	SOUTHBAY FY	SAN JOSE	CA	95134
CITY OF MILPITAS	455 E CALAVERAS BLVD	MILPITAS	CA	95035
KLA-TENCOR CORPORATION	7 TECHNOLOGY DR	MILPITAS	CA	95035-7916
KLA-TENCOR CORPORATION	5 TECHNOLOGY DR	MILPITAS	CA	95035-7916
KLA-TENCOR CORPORATION	1 TECHNOLOGY DR	MILPITAS	CA	95035-7916
OCCUPANT	475 HOLGER WAY	SAN JOSE	CA	95134-1369
SIERRA VISTA APTS II	2043 W LINCOLN RD	STOCKTON	CA	95207
OCCUPANT	450 HOLGER WAY	SAN JOSE	CA	95134-1368
MICROCHIP TECHNOLOGY INCORPORATED,	2355 W CHANDLER BLVD	CHANDLER	AZ	85224

TABLE E-2 PROPERTY OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF LINEARS				
Name	**Address**	**City**	**State**	**ZIP**
OCCUPANT	400 HOLGER WAY	SAN JOSE	CA	95134-1368
DCII 400 HOLGER WAY LLC,	4890 W KENNEDY BLVD, Ste 650	TAMPA	FL	33609
OCCUPANT	350 HOLGER WAY	SAN JOSE	CA	95134-1362
KBSII CORPORATE TECHNOLOGY CENTRE LLC	PO BOX 28270	SANTA ANA	CA	92799
OCCUPANT	300 HOLGER WAY	SAN JOSE	CA	95134-1362
OCCUPANT	250 HOLGER WAY	SAN JOSE	CA	95134-1300
SANTA CLARA COUNTY TRANSIT DIST	3331 North 1st St.	SAN JOSE	CA	95134
OCCUPANT	150 ROSE ORCHARD WAY	SAN JOSE	CA	95134-1358
DRAWBRIDGE ROSE ORCHARD LLC, Ste 2310	3 EMBARCADERO CTR	SAN FRANCISCO	CA	94111
NICHOLSON FAMILY PARTNERSHIP	300 NICHOLSON LN	SAN JOSE	CA	95134
NICHOLSON FAMILY PARTNERSHIP	2 N RIVERSIDE PLZ STE 800	CHICAGO	IL	60606

TABLE E-3 AGENCIES AND LIBRARIES							
First Name	**Last Name**	**Title**	**Agency**	**Address**	**City**	**State**	**Zip**
ADAM	PETERSEN	PLANNER	SAN JOSE PLANNING DIVISION	200 EAST SANTA CLARA STREET	SAN JOSE	CA	95113
DAVID	KEYON	PRINCIPAL PLANNER	SAN JOSE PLANNING, BUILDING & CODE ENFORCEMENT (PBCE)	200 EAST SANTA CLARA STREET	SAN JOSE	CA	95113
			BAY AREA AIR QUALITY MANAGEMENT DISTRICT	375 BEALE STREET, SUITE 600	SAN FRANCISCO	CA	94105
ARIANA	HUSAIN	PRINCIPAL AIR ENGINEER	BAY AREA AIR QUALITY MANAGEMENT DISTRICT	375 BEALE STREET, SUITE 600	SAN FRANCISCO	CA	94105
KATHRIN A.	TURNER	ASSISTANT ENGINEER II	SANTA CLARA VALLEY WATER DISTRICT	5750 ALMADEN EXPRESSWAY	SAN JOSE	CA	95118-3614
GREG	ERICKSON	REGIONAL MANAGER	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	2825 CORDELIA ROAD SUITE 100	FAIRFIELD	CA	94534
GERRY	HAAS	CONSERVATION PLANNER	SANTA CLARA VALLEY HABITAT AGENCY	535 ALKIRE AVENUE	MORGAN HILL	CA	95037

