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April 12, 2018

Via Email & Overnight Mail:

Steve Le
Planning Division
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050
Email: sle@santaclaraca.gov

Re: 2305 Mission College Boulevard Data Center Project Initial Study and Mitigated Negative Declaration Comments (PLN2017-12535 and CEQ2017-01034)

Dear Mr. Le:

We are writing on behalf of California Unions for Reliable Energy ("CURE") to provide comments on the Initial Study and proposed Mitigated Negative Declaration ("IS/MND") prepared by the City of Santa Clara ("City") for the 2305 Mission College Boulevard Data Center Project ("Project"). The 15.7-acre Project site is located at 2305 Mission College Boulevard in the City of Santa Clara. The site is currently occupied by a two-story 358,000 square-foot office building and parking lot. PR III 2305 Mission College Boulevard, LLC ("Applicant") is proposing to demolish the existing development to construct a 495,610 square-foot data center facility, including a generator yard, equipment yard, underground storage, and parking. The Project will include a total of 120 diesel-fueled engine generators to provide 75 megawatts ("MW") of backup power generation capacity and a new 90 megavolt amps electrical substation.

Based on our review of the IS/MND, we conclude that the document fails to comply with the requirements of the California Environmental Quality Act ("CEQA"). First, as explained more fully below, the IS/MND fails to adequately describe several elements of the Project and a result fails to disclose information that is necessary to meaningfully assess the impacts that the Project may have on

human health and the environment. Additionally, the IS/MND fails to identify all of the Project's potentially significant impacts and to propose mitigation to avoid or lessen impacts to a less than significant level. As explained in these comments, there is more than a fair argument that the Project will cause significant air quality and noise impacts. Furthermore, substantial evidence supports a fair argument that the Project's greenhouse gas ("GHG") emissions will result in a cumulatively considerable contribution to global climate change and are therefore significant. For each of these reasons, the City cannot approve the Project until an Environmental Impact Report ("EIR") is prepared that adequately discloses and analyzes the Project's potentially significant impacts and incorporates all feasible mitigation to avoid or lessen these impacts.

Finally, as discussed in Section X below, because the Project includes a thermal powerplant component exceeding 50 MW, the City cannot approve the Project until the California Energy Commission issues a certification or exemption pursuant to its exclusive powerplant siting authority.

These comments were prepared with the assistance of technical expert Dr. Phyllis Fox, Ph.D, CEQ, PE, DEE. Dr. Fox's technical comments and curriculum vitae are attached to this letter as Attachment 1 and are submitted to the City in addition to the comments contained herein.[1]

I. Statement of Interest

These comments are submitted on behalf of CURE. CURE is a coalition of labor organizations whose members construct, operate, and maintain powerplants and other industrial facilities throughout California. CURE encourages sustainable development of California's energy and natural resources. Environmental degradation destroys cultural and wildlife areas, consumes limited water resources, causes air and water pollution, and imposes other stresses on the environmental carrying capacity of the State. Environmental degradation also jeopardizes future jobs by making it more difficult and expensive for industry to expand in Santa Clara, and by making it less desirable for businesses to locate and for people to live and recreate in the area. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn,

[1] Attachment 1. Dr. P. Fox, Comments on the Initial Study/Mitigated Negative Declaration (IS/MND) for the 2305 Mission College Boulevard Data Center (Apr. 5, 2018) ("Fox Comments").

reduce future employment opportunities for CURE's participating organizations and their members. CURE therefore has a direct interest in enforcing environmental laws and minimizing project impacts that would degrade the environment.

CURE's participating organizations and their members also live, recreate, work, and raise families in the City of Santa Clara and Santa Clara County. Thus, CURE, its participating organizations and their members stand to be directly affected by the Project's adverse environmental and health impacts. Members may also work on the Project itself, and would therefore be first in line to be exposed to any health and safety hazards that the Project may create.

II. Applicable Legal Standard

The California Environmental Quality Act ("CEQA") has two basic purposes, neither of which the IS/MND satisfies in this case.

First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.[2] In the context of CEQA, "environment" means the physical conditions that exist within the affected area and include land, air, water, minerals, flora, fauna, noise, or objects of historic or aesthetic significance.[3] Under CEQA and the CEQA Guidelines, if a project is not exempt and may cause a significant effect on the environment, the lead agency must prepare an EIR.[4]

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and the implementation of all feasible mitigation measures.[5] If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns."[6]

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[2] 14 C.C.R. § 15002(a)(1).
[3] Pub. Resources Code ("PRC") § 21060.5.
[4] PRC §§ 21100, 21151; 14 C.C.R. § 15064(a)(1), (f)(1).
[5] 14 C.C.R. § 15002(a)(2) and (3); see also, *Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.
[6] PRC § 21081; 14 C.C.R. § 15092(b)(2)(A)-(B).

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR, except in certain limited circumstances.[7] The EIR is the heart of CEQA[8] and has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[9] An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project *may* have a significant effect on the environment."[10] The EIR aids an agency in identifying, disclosing, analyzing, and, to the extent possible, avoiding a project's significant environmental effects through implementing feasible mitigation measures.[11]

In certain limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement indicating that a project will have no significant impact. However, because "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process" by allowing the agency to dispense with the duty to prepare an EIR, negative declarations are allowed only in cases where there is not even a "fair argument" that the project will have a significant environmental effect.[12]

In some circumstances, a project with potentially significant impacts can be modified by the adoption of mitigation measures to reduce the impacts to a level of insignificance. In such cases, an agency may satisfy its CEQA obligations by preparing a mitigated negative declaration.[13] However, a mitigated negative declaration is also subject to the same "fair argument" standard. Thus, an EIR is required whenever substantial evidence in the record supports a "fair argument" that significant impacts may occur as a result of the project even with the imposition of mitigation measures.

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[7] See, e.g., PRC § 21100.
[8] *Dunn-Edwards v. Bay Area Air Quality Management Dist*. (1992) 9 Cal.App.4th 644, 652.
[9] *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*") (citing *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 392); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[10] PRC § 21080(d) (emphasis added); 14 C.C.R. § 15064; see also *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927; *Mejia v. City of Los Angeles* (2005) 13 Cal. App. 4th 322.
[11] PRC § 21002.1(a); 14 C.C.R. § 15002(a), (f).
[12] *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440; PRC §§ 21100, 21064.
[13] PRC § 21064.5; 14 C.C.R. § 15064(f)(2).

CEQA contains a strong presumption in favor of requiring a lead agency to prepare an EIR. The "fair argument" standard reflects this presumption. The fair argument standard is an exceptionally low threshold favoring environmental review in an EIR rather than a negative declaration.[14] As noted above, this standard requires preparation of an EIR if any substantial evidence in the record indicates that a project may have an adverse environmental effect.[15] As a matter of law, substantial evidence includes both expert and lay opinion based on fact.[16] Even if other substantial evidence supports a different conclusion, the agency nevertheless must prepare an EIR.[17]

With respect to the Project at hand, the IS/MND fails to satisfy either of CEQA's two most fundamental purposes. First, the IS/MND lacks critical information on several elements of the Project and thereby fails to inform the public and decisionmakers of the Project's potentially significant impacts on the environment and human health. Second, substantial evidence demonstrates that the Project may cause significant noise, air quality, and GHG-related impacts, and the IS/MND fails to include sufficient measures to avoid or lessen these impacts to less than significant level. CEQA requires that these impacts be analyzed in an EIR in order to inform the public and decisionmakers of the potential impacts from the Project, to consider alternatives, and to identify and incorporate mitigation measures to reduce these and other harmful impacts.[18]

III. The IS/MND Fails to Describe Critical Project Components and Is Inadequate As An Informational Document

The IS/MND first violates CEQA because it fails to adequately describe several components of the Project, including the Project's aboveground storage tanks and batteries. The IS/MND also fails to disclose information on the Project's anticipated electricity usage. The omission of this information renders the IS/MND

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[14] *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.

