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Memorandum

**To:** Commissioner Karen Douglas, Presiding Member  
Chair David Hochschild, Associate Member

**Date:** September 2, 2021

**From:** California Energy Commission  
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**Subject: CEC STAFF RESPONSE TO ORDER REQUESTING SUPPLEMENTAL INFORMATION IN RESPONSE TO COMMITTEE QUESTIONS (20-SPPE-01)**

On August 26, 2021, the Committee filed an *Order Requesting Supplemental Information In Response to Committee Questions* for the Great Oaks South Backup Generating Facility (GOSBGF). The following are staff's responses to the questions posed in the Committee's filing:

**1. The project description in the FEIR states that the project will receive electricity from a new substation, known as the Santa Teresa Substation, via five new 21 kilovolt (kV) distribution feeders that would extend underground along three proposed trench routes. The California Public Utilities Commission has granted PG&E approval to construct the Santa Teresa Substation. Are the individual effects of the construction and operation of the Santa Teresa Substation and five new 21-kV distribution feeder lines evaluated in the FEIR?**

**If so, then how are these facilities addressed in sections that do not mention them? Would the Santa Teresa Substation have growth-inducing impacts?**

**If not, what is the basis for not evaluating them in the FEIR? What are the environmental impacts of the project relative to the Santa Teresa Substation and distribution feeders, i.e., cumulative impacts?**

Staff Response:

The FEIR does not analyze the direct or indirect impacts resulting from construction of the Santa Teresa Substation but does analyze impacts from the feeder lines. The Santa Teresa Substation was reviewed by the city in the same application package as the proposed Equinix Data Centers (SV 12, SV 13, SV 14), but the need for the substation was triggered by projects that preceded the Great Oaks South Data Center and the substation does not fall within the CEC's jurisdiction. Even if project does not go forward, the substation would still be built (and is currently under construction). The Santa Teresa Substation was approved by the City of San Jose in 2017 and by the California Public Utilities Commission on May 6, 2021 and was

proposed in response to existing customers (48%), RiCloud Corp. and China Mobile International Infrastructure (US1) Inc (CPUC Resolution E-5121, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M383/K104/383104803.PDF>).

The environmental impacts, including cumulative and growth inducing impacts, of the Santa Teresa Substation were analyzed in the Initial Study/Mitigated Negative Declaration for the Equinix Data Centers (SV 12, SV, 13, SV 14) and Santa Teresa Substation, prior to city and CPUC permit approval. The project does not propose changes to the approved substation and thus, analysis of direct or indirect impacts from the substation was not included in the GOSBGF FEIR. The individual impacts of the five distribution lines were analyzed in the FEIR as the distribution lines are new, necessitated by the project, and not previously analyzed. The evaluation of the distribution lines is included in the technical sections as appropriate, including any growth inducing effects. Staff has used a projection approach to cumulative impact analysis, consistent with Title 14, California Code of Regulations, Section 15130 (B). See staff response to question 4 for more information about staff's cumulative impact analysis.

While the *Envision San Jose 2040 General Plan 4 Year Review* did not specifically include the development of the Santa Teresa Substation, the environmental impact report for the *2040 Envision General Plan* did consider the environmental impacts from development of that site based on its general plan land use designation, Transit Employment Center. According to the conclusions in the Initial Study/Mitigated Negative Declaration for the Equinix Data Centers (SV12, SV13, SV14) and Santa Teresa Substation, "...substations are allowed under the General Plan designation, and the project would not conflict with the allowed uses envisioned in the General Plan" (Initial Study/Mitigated Negative Declaration for the Equinix Data Centers [SV12, SV13, SV14] and Santa Teresa Substation, File Number SP15-031, p. 99). Staff has considered the cumulative impacts of development of the *Envision San Jose 2040 General Plan* through to the *Envision San Jose 2040 General Plan 4 Year Review* consistent with the development of the general plan's land use designation, which is consistent with the level of development a substation would pose. Nothing in the record indicates that this analysis overlooked any potential significant adverse impacts attributable to Great Oaks South project as a result of the substation.

