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STATE OF CALIFORNIA
Energy Resources Conservation and
Development Commission

In the Matter of: SMALL POWER PLANT EXEMPTION APPLICATION OF THE MCLAREN BACKUP GENERATING FACILITY	Docket No. 17-SPPE-01 Intervenor Clean Coalition
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CLEAN COALITION COMMENTS ON INITIAL STUDY AND MITIGATED NEGATIVE
DECLARATION IN THE MCLAREN BACKUP GENERATING FACILITY APPLICATION
FOR SMALL POWER PLANT EXEMPTION

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CLEAN COALITION COMMENTS ON INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION IN THE MCLAREN BACKUP GENERATING FACILITY APPLICATION FOR SMALL POWER PLANT EXEMPTION

I. Introduction

The Small Power Plant Exemption (SPPE) Application for the McLaren Backup Generating Facility (MBGF) should be rejected, because the project is likely to have substantial adverse impacts on sensitive receptors and environmentally disadvantaged communities during any outage and does not adequately analyze feasible alternatives. The Initial Study is wholly inadequate because it completely fails to evaluate the real physical impacts of actual operations during an outage on the environmentally disadvantaged communities and sensitive receptors surrounding the plant.¹ The California Environmental Quality Act (CEQA) requires an analysis of whether the project will create “a substantial, or potentially substantial, adverse change in the environment,” and the planned operations of the backup diesel generators for its intended purpose during an entirely foreseeable emergency outage definitely qualifies as a substantial adverse change.

In fact, according to the data in the Initial Study, running all 48 generators at once would:

- Emit pollutants at a rate up to 200 times the CEQA thresholds;
- Emit diesel exhaust in an area that is rated in among 10% worst areas in terms of diesel exhaust pollution; and
- Emit diesel exhaust in an area that is rated among the 20% worst areas for environmental health generally.

The fact that BAAQMD standards don’t cover these emissions is irrelevant to the actual physical impacts to vulnerable communities and sensitive populations that would occur. Since these impacts may be substantial effects, the California Energy Commission (CEC) should deny the SPPE application.

II. CEQA and the Warren-Alquist Act require an analysis of the actual reasonably foreseeable physical impacts of the project.

The Commission must assess the actual physical impacts of the proposed power plant to determine whether the project will have substantial adverse impact on the environment or energy resources.² "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, an environmental impact report shall be prepared." (§ 21080, subd. (d); see also § 21151, subd. (a).) Cal. Pub. Res. Code § 21060.5 defines "environment" as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, objects

¹ California Energy Commission, Small Power Plant Exemption Application, 17-SPPE-01. TN#: 222041-13. Docketed: December 21, 2017.

² Cal. Pub. Res. Code § 25541.

of historic or aesthetic significance." (§ 21060.5.) A "significant effect" is a "substantial, or potentially substantial, adverse change in physical conditions which exist within the area as defined in § 21060.5." (§ 21151, subd. (b).)

California case law has expounded on this further by holding that an EIR must be prepared "whenever it can be fairly argued on the basis of substantial evidence that the project may have significant environmental impact,"³ even if there is substantial evidence to the contrary.⁴

The reliance in the Initial Study on the absence of standards for emergency or short-term emissions does not relieve the Commission of its duty to assess the impacts of those emissions when all 48 proposed generators are running. Although the CEQA checklist does allow for reliance on air quality standards "where available,"⁵ as the Initial Study points out, BAAQMD does not have standards that apply to the emergency operations of the plant, even though such emergency operation is foreseen, given that that is the purpose of the plant. Thus, the Initial Study identifies a key impact, but fails entirely to analyze the impacts of these emissions.

Furthermore, CEQA requires state agencies to not approve projects if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.⁶ Therefore, the Initial Study must assess the impacts of these peak emissions near soccer fields and in environmentally disadvantaged communities and evaluate whether less polluting alternatives may mitigate those impacts.