[15] 14 C.C.R. § 15064(f)(1); *Pocket Protectors,* 124 Cal.App.4th at 931.

[16] PRC § 21080(e)(1) (For purposes of CEQA, "substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact."); 14 C.C.R. § 15064(f)(5).

[17] *Arviv Enterprises v. South Valley Area Planning Comm*. (2002) 101 Cal.App.4th 1333, 1346; *Stanislaus Audubon v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597.

[18] See *Security Environmental Systems v. South Coast Air Quality Management District* (1991) 229 Cal.App.3d 110.

inconsistent with CEQA's fundamental purpose of disclosure and inadequate as an informational document. It also prevents full consideration of the Project's potentially significant environmental impacts.

CEQA requires that before a negative declaration can be issued, the initial study must "provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment."[19] Here, as Dr. Fox's comments explain, the IS/MND's failure to disclose information on several critical components of the Project makes it impossible for the public and decisionmakers to meaningfully evaluate the potential environmental impacts of the Project, to identify the required mitigation, and to assess the effectiveness of the mitigation measures proposed.

First, the IS/MND states that the Project will include twenty-four (24) 10,000-gallon aboveground diesel fuel storage tanks. However, the IS/MND glosses over potential impacts from these storage tanks, and offers no analysis to support its conclusion that hazardous materials and air quality impacts will be less than significant. The IS/MND indicates that "there would be minor evaporative emissions of ROG"[20] (reactive organic gases) from the aboveground storage tanks, but its discussion of the emissions is a single sentence that "emissions of ROG from fuel storage are expected to be negligible."[21] The IS/MND does not describe the type of diesel storage tanks to be used in the Project beyond stating that they will be double-walled tanks. As Dr. Fox notes, information on tank type, such as floating or fixed roof, is critical because ROG emissions from diesel storage tanks may vary, particularly on hot weather days.[22]

Furthermore, ROG emissions would occur during the transfer of diesel into the storage tanks. The IS/MND does not disclose fuel transfers as a source of emissions.[23] There is no information on how or how often diesel fuel will be delivered and transferred to the storage tanks, no discussion of the related potential impacts, and no discussion of what measures will be implemented to avoid such impacts from occurring.

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[19] 14 C.C.R. § 15063(c)(5).
[20] IS/MND at p. 33.
[21] Id. at p. 34.
[22] Fox Comments at p. 30.
[23] Id.

Second, the IS/MND mentions that backup battery equipment will be located in a separate equipment yard in the northern portion of the Project site.[24] However, with the exception of a few brief sentences indicating that batteries will be used in the Project, there is no explanation of what purpose the batteries will serve, or the potential impacts associated with large scale battery usage. Batteries can result in significant environmental and safety impacts depending on the type and arrangement of the batteries and their particular chemical makeup.[25] For example, it is widely known that lithium ion batteries pose serious and unique fire fighting challenges.[26] Water is a poor retardant due to the chemicals present in lithium ion batteries, and facility layout may prevent adequate fire-fighting access.[27] Additionally, battery transport, use, and disposal may result in hazardous materials impacts which are compounded by the Project site's proximity to residences, places of work, and major roadways.[28] None of these potential impacts are disclosed or evaluated in the IS/MND.

Third, the IS/MND fails to disclose the Project's anticipated electricity usage. According to the IS/MND, "[t]he primary function of the data center is to house computer servers, which require electricity and cooling 24 hours a day to operate."[29] With 60 MW of "information technology power"[30] and supporting equipment operating 24 hours a day, it is likely the Project's electricity demand is substantial. And while it may be assumed that the anticipated electricity usage is at least 75MW based on the Project's backup generating capacity, it is never stated that the backup generators would provide the equivalent amount of electricity needed for operations in a daily, non-emergency scenario. As discussed further below, the Project's substantial electricity demand will contribute to Project emissions as result of power generation, particularly GHGs.[31] These emissions are an environmental effect resulting from the Project. Without disclosing the Project's total energy demand, it is impossible to meaningfully evaluate the MND's analysis

[24] IS/MND at p. 6.
[25] See Fox Comments at pp. 33-34.
[26] Id. at p. 33.
[27] Id.
[28] Id.
[29] IS/MND at p. 63 ("Data centers are an energy-intensive land use, requiring more electricity than other types of development.").
[30] Id. at p. 6.
[31] See Fox Comments at p. 3.

of Project emissions and to determine whether the City's conclusions are supported by substantial evidence.

In the absence of the above information on the Project's diesel storage tanks, batteries, and electricity usage, the IS/MND's project description is inadequate. Moreover, the IS/MND does not provide a sufficient factual basis, or substantial evidence, to support a determination that hazardous materials, air quality, and GHG impacts resulting from the Project will be less than significant. The City must disclose this information so that the public and decisionmakers can assess all of the Project's potentially significant impacts and ensure that the Project impacts are mitigated to a less than significant level.

IV. Substantial Evidence Supports A Fair Argument That The Project's Greenhouse Gas Emissions May Be Significant

A. The IS/MND Consistency Analysis Does Not Establish the Project's GHG Emissions Would Be Less Than Signficant

The IS/MND concludes that the Project's GHG emissions would not have a significant impact on the environment because the Project is consistent with the City of Santa Clara Climate Action Plan ("CAP") and other plans, policies, and regulations adopted for the purpose of reducing GHG emissions.[32] However, as explained more fully below, the IS/MND fails to establish that the Project's consistency with these plans and programs will ensure that the Project's contribution to global climate change is not cumulatively considerable. Furthermore, by relying on a qualitative consistency analysis, rather than calculating the Project's emissions, the IS/MND fails to disclose to the public significant GHG emissions that will result from the Project's energy usage. This approach conflicts with CEQA Guidelines section 15064.4(a), which instructs lead agencies to "make a good-faith effort . . . to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project."

As Dr. Fox's comments demonstrate, substantial evidence supports a fair argument that the Project's GHG emissions may be significant notwithstanding the Project's consistency with the Santa Clara CAP, General Plan, and other state and

[32] IS/MND at p. 70.

regional reduction programs. Accordingly, the City must prepare an EIR to disclose, analyze, and mitigate the Project's GHG emissions.