**2. How is the 10 dBA threshold that the FEIR applies to the project's construction-related noise effects consistent with the City of San Jose's General Plan Policy EC-1.7? What is the source of the 10 dBA threshold?**

Staff Response:

Staff's evaluation starts with an analysis of the project's consistency with city requirements and then considers whether additional measures are necessary to ensure project impacts are less than significant under CEQA. Staff generally considers noise due to construction activities to be less than significant if the construction activity is temporary and the use of heavy equipment and noisy activities is limited to daytime hours. However, based on staff's experience with community reaction to increases of noise due to construction, an increase of 10 dBA (which is a doubling of the dBA level) or more during the day can trigger a community reaction (e.g., a receptor hearing a 10 dBA increase due to construction noise could consider

this noise negatively) and can warrant additional measures to address impacts. The CEC has not adopted a formal threshold of significance for construction-related noise impacts, but an increase of 10 dBA is generally considered to be the starting point at which significant impacts may occur. However, whether any receptor actually perceives a 10 dBA or more increase depends on a number of factors, including whether any intervening structures would block or impede the sound waves. The exact level of noise resulting from construction is very difficult to identify because it fluctuates based on many factors over the course of a week, day, or even an hour. Therefore, performance standards (i.e., a complaint and redress process) are ultimately used as a backstop measure to address any impacts that are perceived by the community.

As proposed, the project's construction would meet the city noise requirements and, with the proposed mitigation measures, the project would not result in an increase of ambient noise at the nearest noise receptor over 10 dBA, and staff concludes the project would not result in a significant adverse impact. Updated PD NOI-1, Updated PD NOI-2, and MM NOI-1 included in the FEIR ensure: (1) the requirements of EC-1.7 are implemented; and measures will be taken to alert nearby residents of particularly noisy construction events and provide a mechanism for receiving and addressing any noise complaints. With the adoption of these measures, staff concludes the project's noise impacts related to construction would be less than significant.

**3. What is the magnitude of change in noise from construction and operation of the project compared with the ambient noise level the FEIR identifies as the environmental setting? What threshold of significance applies to the magnitude of change in noise caused by the project: the threshold identified in the FEIR or a different threshold of significance? If it is not necessary to evaluate the magnitude of change in noise levels, please explain why not, excluding the project's compliance with the absolute noise thresholds.**

Staff Response:

For evaluation of noise impacts resulting from construction, magnitude of change was considered. Staff determined that, with the proposed mitigation measures, the project would not result in an increase of ambient noise at the nearest noise receptor over 10 dBA, which staff concludes would not constitute a significant adverse impact.

For evaluation of noise impact resulting from operation staff also considered the magnitude of change and found that operational noise would be below the ambient levels. As discussed in **Section 4.13 Noise** on pages 4.13-2 and 4.13-6, for operation, staff used the city allowable limits to evaluate the potential for impacts. Operational noise would be below the city's noise limits (FEIR, p. 4.13-8).

As discussed on pages 4.13-7 and 4.13-8 of the FEIR, the applicant modeled operational sources of noise for the project, using industry-accepted noise model software, to assess the impact of its operational activities on nearby noise receptors. The results showed that project operational noise levels would be below the city's noise level limits for both commercial and residential receptors. This is because the project would implement effective noise-treatment

for its equipment, as well as installation of sound barriers. Again, as discussed on page 4.13-7, the generator yards would be surrounded on all sides by a sound wall to mitigate noise levels. Heating, ventilation and air conditioning (HVAC) equipment including, but not limited to, chiller plant modules and condensing units would be located on the rooftops of each of the data center buildings and would be surrounded by screening sound walls as well.

#### **4. The FEIR states that it:**

**evaluates cumulative impacts using the Addendum to the Envision San Jose 2040 General Plan Final Program Environmental Impact Report and Supplemental Environmental Impact Report for the Envision San Jose 2040 General Plan 4-Year Review (General Plan FPEIR) (San Jose 2016). The General Plan FPEIR identified that build out of the Envision San Jose 2040 General Plan (General Plan) would contribute to five, significant and unavoidable cumulative impacts in the areas of biological resources, land use, noise, population and housing, and transportation.**

**Please identify whether the cumulative impacts analysis in the FEIR relies on a list of projects or summary of projections within the meaning of Title 14, California Code of Regulations, section 15130, or relies on prior environmental analyses as provided by a different section of Title 14. If the former, please identify the list of projects and projections on which the FEIR relies. If the latter, on which section of Title 14 does the FEIR rely? On what prior analysis does the FEIR rely? Was the prior analysis updated to reflect changes that have occurred since it was prepared? Why or why not?**

#### Staff Response:

The cumulative impacts analysis in the FEIR relies on a projection approach based on the environmental analysis from the current general plan, as explained in **Section 4.20 Mandatory Findings of Significance**, page 4.20-3, in conformance with Title 14, California Code of Regulations, Section 15130 (B).