TABLE E-3 AGENCIES AND LIBRARIES

First Name	Last Name	Title	Agency	Address	City	State	Zip
RYAN	OLAH	DIVISION CHIEF	US FISH & WILDLIFE SERVICE, SACRAMENTO FISH & WILDLIFE OFFICE, COAST BAY DIVISION	2800 COTTAGE WAY, ROOM W2605	SACRAMENTO	CA	95825 -1846
REBECCA	FANCHER		CALIFORNIA AIR RESOURCES BOARD	1001 I ST	SACRAMENTO	CA	95814
COURTNEY	GRAHAM		CALIFORNIA AIR RESOURCES BOARD	1001 I ST	SACRAMENTO	CA	95814
SIMON	BAKER	DIRECTOR, ENERGY DIVISION	CALIFORNIA PUBLIC UTILITIES COMMISSION	505 VAN NESS AVENUE	SAN FRANCISCO	CA	94102
BINAYA	SHRESTHA	SUBJECT MATTER EXPERT, PG&E	CALIFORNIA INDEPENDENT SYSTEM OPERATOR	250 OUTCROPPING WAY	FOLSOM	CA	95630
NED	THOMAS	PLANNING DIRECTOR	CITY OF MILPITAS PLANNING AND NEIGHBORHOOD SERVICES	455 EAST CALAVERAS BLVD.	MILPITAS	CA	95035
SYLVIA	FUNG		IGR, CALTRANS, DISTRICT 4	P.O. BOX 23660	OAKLAND	CA	94623 -0660
KEITH	LICHTEN	REGIONAL PROGRAM LEAD	SAN FRANCISCO BAY RWQCB	1515 CLAY SUITE 1400	OAKLAND	CA	94612
JULIE	PETTIJOHN	ACTING BRANCH CHIEF	DEPT. OF TOXIC SUBSTANCES CONTROL, REGION 2	700 HEINZ AVENUE SUITE 200	BERKELEY	CA	94710 -2721
			SAN FRANCISCO BAY CONSERVATION & DEVELOPMENT COMMISSION	375 BEALE STREET, SUITE 510	SAN FRANCISCO	CA	94105
JON	CICIRELLI		SAN JOSE PARKS, RECREATION AND NEIGHBORHOOD SERVICES	200 EAST SANTA CLARA STREET	SAN JOSE	CA	95113
		FIRE CHIEF	SAN JOSE FIRE DEPARTMENT	1661 SENTER RD.	SAN JOSE	CA	95112
EDGARDO (EDDIE)	GARCIA	CHIEF OF POLICE	SAN JOSE POLICE DEPARTMENT	201 W. MISSION STREET	SAN JOSE	CA	95110
MANJIT	BANWAIT	SENIOR TRANSPORTATION SPECIALIST	SAN JOSE DEPARTMENT OF TRANSPORTATION	200 EAST SANTA CLARA STREET	SAN JOSE	CA	95113

TABLE E-3 AGENCIES AND LIBRARIES

First Name	Last Name	Title	Agency	Address	City	State	Zip
RYAN	DO		SAN JOSE PUBLIC WORKS	200 EAST SANTA CLARA STREET	SAN JOSE	CA	95113
KERRY	ROMANOW		SAN JOSE ENVIRONMENTAL SERVICES	200 EAST SANTA CLARA STREET 10TH FLOOR TOWER	SAN JOSE	CA	95113
CHERISE	ORANGE	ASSOCIATE PLANNER	COUNTY OF SANTA CLARA PARKS AND RECREATION DEPARTMENT	298 GARDEN HILL DRIVE	LOS GATOS	CA	95032 -7669
KERRI	KISKO	ENVIRONMENTAL SCIENTIST	DEPARTMENT OF CONSERVATION	801 K STREET, MS 24-01	SACRAMENTO	CA	95814
WADE	CROWFOOT	SECRETARY	NATURAL RESOURCES AGENCY	1416 NINTH STREET, SUITE 1311	SACRAMENTO	CA	95814
PHILLIP	CRADER		STATE WATER RESOURCES CONTROL BOARD, WATER QUALITY DIVISION	P.O. BOX 100	SACRAMENTO	CA	95812 -0100
ALYSON	AQUINO		NATURAL RESOURCES CONSERVATION SERVICES	3585 GREENVILLE ROAD SUITE 2	LIVERMORE	CA	94550 -6707
KARLA	NEMETH	DIRECTOR	DEPARTMENT OF WATER RESOURCES	P.O. BOX 942836	SACRAMENTO	CA	94236 -0001
			COUNTY OF SANTA CLARA, OFFICE OF THE CLERK RECORDER	70 WEST HEDDING STREET	SAN JOSE	CA	95110
LAURA	MIRANDA	COMMISSIONER	NATIVE AMERICAN HERITAGE COMMISSION	1550 HARBOR BLVD, SUITE 100	WEST SACRAMENTO	CA	95691
			CEC - ENERGY LIBRARY	715 P STREET, MS 10	SACRAMENTO	CA	95814 -5504
		GOV PUBLICATIONS	FRESNO COUNTY FREE LIBRARY	2420 MARIPOSA ST	FRESNO	CA	93721 -2204
			HUMBOLDT COUNTY MAIN LIBRARY	1313 3RD STREET	EUREKA	CA	95501 -0553
		SERIALS DIVISION	LOS ANGELES PUBLIC LIBRARY	630 W 5TH ST	LOS ANGELES	CA	90071 -2002