1. Consistency with the CAP and General Plan Does Not Support a Determination that GHG Emissions Would Be Less Than Significant

The CEQA Guidelines provide that a lead agency may analyze and mitigate GHG emissions resulting from certain activities in a defined geographic area in a qualified plan for the reduction of GHG emissions.[33] Lead agencies may then tier from or incorporate the analysis and mitigation contained in a GHG reduction plan when considering individual projects within the plan's scope. If the lead agency determines that an individual project is consistent with an adopted GHG reduction plan, it may be presumed that the Project's incremental contribution to climate change would be less than cumulatively considerable, or less than significant.[34]

CEQA Guidelines section 15064 specifies how to demonstrate consistency with a greenhouse gas reduction plan. That section states: "When relying on a plan, regulation or program [for the reduction of GHG emissions], the lead agency should explain how implementing the plan, regulation or program ensures that the project's incremental contribution to the cumulative effect is not cumulatively considerable." Additionally, the consistency analysis "must identify those requirements specified in the plan that apply to the project, and if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project."[35] However, "[i]f there is substantial evidence that the effects of a particular project may be cumulatively considerable, notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project."[36]

Here, the IS/MND considers the Project's consistency with the CAP and General Plan as its threshold of significance. First, the IS/MND considers whether

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[33] 14 C.C.R. § 15183.5; see also 14 C.C.R. §§ 15064(h)(3), 15064.4
[34] 14 C.C.R. § 15064.4(b); see also BAAQMD CEQA Guidelines (May 2017), pp. 4-4, 4-7.
[35] 14 C.C.R. § 15183.5(b)(2); BAAQMD CEQA Guidelines (May 2017), p. 4-4 ("A project must demonstrate its consistency by identifying and implementing all applicable feasible measures and policies from the GHG Reduction Strategy into the project.").
[36] 14 C.C.R. § 15183.5(b)(2).

or not the Project "conforms to the applicable reduction measures in the City's CAP."[37] The IS/MND also considers the Project's consistency with relevant provisions of the City of Santa Clara General Plan. The CAP, which was adopted in 2013 and is now part of the City's General Plan, is a qualified GHG reduction plan for purposes of CEQA.[38] The CAP identifies a series of measures intended to ensure the City "achieve[s] it fair share of statewide emissions reductions for the 2020 timeframe consistent with AB 32, the Global Warming Solutions Act."[39] As directed by the CEQA Guidelines, the IS/MND includes a section outlining the applicable CAP and General Plan provisions. The IS/MND then briefly describes how these measures apply to the Project. On this basis, the IS/MND concludes that the Project is consistent with the CAP and General Plan and therefore its GHG emissions will be less than significant.[40]

The IS/MND's conclusion that the Project will not result in significant GHG impacts because it is consistent with the City's CAP is not supported by substantial evidence for two reasons. First, because the CAP was adopted to achieve 2020 emissions reduction targets, consistency with the CAP does not support a determination that impacts will be less than significant beyond that year. Since the CAP was adopted, the state of California has adopted a more aggressive GHG emissions reduction target of 40 percent below 1990 levels by 2030.[41] This target was set in accordance with the latest scientific evidence regarding the degree of reduction needed to avoid further contributing to the devastating impacts of climate change.[42] As the City's CAP pre-dates the latest standards and scientific data, compliance with its measures alone does not provide substantial evidence that the Project's GHG impacts would be less than significant during the Project's operational life.

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[37] IS/MND at p. 63
[38] See 14 C.C.R. § 15183.5(b)(1); Santa Clara Climate Action Plan, p.8 (Dec. 3, 2013), *available at* http://santaclaraca.gov/government/departments/community-development/planning-division/general-plan/climate-action-plan.
[39] IS/MND at p. 62.
[40] Id. at p. 70.
[41] Health & Safety Code § 38566 (SB 32).
[42] California's 2017 Climate Change Scoping Plan, California Air Resources Board pp. ES2-ES3, 2 (Nov. 2017), *available at* https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm; see also *Cleveland National Forest Foundation,* 3 Cal. 5th at 519 ("CEQA requires public agencies . . . to ensure that [greenhouse gas impact] analysis stay in step with evolving scientific knowledge and state regulatory schemes.")

CEQA requires that lead agencies consider the long term impacts of projects with long term operations, particularly in the context of GHG emissions.[43] As we approach the year 2020, the California Supreme Court and has counseled against relying on consistency with 2020 targets to evaluate the impacts of long term projects.[44] In *Center for Biological Diversity v. Department of Fish and Wildlife*, the California Supreme Court explained that, "over time consistency with year 2020 goals will become a less definitive guide, especially for long-term projects that will not begin operations for several years. An EIR taking a goal-consistency approach to CEQA significance may in the near future need to consider the project's effects on meeting longer term emissions reduction targets." Here, this passage is particularly relevant as it is likely the Project will not even commence operations prior to 2020. In short, the fact that the Project will not interfere with, or is consistent with, achieving the City's 2020 GHG reduction targets tells the public and decisionmakers little, if anything, about the significance of the Project's GHG emissions during the course of its entire operational life.

Second, as Dr. Fox's comments further explain, the majority of the applicable CAP and General Plan measures listed in the IS/MND do not even address the Project's primary source of GHGs. For example, with regard to transportation-related GHG emissions, the CAP requires that the project achieve "a 25 percent vehicle miles traveled (VMT) reduction, with 10 percent coming from [transportation demand program] measures."[45] However, as Dr. Fox comments demonstrate, transportation-related emissions make up just .043% of the Project's overall GHG-emissions.[46] Thus, the fact that the Project is "consistent" with the CAP in this area does little to reduce the Project's GHG emissions.[47]

The same holds true for the CAP's water conservation measures, waste reduction measures, and off-road equipment requirements. According to the IS/MND, these three categories make up the remainder of the CAP measures applicable to the Project.[48] For each, the IS/MND provides a brief paragraph

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[43] See 14 C.C.R. § 15126.2 (discussing impacts both during the "initial and continued phases of the project"); see also *Natural Resources Defense Council v. City of Los Angeles* (2002) 103 Cal.App.4th 268 (CEQA requires examination of the environmental impacts of "the entire project, from start to finish").
[44] *Center for Biological Diversity v. Dept. of Fish & Wildlife* (2015) 62 Cal. 4th 204, 224.
[45] IS/MND at p. 67.
[46] Fox Comments at p. 6.
[47] Id.
[48] IS/MND at p. 66-67.

indicating that the Project is consistent. However, two of the three (waste reduction and off-road equipment) only apply to Project construction. For the third, water conservation, the IS/MND does not explain the effect these measures will have on the Project's operational GHG emissions. The McLaren Data Center IS/MND showed that approximately 99% of that project's operational GHG emissions were the result of the data center energy demand, with slightly less than half a percent attributable to vehicle travel.[49] Thus, even assuming water usage was responsible for the remaining emissions, water conservation measures, while important, will do very little to reduce the Project's total GHG emissions.

Further, with respect to the Project's consistency with relevant General Plan policies, these policies similarly do not address GHG emissions resulting from electricity generation needed for the Project.[50] In fact, the applicable policies relate to largely the same categories as the CAP measures (water conservation, waste disposal). And again, the IS/MND also fails to explain what effect these measures will have in terms of reducing or mitigating the Project's overall operational GHG emissions.

In sum, the fact that the Project is consistent with the City's CAP and General Plan does not provide substantial evidence that GHG emissions will be less than cumulatively considerable, or less than significant. Because the City's CAP was prepared to achieve the City's 2020 GHG emission reduction targets, compliance with the CAP measures at most supports a determination that the Project will not impede the achievement of the City's 2020 targets. Moreover, of the CAP and General Plan measures applicable, few address the Project's primary source of GHG emissions, and the IS/MND wholly fails to explain how these measures will "ensure[] that the project's incremental contribution to the cumulative effect is not cumulatively considerable." As discussed further below, because substantial evidence supports a fair argument that the Project's GHG emissions may be significant notwithstanding its consistency with the City's GHG reduction plans and programs, an EIR must be prepared.