The FEIR relied on the current environmental analysis of the Envision San Jose 2040 General Plan 4 Year Review, which is an update of the Envision San Jose 2040 General plan, first adopted in 2011. The current environmental analysis for the Envision San Jose 2040 General Plan 4 Year Review is the Addendum to the Envision San Jose 2040 General Plan Final Program Environmental Impact Report and Supplemental Environmental Impact Report for the Envision San Jose 2040 General Plan 4-Year Review (General Plan FPEIR). The General Plan FPEIR was published in 2016. Staff confirmed with staff from the City of San Jose Planning, Building and Code Enforcement as to the appropriate planning document to use to develop the project's cumulative analysis.

**5. The FEIR states that the exact amount and the source of the NOx offsets would be confirmed through the permitting process with the BAAQMD. What are the specific levels of NOx emissions from the project on which BAAQMD would base its determination of the offset required, and what offsets are needed? How would the analysis of emissions predicted from Tier 4 equipment compare to the results of the emissions modeling performed for Tier 2 equipment?**

Staff Response:

It should be noted that it takes time for the selective catalytic reduction (SCR) to reach the activation temperature and become fully effective in controlling NOx emissions. The SCR may not be effective for short (e.g., 15-minute) readiness testing and maintenance at zero or low load. However, if tests are run at higher load for more than 15 minutes, the SCR will become effective.

The applicant states that the readiness testing and maintenance for GOSDC standby generators could occur at loads in the range of 10 percent to 100 percent (TN237152). Staff conservatively estimated the total required NOx offsets to be 16.24 tons per year (tpy) using Tier 2 emission factors, as explained in **Section 4.3 Air Quality** on page 4.3-19 of the FEIR. Staff's conservative estimation of the NOx offsets does not account for the fact that, depending on load, the SCR would be expected to kick on within 15 minutes, providing some additional emissions control for tests that run longer than this. In addition to the Tier 2 emission factor, the annual NOx emissions of 16.24 tpy were also based on 20 hours of readiness testing and maintenance per engine per year at full load.

The applicant also provided NOx emission estimates based on a 15-minute warm-up period with Tier 2 emissions and 45-minute steady state period with Tier 4 emissions (TN237152). The total annual NOx emissions would be 5.57 tpy (= 5.39 tpy for QSK95 engines + 0.18 tpy for QSX15 engines) assuming 20 hours of readiness testing and maintenance per engine per year.

The BAAQMD would do a refined emissions calculation if the applicant provides a detailed testing plan (including testing frequency, duration, and load, etc.) and the specifications from the SCR vendor. If it is uncertain whether the SCR would become effective during readiness testing and maintenance, the BAAQMD would also use the most conservative calculation assuming Tier 2 emissions.

Therefore, staff's analysis assuming Tier 2 emissions is conservative. Analysis of Tier 4 emissions would result in less impact than that for the analysis of Tier 2 emissions. The FEIR concluded the air quality impacts of the project with Tier 2 emissions to be *Less Than Significant with Mitigation Incorporated* under impact criterion "b". With Tier 4 emissions, the conclusion would not change but the impacts would be even less.

**6. The FEIR's response to comment A-13 describes how a person can redress a complaint about project noise, as anticipated by MM NOI-1. The FEIR states:**

**Typically, when a noise complaint is received the trained project coordinator investigates the nature of the complaint and the project takes action accordingly. If the complainant is not satisfied with the project's proposed resolution of the complaint, they can contact the permitting agency (in this case the City of San Jose) for further investigation and resolution.**

**How does MM NOI-1 mitigate the project's noise identified in the FEIR? Would it be feasible to add to MM NOI-1 a contact with the City of San Jose to elevate unresolved noise complaints? What response would the City of San Jose have to an elevated complaint? Would it be feasible to add a performance standard to MM NOI-1 to provide for a physical change or other response to any report substantiated by the disturbance coordinator?**

Staff Response:

Collectively, Updated PD NOI-1, Updated PD NOI-2, and MM NOI-1 mitigate the project's noise identified in the FEIR by limiting construction work to the daytime hours; requiring quiet engine-driven equipment; prohibiting unnecessary idling of internal combustion engines; locating noisy equipment and staging and construction material areas further from adjacent noise receptors; notifying the nearby residents and commercial receptors of the schedule of construction activities, and including the telephone number for the project's disturbance coordinator. In addition, as required by Updated PD NOI-2, the project applicant would prepare a noise logistics plan, which would be reviewed and approved by the Director of the Department of Planning, Building, and Code Enforcement or Director's designee prior to issuance of grading and building permits. This plan would include the construction contractor's plan, identifying a schedule of major noise generating construction activities, among the requirements mentioned above.