TABLE E-3 AGENCIES AND LIBRARIES

First Name	Last Name	Title	Agency	Address	City	State	Zip
		SCIENCE & INDUSTRY DIV	SAN DIEGO PUBLIC LIBRARY	330 PARK BLVD	SAN DIEGO	CA	92101-6478
		GOVERNMENT INFORMATION CENTER	SAN FRANCISCO PUBLIC LIBRARY	100 LARKIN ST	SAN FRANCISCO	CA	94102-4733
		GOV PUBS	STANLEY MOSK LIBRARY & COURTS BLDG	914 CAPITOL MALL, 3RD FLOOR	SACRAMENTO	CA	95814
			ALVISO BRANCH LIBRARY	5050 N FIRST STREET	SAN JOSE	CA	95002
			MILPITAS LIBRARY	160 N MAIN STREET	MILPITAS	CA	95035

TABLE E-4 INTERESTED PARTIES INCLUDING ENVIRONMENTAL JUSTICE AND COMMUNITY-BASED ORGANIZATIONS

First Name	Last Name	Organization	Address	City	State	Zip
CAROL	ZABIN	CENTER FOR LABOR RESEARCH AND EDUCATION (LABOR CENTER)	2521 CHANNING WAY #5555	BERKELEY	CA	94704
		EVERGREEN ECONOMICS	1648 MARTIN LUTHER KING JR. WAY	BERKELEY	CA	94709
		CALIFORNIANS FOR PESTICIDE REFORM (CPR)	2029 UNIVERSITY AVE., SUITE 200	BERKELEY	CA	94704
AMY D.	KYLE	UC BERKELEY, SCHOOL OF PUBLIC HEALTH	140 WARREN HALL	BERKELEY	CA	94720
JULIA	HATTON	RISING SUN ENERGY CENTER	111 36TH STREET	OAKLAND	CA	94608
BROOKS	ANDREW	ASSOCIATION FOR ENERGY AFFORDABILITY	5900 HOLLIS STREET, SUITE R2	EMERYVILLE	CA	94608
		SAN MATEO COUNTY UNION COMMUNITY ALLIANCE (SMCUCA)	1153 CHESS DR.	FOSTER CITY	CA	94404
		COMMUNITIES FOR A BETTER ENVIRONMENT	6325 PACIFIC BLVD. STE 300	HUNTINGTON PARK	CA	90255
LEVONNE	STONE	FORT ORD ENVIRONMENTAL JUSTICE NETWORK, INC.	PO BOX 361	MARINA	CA	93933
		ASIAN PACIFIC ENVIRONMENTAL NETWORK	426 17TH ST #500	OAKLAND	CA	94612
STEPHANIE	CHEN	GREENLINING INSTITUTE	360 14TH STREET, 2ND FLOOR	OAKLAND	CA	94612