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[49] Proposed Mitigated Negative Declaration and Initial Study McLaren Data Center Project, File No(s): PLN2016-12246/CEQ2016-01023, City of Santa Clara, Appendix B, p. 8 (Feb. 2017), http://santaclaraca.gov/Home/Components/BusinessDirectory/BusinessDirectory/167/3650?npage=2 ("Electricity usage makes up nearly 99% of the operational Project GHG emissions, with mobile sources making up slightly under half a percent.") ("McLaren IS/MND").

[50] IS/MND at pp. 68-69; Fox Comments at pp. 10-12.

2. The IS/MND's Conclusion That The Project Is Consistent With Regional and State GHG Reduction Plans Is Unsupported

In addition to considering the Project's consistency with the City's CAP, the IS/MND purports to consider the Project's consistency with other regional and statewide efforts to reduce GHG emissions. Specifically, the IS/MND includes sections addressing the Project's consistency with the Bay Area 2017 Clean Air Plan, Plan One Bay Area/SB 375, the 2009 California Climate Change Adaptation Strategy, and the California Air Resources Board's Climate Change Scoping Plan.[51] However, the IS/MND's "consistency analysis" for these plans and programs consists of little more than conclusory statements that the Project is generally consistent with the overarching purpose of the program. Relying on these conclusory statements, the IS/MND's plan consistency section concludes:

> As discussed above, the project would not conflict with plans, policies or regulations adopted for the purpose of reducing the emissions of GHG. Therefore, the project would not conflict with any currently adopted local plans, policies, or regulations pertaining to GHG emissions and would not generate greenhouse gas emissions that would have a significant impact on the environment.

Contrary to the IS/MND's conclusion, however, the IS/MND offers no evidence that consistency with the above mentioned plans will avoid a significant impact on the environment as a result of the Project's GHG emissions. For example, for the Bay Area 2017 Clean Air Plan, the IS/MND explains that the Plan "identifies a range of control measures that make up the Clean Air Plan's control strategy for emissions including GHGs." However, rather than explaining how the Project is consistent with the "range of control measures" identified in the Clean Air Plan, the IS/MND includes two sentences stating that "energy efficiency measure have been included in the design and operation of the electrical and mechanical systems on the site. This is in keeping with the general purpose of Energy Sector Control Measures in the Clean Air Plan."[52]

[51] Id. at pp. 69-70.
[52] IS/MND at p. 69.

Similarly, for its consistency analysis with SB 375, the IS/MND includes one sentence that "[t]he project has a low concentration of employment and would not contribute to a substantial increase in passenger vehicle travel within the region."[53]

Finally, after a paragraph describing the Climate Change Scoping Plan, the IS/MND again includes one conclusory statement that "[t]he project would be generally consistent with the Climate Change Scoping Plan, as updated[.]"[54]

As with the CAP consistency analysis, the IS/MND's consistency analysis for regional and statewide GHG reductions plans and programs wholly fails to explain how the Project's consistency with such plans supports its conclusion that the Project would not generate GHG emissions that would have a significant impact on the environment. Conclusory statements that the Project would be "generally consistent with" or "keeping with the general purpose" are not substantial evidence that impacts will be less than significant, as CEQA requires.[55] Moreover, because none of the plans and programs identified address data centers, where the majority of GHG emissions derive from electricity usage, finding that the Project is consistent is of minimal import in this case.[56]

B. Substantial Evidence Supports A Fair Argument That The Project's GHG Emissions Would Result In A Significant Impact

The BAAQMD CEQA Guidelines provide the following thresholds of significance for operational-related GHG emissions for land use development projects:

> Compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per years (MT/yr) of CO2e; or 4.6 MT CO2e/SP/yr (residents + employees).[57]

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[53] Id.
[54] Id. at p. 70.
[55] Id. at pp. 69-70.
[56] 14 C.C.R. § 15064.4(b)(3) (Providing that consistency with adopted regulations and requirements is relevant for assessing a project's impacts if such requirements "reduce or mitigate the project's incremental contribution to greenhouse gas emissions.").
[57] BAAQMD CEQA Guidelines (May 2017), p. 2-4.

The IS/MND considers the Project's "compliance with a qualified GHG Reduction Strategy" as the threshold of significance for the Project's operational emissions. However, as discussed above, the IS/MND fails to demonstrate that compliance with the City's CAP and General Plan will reduce or mitigate the Project's GHG emissions to a less than significant level. In order to more accurately evaluate the significance of the Project's impacts, Dr. Fox conducted an analysis of the Project's GHG emissions and compared her results to BAAQMD's other, numeric threshold.[58]

The main text of the IS/MND does not disclose the Project's GHG emissions from sources other than emergency generators. However, in reviewing the IS/MND and air quality appendix, Dr. Fox found that the CalEEMod outputs buried in Appendix A do contain an estimation of a portion of the Project's operational GHG emissions.[59] As an initial matter, these calculations are effectively hidden from all non-expert members of the public. There is also no explanation of how these GHG emissions were calculated, and the CalEEMod model does not include GHGs from energy generation. Nevertheless, the output files show that the unmitigated GHG emissions from Project operations are 1,720 MT CO2e per year, excluding generators and energy usage.[60] This alone exceeds the BAAQMD significance threshold of 1,100 MT CO2e per year, but still does not include the Project's primary source of GHG emissions.

To determine the Project's GHG emissions resulting from electricity usage, Dr. Fox looked to emissions calculations prepared for a similar Santa Clara data center project, the McLaren Data Center Project.[61] The City initially approved the McLaren Data Center Project in 2017.[62] The projected energy demand of the McLaren Data Center Project was 76 MW, compared to the Project's 75 MW.[63] The McLaren Data Center will also be served by Silicon Valley Power. Thus, the two projects will rely on the same sources for electricity generation. The McLaren IS/MND Greenhouse Gas Technical Report indicates that the project would emit

[58] Fox Comments at pp. 4-5.
[59] Id. at p. 3.
[60] Id. at p. 4.
[61] Id. at p. 4.
[62] Architectural Review Committee, City of Santa Clara, Minutes Wednesday, March 29, 2017, *available at* http://santaclaraca.gov/government/about-santa-clara/meetings/-toggle-allpast/-npage-19.
[63] McLaren IS/MND at p. ii (total project demand is 76 MW).

153,850 MT CO2e per year, 99 percent of which (152,262 MT CO2e/year) was attributed to the data center's energy usage.[64]

Relying on the McLaren Data Center calculations, Dr. Fox determined that the Project's GHG emissions from energy usage would be approximately 151,826 MT CO2e per year.[65] When added to the 1,720 MT CO2e per year from other sources disclosed in the CalEEMod outputs, the Project's total operational GHG emissions are 153,546 MT CO2e per year.[66] This figure is 89 times higher than the GHG emissions disclosed in Appendix A, and exceeds the BAAQMD significance threshold for land use projects by a factor of 140.[67]

Because the overwhelming majority of the Project's operational GHG emissions will not be reduced by the City's CAP and General Plan measures, finding that the Project is consistent with the CAP does not support a determination that the Project's GHG impacts will be less than significant. Moreover, as Dr. Fox's comments provide, substantial evidence shows that the Project's GHG emissions will be cumulatively considerable and therefore significant notwithstanding the Project's alleged consistency with a GHG reduction plan.[68] The City must prepare an EIR to disclose and analyze the Project's GHG emissions, and to incorporate all feasible mitigation.