For projects under the CEC jurisdiction, if a noise complaint is not resolved between the project owner and the complainant, it is elevated to the CEC's Compliance Unit, since the CEC is the lead agency. Then CEC staff takes all necessary measures to resolve the complaint. Sometimes staff visits the project site to verify the stated complaint and work more closely with the project owner and complainant to address the complaint in a manner that satisfies the complainant. In the case of SPPEs, once exempted from CEC licensing requirements, the CEC no longer has jurisdiction over the project, and the responsible agency agrees to ensure project compliance with mitigation measures. As described in Updated PD NOI-2, noise complaints would be submitted to the designated project coordinator. If a satisfactory resolution is not reached, then the complainant would contact the City to report the complaint. The phone number for the city is the same number for reporting non-emergency complaints, which is readily available on the city's website. The number to report such complaints is **(408) 277-8900**. It would not be necessary to add this phone number to MM NOI-1 or the other noise measures, as the City

of San Jose (City) Department of Planning, Building and Code Enforcement (PBCE) has an established complaint process, as explained below. Furthermore, the City submitted a letter (City of San Jose - Acceptance of MMRP and Mitigation Compliance) on August 25, 2021, stating they accept the MMRP and will serve as the enforcement agency for the MMRP, ensuring the Great Oaks South Data Center complies with all requirements outlined in the MMRP.

Please note that with the implementation of Updated PD NOI-1, Updated PD NOI-2, and MM NOI-1, construction noise will be adequately controlled. However, if a noise complaint is received and will require a physical change or other response, the exact solution can be more appropriately determined after investigating the nature of the complaint. Staff believes the most appropriate course of action is for the city to work with the project to come up with a solution, tailored to the specific complaint.

Staff reached out to the City PBCE to learn how the City would respond if a noise complaint were elevated to the City. City staff responded by saying that for operational noise, the City of San Jose Code Enforcement Division enforces the City's Ordinances. Accordingly, Code Enforcement is responsible for addressing violations of noise standards prescribed in Title 20 of the San Jose Municipal Code. Code Enforcement service requests are completed online at: <https://www.sanjoseca.gov/your-government/departments-offices/planning-building-code-enforcement/code-enforcement/request-service-check-status/code-service-request-form>. Construction noise is addressed through Updated PD NOI-1, Updated NOI-2, and MM NOI-1.

It is not feasible to add a performance standard to this provision as noise complaints are best handled on a case-by-case basis. Sometimes it can be difficult to pinpoint exactly what measure(s) would be necessary to redress a verified complaint and proscribing a particular type of change ahead of time might not be the exact type of change necessary to redress the situation (e.g., an operational, not physical, change might be the necessary remedy, or a scheduling change, etc.). As the City has set procedures in place for a code violation, staff does not recommend including specific response in the mitigation measures ahead of any complaints received, as it would be speculative to try to predetermine an appropriate response.

**7. How does payment of the nitrogen deposition mitigation fee required in MM BIO-1 mitigate the project's potentially significant impacts of nitrogen deposition to less than significant levels?**

Staff Response:

The payment of the nitrogen deposition mitigation fee will be used to acquire land and set up a reserve system that will have long-term management, enhancement, and restoration of natural communities for the benefit of the covered species. The fee will cover all plan costs on land cover types affected by nitrogen deposition primarily serpentine habitats. The Santa Clara Valley Habitat Plan (SCVHP) includes a conservation strategy to mitigate impacts on covered species and contribute to their recovery within the study area. A detailed cost model is used to project the costs of implementing the SCVHP during the permit term and the ongoing costs



of managing and monitoring the reserve system after the permit term. The cost model is used to estimate funding needs for the SCVHP.

**8. When and how will the actions required pursuant to PD-TRA-1 take place? How does PD-TRA-1 mitigate the identified vehicle miles traveled impacts to less than significant levels as referenced in the FEIR?**

Staff Response:

The Mitigation Monitoring and Reporting Program (MMRP), attached to Staff's Addendum to the Final Environmental Impact Report for the Great Oaks South Backup Generating Facility (Addendum), outlines the methods of compliance and timing required for the applicant and oversight, action/reports and timing required for the responsible agency. The MMRP notes that compliance with PD TRA-1 will occur prior to the issuance of Public Works clearances/permits. Specifically, the construction of a Class II bike lane along Via Del Oro on the opposing side of the project frontage between San Ignacio Avenue and Great Oaks Boulevard, removal of two pork chop islands on the north leg (Great Oaks Boulevard) at the Santa Teresa Boulevard/Great Oaks Boulevard intersection, implementation of a signal modification at the northeast and northwest corners of Santa Teresa Boulevard/Via Del Oro intersection upon implementation of pork chop removal, and lastly a contribution payment for signal improvements, including pan, tilt, zoom (PTZ) cameras, at the Via Del Oro/San Ignacio Avenue and Via Del Oro/ Great Oaks Boulevard intersections would take place.