TABLE E-4 INTERESTED PARTIES INCLUDING ENVIRONMENTAL JUSTICE AND COMMUNITY-BASED ORGANIZATIONS						
First Name	**Last Name**	**Organization**	**Address**	**City**	**State**	**Zip**
		LOCAL INITIATIVES SUPPORT CORPORATION (LISC) BAY AREA	1970 BROADWAY SUITE 1100	OAKLAND	CA	94612
		GRID ALTERNATIVES	1171 OCEAN AVENUE, SUITE 200	OAKLAND	CA	94608
STRELA	CERVAS	CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE	1904 FRANKLIN STREET, STE. 250	OAKLAND	CA	94612
MIA	KITAHARA	STOPWASTE	1537 WEBSTER ST.	OAKLAND	CA	94612
		CENTER FOR BIOLOGICAL DIVERSITY (CBD)	1212 BROADWAY, ST. #800	OAKLAND	CA	94612
		THE PEOPLE'S SENATE	1999 HARRISON STREET, SUITE 650	OAKLAND	CA	94612
		CENTER ON RACE, POVERTY AND ENVIRONMENT (CRPE)	1999 HARRISON STREET, SUITE 650	OAKLAND	CA	94612
		THE EAST OAKLAND COLLECTIVE	PO BOX 5382	OAKLAND	CA	94605
BOB	ALLEN	URBAN HABITAT PROGRAM	2000 FRANKLIN STREET	OAKLAND	CA	94612
		UNION OF CONCERNED SCIENTISTS	500 12TH STREET, SUITE 340	OAKLAND	CA	94607
		PEOPLE UNITED FOR A BETTER OAKLAND (PUEBLO)	1728 FRANKLIN STREET	OAKLAND	CA	94612
SUSANNAH	CHURCHILL	VOTE SOLAR	360 22ND STREET, SUITE 730	OAKLAND	CA	94612
JAYANT	KAIRAM	ENVIRONMENTAL DEFENSE FUND	1107 9TH ST., STE 1070	SACRAMENTO	CA	95814
		ENVIRONMENTAL DEFENSE FUND	123 MISSION ST, 28TH FLOOR	SAN FRANCISCO	CA	94105
		LITERACY FOR ENVIRONMENTAL JUSTICE	P.O. BOX 170039	SAN FRANCISCO	CA	94117-0039
BRADLEY	ANGEL	GREENACTION	315 SUTTER STREET, 2ND FL	SAN FRANCISCO	CA	94108
		BLUEGREEN ALLIANCE	369 PINE STREET, SUITE 700	SAN FRANCISCO	CA	94104
MARIA	STAMAS	NATURAL RESOURCES DEFENSE COUNCIL (NRDC)	111 SUTTER STREET, 21ST FLOOR	SAN FRANCISCO	CA	94104
EDDIE	AHN	BRIGHTLINE DEFENSE	1028A HOWARD STREET	SAN FRANCISCO	CA	94103
JENNIFER	BERG	ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG)	375 BEALE STREET, SUITE 700	SAN FRANCISCO	CA	94105-2066
IVAN	JIMENEZ	BRIGHTLINE DEFENSE	1028A HOWARD STREET	SAN FRANCISCO	CA	94103

TABLE E-4 INTERESTED PARTIES INCLUDING ENVIRONMENTAL JUSTICE AND COMMUNITY-BASED ORGANIZATIONS						
First Name	**Last Name**	**Organization**	**Address**	**City**	**State**	**Zip**
ERICA	MCCONNELL	SHUTE, MIHALY & WEINBERGER LLP	396 HAYES ST.	SAN FRANCISCO	CA	94102
ANTONIO	DIAZ	PEOPLE ORGANIZING TO DEMAND ENVIRONMENTAL AND ECONOMIC RIGHTS (PODER)	474 VALENCIA STREET, #125	SAN FRANCISCO	CA	94103
		ENVIRONMENTAL LAW AND JUSTICE CLINIC	536 MISSION STREET	SAN FRANCISCO	CA	94105
		BAYVIEW HUNTERS POINT COMMUNITY ADVOCATES (KAREN PIERCE)	186 MADDUX AVENUE	SAN FRANCISCO	CA	94124
		SILICON VALLEY TOXICS COALITION	PO BOX 27669	SAN FRANCISCO	CA	94127
		SANTA CLARA VALLEY AUDUBON SOCIETY (SCVAS)--MCCLELLAN RANCH PRESERVE	22221 MCCLELLAN ROAD	CUPERTINO	CA	95014
		LOMA PRIETA SIERRA CLUB CHAPTER OFFICE	39821 EAST BAYSHORE ROAD, SUITE 204	PALO ALTO	CA	94303
MARK T.	ESPINOZA	PRESIDENT ORGANIZACIÓN COMUNIDAD DE ALVISO	P.O. BOX 1301	ALVISO	CA	95002
ADA E.	MÁRQUEZ	SAN JOSE STATE UNIVERSITY, DEPT. OF ENVIRONMENTAL STUDIES	1 WASHINGTON SQUARE HALL, WSQ 118	SAN JOSE	CA	95192-0115