V. Substantial Evidence Supports a Fair Argument That the Project Will Cause Significant Noise Impacts

Appendix G to the IS/MND explains that the Project's emergency equipment, including the backup generators and battery switchgear, would generate significant operational noise impacts. To reduce these impacts to a less than significant level, the IS/MND contains two mitigation measures addressing operational noise: First, MM NOI-1 requires that "[n]o more than nine powerblocks (45 generators) located on the western boundary of the generator yard may be tested simultaneously."[69] Second, MM NOI-2 provides that "[n]oise attenuation measures will be subject to demonstration of effectives in meeting the City's noise standards, to the satisfaction

[64] McLaren IS/MND, Appendix B, p. 8.
[65] Fox Comments at p. 4 n. 15.
[66] Id. at p. 4.
[67] Id. at p. 5.
[68] Id. at pp. 4-5.
[69] IS/MND at p. 95.

of the City's Planning Division, prior to approval of building permits."[70] The IS/MND concludes that "[w]ith implementation of MM NOI-1 and MM NOI-2, noise levels at adjacent property lines would be below the requirements established in the City Code" and therefore less than significant with mitigation incorporated.[71] Additionally, the IS/MND concludes that, "assuming emergency testing occurs for no more than four hours in a twenty-four (24) hour period,"[72] the Project "would not result in significant increases in ambient noise levels at adjacent receptors."[73]

As explained further below, the IS/MND's conclusion that noise impacts will be mitigated to less than a significant level is unsupported for two reasons. First, the IS/MND does not disclose or evaluate the noise levels resulting from simultaneous operation of all generators. Rather, it bases its conclusion that impacts would be less than significant on the fact that the City's noise ordinance does not apply during emergency situations and therefore would not be violated. However, the IS/MND's analysis in this regard is in clear conflict with the requirement of CEQA to consider the Project's effects on the surrounding environment, not simply whether it will comply with City law. Second, the IS/MND fails to incorporate the mitigation measures that the attached noise assessment demonstrates are necessary to reduce noise impacts to a less than significant level. Instead, the IS/MND incorporates a variation of one of the recommended measures, while erroneously excluding the others.

For each of these reasons, the IS/MND's determination that noise impacts would be less than significant is not supported by substantial evidence. Noise levels generated by the Project's equipment remain significant and unmitigated.

A. The IS/MND Fails to Disclose and Analyze Noise Impacts that May Result from the Operation of Backup Generators

The first flaw of the IS/MND's noise analysis is that it is prepared as though the Project's backup generators will only be used for maintenance and testing purposes. This misleading approach ignores the reality that the backup generators

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[70] Id. at p. 96.
[71] Id.
[72] IS/MND, Appendix G, p. 9 (showing that the "Project L_{dn}" displayed in IS/MND Table 4.12-4 was calculated assuming emergency generators are tested for no more than four hours in a 24 hour period.)
[73] IS/MND at p. 96.

were included in the Project for a reason and will be used simultaneously when the Project's primary power supply is interrupted. It also prevents the public and decisionmakers from conducting an informed evaluation of the Project's potential noise impacts. Neither the IS/MND nor Appendix G disclose to the reader the sound levels that would result from all 120 generators operating simultaneously.[74] Further, in considering whether the Project would result in a significant increase over ambient noise levels, the projected noise level displayed in the IS/MND was calculated assuming emergency generators operate for no more than four hours in a day.[75]

Contrary to the IS/MND's depiction of the Project's backup generators, SVP's outage history demonstrates that all 120 backup generators will be called on to operate throughout the year. The Silicon Valley Power website shows that the utility has experienced 41 power outages across its entire service area over the course of the last year and a half.[76] These power outages ranged in duration from five minutes to more than five hours, with causes ranging from equipment failure to balloons to animal contact.[77] As these figures show, disruptions to the Project's power supply may reasonably be expected throughout the Project's operational life and all generators will be required to operate simultaneously.

The omission of impacts from all generators operating simultaneously not only renders the IS/MND deficient as an informational document, it renders the City's determination that noise impacts would be less than significant not supported by substantial evidence. The fact that "[e]mergency equipment such as backup generators are not required to meet noise code during emergency operations [per section 9.10.070(a) of the Santa Clara City Code]" does not support a determination that noise impacts would be less than significant under CEQA. While compliance with applicable noise limits is a relevant consideration, CEQA ultimately requires consideration of the Project's effect on the surrounding

[74] See IS/MND, Appendix G, p.8 (Sound pressure levels displayed are the result of 9 powerblocks and 11 powerblocks tested simultaneously).
[75] Id. at p. 9.
[76] Silicon Valley Power, Outage History, http://www.siliconvalleypower.com/svp-and-community/outages-and-alerts/outages/outage-history (last visited Apr. 11, 2018).
[77] Id.

environment notwithstanding it's compliance with applicable City laws.[78] As the City's own analysis shows, noise levels will be highest during emergency situations when all generators are required to operate at once. However, these impacts are never disclosed or analyzed in the IS/MND.

The mitigation measures required will not reduce noise impacts resulting from simultaneous operation of all backup generators. MM NOI-1 does not mitigate noise levels other than during routine testing. MM NOI-2 requires a demonstration that noise attenuation measures are sufficient to meet City noise standards, which the IS/MND expressly states do not apply when the backup generators are actually needed. Thus, the determination that noise impacts would be mitigated to a less than significant level by MM NOI-1 and MM NOI-2 alone is unsupported. The City's own evidence supports a fair argument that noise impacts may be significant.

B. The IS/MND Fails to Incorporate the Measures Required to Mitigate Noise Impacts to a Less Than Significant Level

In addition to failing to disclose and evaluate the Project's potentially significant noise impacts during reasonably foreseeable disruptions to the Project's power supply, the IS/MND's determination that noise impacts will be mitigated to a less than significant level is refuted by its own noise assessment. Specifically, the IS/MND fails to incorporate restrictions that the noise assessment shows are needed for the Project to comply with the City's noise limits during routine testing. Accordingly, the IS/MND must be revised to incorporate enforceable mitigation measures consistent with the restrictions specified in Appendix G otherwise noise impacts remain significant.