As PD TRA-1 states, it mitigates impacts from vehicle miles traveled (VHT) by improving bike access to the project which promotes biking as an alternative to driving which reduces VMT. Also, improving pedestrian connections encourages people to walk instead of drive, reducing VMT.

**9. Staff's noise impacts analysis in the FEIR relies on noise survey data collected between January 26, 2016 and December 3, 2019, including six short-term measurements, a 2016 long-term measurement from Santa Teresa Boulevard adjacent to the project site, and a 2018 long-term measurement from approximately 700 feet northeast of the project site at 6230 San Ignacio Avenue. Please explain how the data sets discussed in the FEIR are appropriate for use as the environmental setting (baseline) for noise, particularly in light of the time between the date of the 2016 noise measurements and the date the CEC began preparation of the EIR?**

Staff Response:

Using Google Earth Pro, CEC staff compared photos of site vicinity from November 2016 with those from September 2020 and found that there has not been much change between the two. Also, staff recently visited the project site in July 2021, and found that the conditions of the site vicinity are similar to what Google Earth shows for 2016 and 2020. There has been slight development in the site vicinity since 2016, but not enough to have altered the ambient

noise environment since 2016. Staff concludes that the current ambient noise levels are not measurably different in comparison to those reported in the 2016 noise survey. Thus, the data sets used in the FEIR are still appropriate.

**10. In comments on the DEIR, Applicant proposed a three-factor mitigation measure to provide alternatives to meet the City of San Jose's (City) climate action plan (CAP); the Applicant invited response from the City to its proposal. The City responded to the Applicant's proposal in its comments on the DEIR. The City concluded that the proposal did not meet the requirements of its CAP. For example, the City pointed out that the use of an alternative to the San Jose Clean Energy Total Green energy program would need to be vetted by a consultant previously approved by the City. The City also stated that the appropriateness of the alternative would require a qualitative description of what measure will be implemented, why it is proposed, and how it will reduce greenhouse gas emissions. Finally, the City stated that any proposed mitigation measure would require a description of how the alternative project measure would achieve the same or greater level of greenhouse gas emission reductions as the City's 2030 Greenhouse Gas Reduction Strategy it replaces, including documentation or calculations to support the Alternative Measure.**

**Staff then filed the Addendum, which proposes changes to MM GHG-1; these changes provide an alternative to participating in the San Jose Clean Energy Total Green energy program based on Applicant's proposed three-factor mitigation measure. Based on the foregoing, how does the revised MM GHG-1 mitigate the potentially significant environmental impact of greenhouse gas emissions to less than significant levels?**

**Please describe how the changes to MM GHG-1 address the comments filed by the City of San Jose relating to compliance with the City's previously adopted greenhouse gas emission reduction strategies and the law, including California Code of Regulations, title 14, sections 15064.5 (sic) and 15183.5. What are the performance standards that ensure the mitigation goal will be achieved consistent with the requirement that a lead agency must not defer determinations of offset adequacy?**

Staff Response:

In working with the City of San Jose to develop the MMRP, the city requested changes to MM GHG-1 to accommodate the applicant's request to present an alternative clean energy program that would meet the requirements the city established in its GHG Reduction Strategy. The revised MM GHG-1 includes a performance standard requiring any alternative clean energy program to "accomplish[] the same goals of 100% carbon-free electricity as the SJCE Total Green Level." This equivalency includes any restrictions imposed on the 100% carbon-free electricity claim that SJCE will be subject to, including the restrictions on the use of unbundled Renewable Energy Credits contained in California Code of Regulations, title 20, section 1393. As enforced by the city, the project owner will be required to produce documentation showing

that it has developed an alternative program that meets these same 100% carbon free goals as verified by a qualified third-party auditor specializing in greenhouse gas emissions. And each year that the project wants to continue to use the alternative program, it will also be required to provide annual reports showing that the alternative program “continue[s] to provide 100% carbon-free electricity, as verified by an independent third-party auditor.” (MMRP, p. 21) The Director of City of San Jose PBCE will undertake the oversight responsibility. If the project owner fails to produce an alternative program that satisfies the performance standard (and, by extension, fails to show compliance with the city’s GHG Reduction Strategy), the project owner will be required to either participate in San Jose Clean Energy at the Total Green level or negotiate with SJCE for an equivalent program. Because the measure clearly articulates the applicable standard the project will have to meet (purchase of electricity that is either the SJCE Total Green Level or accomplishes the exact same 100% carbon-free electricity as that product) there is no deferral of mitigation at issue.