The IS/MND explains that the generators and PCS modules must comply with the City's noise code during routine testing.[79] The applicable noise limits[80] at each of the Project's property lines are listed in the IS/MND as follows:

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[78] See also CEQA Guidelines, Appendix G (Noise checklist directing lead agencies to consider whether the project would result in "a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?")
[79] IS/MND at p. 95.
[80] IS/MND, Appendix G at p. 4; Santa Clara Muni. Code § 9.10.040

Property Line	Daytime Noise Limit [dBA]	Nighttime Noise Limit [dBA]
1. Residential to North	55	50
2. Public Space to West	55	50
3. Light Industrial to East	70	70
4. Planned Development to South	65	60

Appendix G concludes that "the *daytime* noise limits will be met if no more than (9) powerblocks (45 generators) and eleven (11) PCS modules are tested simultaneously."[81] Additionally, Appendix G specifies: "To meet code limits at all property lines, *no more than four (4) powerblocks along the west end of the generator yard may be tested simultaneously*."[82] With these restrictions in place, sound pressure levels would be 54 dBA at receivers 1 and 2, 59 dBA at receiver 3, and 54 dBA at receiver 4, and therefore would be below *daytime limits*.[83]

As the above statements demonstrate, the IS/MND's conclusion that noise impacts will be less than significant with the incorporation of mitigation measures MM NOI-1 and MM NOI-2 is inconsistent with Appendix G. First, despite a brief statement in the IS/MND that "testing would be conducted between the hours of 7:00 AM and 10:00 PM," there is no enforceable restriction on the time equipment testing may occur at the Project. In the absence of an enforceable time restriction, nighttime noise limits at both the north and west property lines would be exceeded during testing (54 dBa during testing compared to 50 dBA nighttime noise limit).

Second, Appendix G states that, "[t]o meet code limits at all property lines, no more than four powerblocks along the west end of the generator yard may be tested simultaneously."[84] However, MM NOI-1 erroneously sets the limit on simultaneous testing at nine powerblocks on the western boundary.[85] There are nine powerblocks along the west end of the property alone.[86] Thus, the Applicant could test all nine

[81] Id. at p. 8 (Italics added).
[82] Id. at p. 9 (Italics added).
[83] Id.
[84] Id.
[85] IS/MND at p. 95.
[86] IS/MND, Appendix G, p. 7, Figure 7.

western powerblocks simultaneously, resulting in a violation of City noise limits, without violating MM NOI-1.

Third, the mitigation measures imposed do not restrict testing of PCS modules. As noted above, Appendix G states that no more than 11 PCS modules may be tested simultaneously to remain in compliance with City noise limits.[87] The Project will feature 37 PCS Modules in total.[88] Thus, in the absence of a restriction on PCS Module testing, the IS/MND's conclusion that noise impacts will be less than significant during emergency equipment testing is again refuted by the City's own analysis.

In the absence of enforceable mitigation specifying that no more than four powerblocks along the west end of the generator yard may be tested simultaneously; no more than 11 PCS modules may be tested simultaneously with generator testing; and that all emergency equipment testing shall occur between the hours of 7:00 AM and 10:00 PM, the IS/MND's conclusion that impacts will be less than significant with mitigation is not supported by substantial evidence. Unless these restrictions are incorporated, noise impacts would be significant.

VI. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Air Quality Impacts

Project construction emissions were calculated using the California Emissions Estimator Model ("CalEEMod").[89] Dr. Fox reviewed the IS/MND's emissions calculations, including the CalEEMod outputs, and found that the IS/MND underestimates Project construction emissions.[90] As explained more fully below, entire categories of emissions, including fugitive dust emissions from off-road vehicles and wind erosion, are not accounted for in the construction emissions calculations. After recalculating Project construction emissions to account for these omissions, Dr. Fox concluded that impacts to air quality from construction-generated particulate matter may be significant.[91]

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[87] Id. at p. 8.
[88] Id. at p. 7, Table 5.
[89] IS/MND, Appendix A, p. 7. It is unclear which version of CalEEMod was used to calculate the Project's emissions. Appendix A at page 7 references both version 2016.3.1 and 2013.2.2.
[90] Fox Comments at pp. 19-27.
[91] Fox Comments at pp. 26-27.

Furthermore, because the CalEEMod model was run for an annual scenario only, with average daily emissions calculated by dividing annual emissions by 336 work days, the IS/MND's emissions calculations are inaccurate and its conclusions are unsupported. As Dr. Fox explains, CalEEMod can be run for three scenarios: annual or summer and winter with output in pounds per day. It also calculates maximum daily construction emissions. Here, the IS/MND's approach of determining daily emissions averages by division results in an inaccurate calculation of the Project's construction emissions as construction will occur over a 15 month period and emissions will vary depending on seasonal conditions.[92] Averaging emission also fails to account for the fact that construction phases may overlap in time, with multiple pieces of construction equipment operating simultaneously.

Because the IS/MND's emissions calculations are inaccurate, they cannot be relied on to support a determination that air quality impacts from Project construction will be less than significant. Moreover, as discussed further below, substantial evidence supports a fair argument that Project construction will result in significant particulate matter emissions from fugitive dust. Accordingly, an EIR must be prepared to accurately disclose and analyze the Project's construction emissions and to impose all feasible mitigation.

A. Construction Fugitive Dust Emissions Were Omitted from the IS/MND Emissions Calculations

The CalEEMod User's Guide states that the program does not account for fugitive dust emissions from off-road vehicle travel when calculating emissions.[93] This category of emissions includes fugitive dust generated by on-site haul trucks during construction activities.[94] On site haul trucks generate fugitive PM10 and PM2.5 emissions when traveling on unpaved surfaces within a project site, such as during site preparation and grading. Here, the IS/MND states that fugitive dust will be generated during Project construction. It also indicates that project construction will include site preparation, grading, and excavation for the 15.7 acre site. However, the IS/MND does not disclose the size or extent of unpaved surfaces,

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[92] Id. at p. 19.
[93] Id. at p. 21.
[94] Id.; see also IS/MND at p. 31 ("During grading and construction activities, dust would be generated.")

or calculate fugitive dust emissions resulting from haul truck activities in these areas.

In order to more accurately calculate the Project's construction-related emissions, Dr. Fox calculated particulate matter emissions from on-site haul truck travel using EPA's air pollution emission factor equation for industrial unpaved roads.[95] Based on her calculations, which are detailed further in the attached comments, Dr. Fox determined that project construction would generate approximately 458 pounds per day of PM10, and approximately 46 pounds per day of PM2.5 as a result of off-road vehicle travel.[96]

Furthermore, the CalEEMod model also does not account for "fugitive dust generated by wind over land and storage piles." The CalEEMod Technical Paper acknowledges that this limitation "could result in underestimated fugitive dust emissions if high winds and loose soil are substantial characteristics for a given land use/construction scenario."[97] As Dr. Fox notes, windblown dust can be a significant source of fugitive PM10 and PM2.5, particularly in the Bay Area where frequent hot, dry high-wind events are common in spring and fall.[98] These emissions could result in public health impacts due to violations of state and federal ambient air quality standards for PM10 and PM2.5.

Because the IS/MND does not provide a separate emissions estimate for windblown dust from Project construction activities, Dr. Fox calculated windblown dust emissions using the AP-42 construction emission factor and information contained in the IS/MND. AP-42 includes a generic construction emission factor of 1.2 tons of total suspended material per acre per month of construction activity.[99] Assuming 2.5 acres are disturbed on the maximum day and that 90% of the total suspended material is PM10, Dr. Fox determined that PM10 emissions from wind erosion alone would be 180 lb/day.[100] Similarly, conservatively assuming that only 25% of PM10 wind erosion emissions are PM2.5, wind erosion PM2.5 emissions would be 45 lb/day.[101]

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[95] Id. at p. 21.
[96] Id. at pp. 21-24.
[97] Id. at p. 24.
[98] Id. at p. 25.
[99] Id.
[100] Id. at p. 25.
[101] Id. at pp. 25-26.

Alternatively, using the AP-42 "Industrial Wind Erosion" guidance and assuming a 2-minute wind speed of 30 mph, Dr. Fox estimated wind erosion PM10 emissions from a similar, but much smaller disturbed area at a construction site (4 acres disturbed) would be 60 lb/day of PM10 and 30 lb/day of PM2.5. However, she explains, "Wind erosion PM10 and PM2.5 emissions calculated using the AP-42 'Industrial Wind Erosion' methodology would be substantially higher if the entire disturbed area were included."[102]

B. Construction PM10 and PM2.5 Emissions Are Significant

Under CEQA, "the determination of whether a project may have a significant effect on the environment calls for careful judgment on the public of the public agency involved, based to the extent possible on scientific and factual data."[103] BAAQMD's CEQA guidelines do not establish a threshold of significance for fugitive dust PM10 and PM2.5 emissions; however, several other California air pollution control districts have adopted significance thresholds for fugitive dust construction emissions. For example, the Monterey Bay Unified Air Pollution Control District has established a significance threshold of 82 pounds per day for construction PM10 emissions; the South Coast Air Quality Management District has established thresholds of 150 pounds per day for PM10 and 55 pounds per day for PM2.5; and the Sacramento Metropolitan Air Quality Management District has established significance thresholds of 80 pounds per day for PM10 and PM2.5 if all feasible control measures are implemented. The CEQA Guidelines provide that "when adopting thresholds of significance, a lead agency may consider thresholds of significant previously adopted or recommended by other public agencies or recommended by experts provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Here, when taken together, these agencies show a reasonable threshold of significance of construction emissions is 80-150 pounds per day for PM10 and zero-80 pounds per day for PM2.5. [104]

Dr. Fox's calculations demonstrate that when fugitive PM10 emissions are calculated to include off-road vehicle travel and wind erosion, total construction fugitive PM10 emissions may range from 524-648 pounds per day.[105] Furthermore,

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[102] Id. at p. 26.
[103] 14 C.C.R. § 15064(b).
[104] Fox Comments at p. 27.
[105] Id. at p. 28.

total fugitive PM2.5 emissions are approximately 79-94 pounds per day when off-road vehicle travel and wind erosion are accounted for.[106] As Dr. Fox notes, if all information necessary to calculate fugitive dust emissions were provided in the IS/MND, emissions levels would be higher.[107] These calculations support a fair argument that the Project's fugitive PM10 and PM2.5 emissions from construction activities are significant. Thus, the City must prepare an EIR to analyze construction impacts and to adopt all feasible mitigation.

VII. The IS/MND Failed to Evaluate Ozone Impacts

The IS/MND failed to determine whether increases in ozone precursors from the Project would cause or contribute to additional violations of ambient air quality standards for ozone. Appendix A states that, "[a]lthough the project could cause a cumulatively considerable net increase in ozone precursor emissions, they are no [sic] expected to cause or substantially contribute to a violation of an ozone ambient air quality standard."[108] However, the IS/MND provides no analysis or discussion to support this single conclusory statement.

The Bay Area Air Basin, the air basin in which the Project would be located, is designated as a serious nonattainment area for the state 1-hour ozone standard and as nonattainment for the federal 8-hour ozone standard.[109] As Dr. Fox's comments explain, increases in ozone precursor emissions from the Project, coupled with emissions from other projects in the area, may aggravate existing exceedances of ozone standards or result in additional exceedances. This is a potentially significant impact of the Project that is undisclosed in the IS/MND.

Ground-level ozone is not emitted directly into the air but is created by chemical reactions between NOx and VOCs.[110] The NOx and VOCs react in the presence of sunlight, creating ozone.[111] Ozone at ground level is a harmful air pollutant because of its adverse effects on people and the environment.[112] The public health impacts resulting from Ozone include:

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[106] Id. at p. 26.
[107] Id. at p. 28.
[108] IS/MND, Appendix A, p. 13.
[109] Fox Comments at p. 16; IS/MND, Appendix A, pp. 4, 7.
[110] Id. at p. 16.
[111] Id. at p. 16; IS/MND, Appendix A, p. 4.
[112] IS/MND, Appendix A, p. 4.

- making it more difficult to breathe deeply and vigorously;
- causing shortness of breath and pain when taking a deep breath;
- causing coughing and sore or scratchy throat;
- inflaming and damaging the airways;
- aggravating lung diseases such as asthma, emphysema, and chronic bronchitis;
- increasing the frequency of asthma attacks;
- making the lungs more susceptible to infection;
- continuing to damage the lungs even after symptoms have disappeared; and
- causing chronic obstructive pulmonary disease (COPD).[113]

Ozone also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas, and can cause significant damage during the growing season.[114]

In the Project at hand, sources of VOCs and NOx include Project construction equipment, backup generators, traffic, the generation of electricity, and the diesel storage tanks.[115] Emissions of NOx and VOCs from these sources will increase ambient ozone concentrations, may aggravate existing exceedances of ozone standards and perhaps cause additional exceedances. These exceedances translate directly into adverse health impacts on the affected population and environment.

As the IS/MND shows, the Project's unmitigated construction emissions would exceed BAAQMD thresholds for NOx. After mitigation, average daily construction emissions are estimated to just below the BAAQMD threshold at 51 pounds per day. Furthermore, Project operational emissions from generator testing alone are just below the BAAQMD threshold of significance with the timing restrictions of MM AIR-2 incorporated. These emissions do not account for emissions from actual use of the backup generators in the case of a power outage, which as discussed in section V (A) above, is a highly foreseeable scenario. Moreover, when emissions from nearby Projects, including similar data center

[113] Fox Comments at p. 16.
[114] Id. at p. 16.
[115] Id. at pp. 16-17.

Projects are taken into account, the Project's VOC and NOx emissions could be cumulatively considerable. These increases in ozone precursors should have automatically triggered an analysis of their impact on ambient ozone concentrations and the air basin's attainment status.

The IS/MND's conclusion that Project emissions are not expected to cause or substantially contribute to a violation of an ozone ambient air quality standard is unsupported. As Dr. Fox comments demonstrate, substantial evidence supports a fair argument that the Project may result in a cumulatively considerable net increase in ozone precursors, and may aggravate existing exceedances of ozone standards and or cause additional exceedances, which is a significant impact. Accordingly, the City must prepare an EIR to disclose and analyze the Project's impacts on ambient ozone concentrations, and to incorporate all feasible mitigation.

VIII. NOx Emissions From the Emergency Diesel Generators Are Significant and Unmitigated

To determine the maximum air quality impacts from the Project's backup diesel generators, the IS/MND calculated daily emissions assuming operation of all generators at 100% engine load one day per month.[116] The IS/MND shows that daily NOx emissions from all generators operating simultaneously totaled 57 pounds per day, which exceeds the BAAQMD threshold of significance of 54 pounds per day. To mitigate this significant impact, the IS/MND imposes mitigation measure MM AIR-2, which limits generator operation for maintenance and testing "shall be limited so that the combined operation of all engines does not exceed 100 hours per day in total." This limit applies to generator operation for testing and maintenance purposes only; the IS/MND does not include any restriction on generator operation when serving the data center.

As discussed in Dr. Fox's comments, assuming that exceeding 100-hours combined operation will result in an exceedance of BAAQMD significance thresholds for NOx emissions, it would take just 50 minutes of simultaneous operation of the Project's 120 generators to exceed NOx thresholds. As discussed above, SVP experienced multiple power outages in the last year, many of which exceeded 50 minutes. Under these conditions, it may reasonably be expected the Project's generators would exceed 100-hours of combined operation.

[116] IS/MND at p. 34.

Because MM AIR-2 does not address generator operation during emergency conditions, but rather only operations for maintenance and testing purposes, the IS/MND's conclusion that generators NOx emissions would be less than significant with mitigation incorporated is not supported by substantial evidence. The IS/MND shows that the combined operation of the Project's 120 generators would exceed significance thresholds in a reasonably foreseeable disruption to the Project's power supply. Thus, NOx emissions from operation of the Project's backup generators remain significant and unmitigated.

IX. The IS/MND Fails to Require All Feasible Mitigation

A. All Feasible Mitigation Must Be Required for Construction-Related Fugitive PM10 and PM2.5 Emissions

As demonstrated in section VI(B) above, substantial evidence supports a fair argument that fugitive PM10 and PM2.5 emissions from Project construction activities may be significant. CEQA requires that the City prepare an EIR to analyze these emissions and to implement all feasible mitigation measures when a potentially significant impact is identified. Currently, the IS/MND requires that the Applicant implement BAAQMD's recommended construction mitigation measures. However, as Dr. Fox notes, there are additional feasible mitigation measures to reduce fugitive PM emissions. Mitigation measures that have been required in recent CEQA documents or recommended by the U.S. EPA:[117]

- The number of pieces of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practicable number is operating at any one time.

- Signs shall be posted in designated areas and job sites to remind drivers and operators of the speed limit.

- Low rolling resistance tires shall be used on long haul class 8 tractor-trailers.

[117] Fox Comments at pp. 28-29.

- When soil will be disturbed by heavy equipment or vehicles, wet soil before disturbing it and continuously wet while digging to keep dust levels down.

- Water all grading areas at least four times daily as water evaporates quickly in hot climates, requiring more frequent watering than two times per day.

- Use a watering method that does not raise dust.

- Use the calcium chloride methods or salt crust process to achieve better dust control than with water alone.

- Use fine atomized sprays or mist sprays with droplet diameters of 60 um, produced by swirl-type pressure nozzles or pneumatic atomizers on watering trucks.

- Thoroughly clean equipment, vehicles, and other items before they are moved off-site.

- Continuously wet the soil before and while digging or moving the earth. Areas where bulldozers, graders, or skip steers operate are examples of areas where continuously wetting the soil should be required.

Additionally, methods of ensuring compliance or monitoring mitigation measures should be required. For example, monitoring of wind speed to determine when winds exceed 20 mph should be incorporated. Similarly, measures to ensure vehicles to not exceed 15 mph should be incorporated.

B. All Feasible Mitigation Must Be Required for GHG Emissions

As detailed in section IV above, substantial evidence supports a fair argument that the Project's GHG emissions may be significant notwithstanding its alleged consistency with the City's CAP. CEQA thus requires that all feasible mitigation be incorporated to avoid or lessen impacts resulting from the Project's GHG emissions. Dr. Fox's comments demonstrate that additional feasible mitigation measures are available to reduce the Project's GHG emissions.

First, the Project could reduce its GHG impacts by installing solar panels to the maximum extent feasible, including over parking spaces and any roof area not being used for cooling towers or other equipment. The Applicant could acquire additional land in the vicinity to install any additional PV panels required to offset 100% of the demand.

Second, the Applicant could be required to enter into a long-term (e.g., 20-year minimum) purchase agreement for renewable energy in which the provider is contractually bound to retire the renewable energy credits associated with the renewable energy on CARB's behalf.

Third, other building envelope and facility operation measures are feasible and should also be required. These include:

- Replace the diesel-powered generators with backup power from on-site solar coupled with battery backup. The Project currently includes batteries, but the IS/MND is silent on their capacity or use.

- Require bus stops, express lanes, and bus stop shelters for existing/planned transit service that supports the Project.

- Use traffic calming measures, including all internal sidewalks a minimum 5 feet wide, all sidewalks with vertical curbs, roadways routed to avoid "skewed intersections."

- Use the following traffic-calming features at internal and adjacent intersections: marked crosswalks, count-down signal times, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts, or mini-circles.

- Participate in funding off-site traffic improvements to reduce idling by increasing traffic flow through synchronized traffic signals.

- Use the following traffic-calming features on internal and adjacent streets: planter strips with trees, chicanes/chokers (variations in road width to discourage high-speed travel).

- Provide preferential parking for park-and-ride to incentivize carpooling, vanpooling, commuter bus, and electric vehicles.

- Require "cool parking" by, for example, providing tree cover to reduce the heat-island effect.

- Provide preferential parking for EV /CNG vehicles.

- Use only drought-resistant native trees, trees with low emissions and high carbon sequestration potential.

- Orient building to maximize shade in the summer and maximize solar access to walls and windows in the winter.

- Provide shade and/or use light-colored/high-albedo materials and/or open-grid pavement for at least 30% of the site's nonroof impervious surfaces, including parking lots, walkways, plazas, etc.; or place a minimum of 50% of parking spaces underground or covered by structured parking, or use an open-grid pavement system for a minimum of 50% of the parking lot area.

- Implement CALGreen Tier 2 standards or better.

- Use a chiller system that uses less energy, such as the cactus chiller.[118]

[118] Id. at pp. 13-14.

X. The City Lacks the Authority to Approve Powerplant Projects

In addition to the numerous deficiencies with the IS/MND described above, the City cannot approve the Project because the California Energy Commission ("CEC") has exclusive jurisdiction to approve powerplants, such as that included as part of the Project.

Under the Warren Alquist Act, Public Resources Code section 25500, the CEC has exclusive jurisdiction to certify all sites and related facilities for thermal power plants that generate 50 megawatt (MW) or more within California. For purposes of the Act, "thermal powerplant," is defined as "*any* stationary . . . electrical generating facility using any source of thermal energy, with a generating capacity of 50 MW or more . . . ."[119] As seen in the case of other Santa Clara data center projects, diesel-fueled backup generators serving data center facilities are encompassed with the scope of the CEC's jurisdiction where the collective generating capacity exceeds 50 MW. Here, the combined generating capacity of the Project's 120 backup diesel generators is 75 MW.

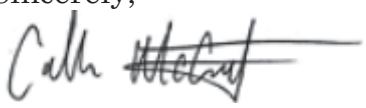
Under Public Resources Code section 25500, the siting authority of the CEC supersedes local approval of thermal powerplant facilities. The CEC may exempt thermal powerplants with a generating capacity of up to 100 megawatts if it finds that no substantial adverse impact on the environment or energy resources will result from the construction or operation of the proposed facility or from the modifications.[120] However, in the absence of a Small Power Plant Exemption ("SPPE"), construction of a powerplant project may not commence without first obtaining certification for any such site and related facility by the CEC.[121] Here, the Applicant has not obtained an SPPE, thus the Project remains subject to the siting jurisdiction of the CEC.

[119] PRC § 25120.
[120] PRC § 25541.
[121] PRC § 25517.

XI. CONCLUSION

For the foregoing reasons, we urge the City to withdraw the MND. The environmental impacts of the Project should be evaluated by the CEC in an EIR, or alternatively, pursuant to the agency's certified regulatory program.

Sincerely,



Collin S. McCarthy

CSM:ljl