III. Air quality analysis of emergency operations is insufficient.

The Initial Study is inadequate because it does not study the impacts of emissions from the entire facility operating during an extended outage, which the SPPE applications acknowledged will "generate emissions that will be transported outside of the physical boundaries of the Project site, potentially impacting nearby sensitive receptors such as residential areas."⁷ The Initial Study suggests "[w]hen permitting emergency diesel engines, the BAAQMD typically limits only emissions resulting from non-emergency use, since emergency use of generators is not limited under BAAQMD regulations. In this case, engine emissions are based on nonemergency operations."⁸ Of course, this captures only part of the environmental impacts. In fact, the facility is specifically designed to have all 48 generators operate simultaneously, with potentially many more hours of emissions than simply one or two generators being tested at a time.

³ *No Oil, Inc. v. City of Los Angeles*, (1974) 13 Cal.3d 68, at 84.

⁴ *Arviv Enterprises, Inc. v. South Valley Area Planning Com.* (2002) 101 Cal.App.4th 1333, 1346

⁵ TN # 223911, McLaren Data Center Project Initial Study and Proposed Mitigated Negative Declaration, at 5.3-1 ("Initial Study").

⁶ Cal. Pub. Res. Code § 21002.

⁷ SPPE, Appendix E, page 6.

⁸ Initial Study, 5.3-5.

The emissions data provided for the operation of a single generator⁹ suggest that the full set of 48 generators running for a full day's outage would result in emissions at a rate many times the daily emissions threshold levels. In the event of substantial transmission grid outages from wildfire, earthquakes or other major transmission failures, the backup generators could easily run for days at a time. Under such conditions, the daily emissions would be up to 190 times the significance threshold. While such emission might be exceptional, they are clearly anticipated by the very installation of the generators and the impacts on sensitive receptors would be real. If the likelihood of actual operation of all 48 generators was truly negligible then their installation would not be warranted.

Table 1 - Estimated emissions from a 24-hour outage. (lbs./ day)

NOx	ROG	CO	PM10	PM2.5
10,208.2	169.4	377.5	36.3	36.3

IV. The Initial Study completely fails to engage in any meaningful environmental justice analysis.

These peak emissions would occur next to a soccer field where children play and in a community that is already among the most heavily polluted by diesel exhaust in the state.

California law defines “environmental justice” as the fair treatment of people of all races, cultures, and incomes with respect to development, adoption, implementation and enforcement of environmental laws, regulations and policies.¹⁰ As acknowledged in the Initial Study, the project site is in an area with a high minority population,¹¹ so Environmental Justice is of particular concern here.

To help guide our analysis on Environmental Justice, the Clean Coalition looked at the data provided on the CalEnviroScreen tool--widely regarded as the nation’s best indicator of environmental justice issues. The overall CalEnviroScreen 3.0 score incorporates both the pollution burden and the population characteristics, although the CalEnviroScreen also provides assessments of individual pollutants and other factors.¹² The Initial Study notes that the project site is located at 651, 725 and 825 Mathew Street in Santa Clara California.¹³ In particular, this

⁹ Initial Study, Table 5.3-6.

¹⁰ Cal. Gov. Code § 65040.12(e).

¹¹ Initial Study, Environmental Justice section, p. 5.20 - 2.

¹² California Office of Environmental and Health Hazard Assessment (OEHHA), CalEnviroScreen Training Videos, Module 6: Calculating the CalEnviroScreen score. Found at: <https://oehha.ca.gov/calenviroscreen/training-videos>

¹³ Initial Study, Project Description, 4.6 Existing Site Condition, page 4 - 4.

site is among the highest pollution burden communities in the state, ranking in the worst 12%. In the context of the current project, the fact that this community is already in the worst 10% diesel polluted communities in the state, even marginal additions from peak emissions represents a cumulatively considerable impact.

The CalEnviroScreen tool provided the following data for the potential project site, 835 Mathew Street, in Santa Clara, California:

<u>Category</u>	<u>Percentile</u>
CalEnviroScreen 3.0	75-80%
Pollution Burden	88%
Population Characteristics	58%
Diesel	90%
Traffic	72%
Low Birth Weight	80%
Poverty:	55%
Cleanups:	100%
Hazardous Waste:	99%

The proposed project area in Santa Clara represents one of the worst places in the Bay Area for air quality. With both categories of ozone and particulate matter all out of attainment, the fundamental indicators of air quality status all portray this area to be of particular concern to air pollution. This is compounded by the fact that the Environmental Justice analysis also showed this area to have a more than 50% minority residents and suffers from some of the highest rates of low birth weight in the state.

Ultimately, the SPPE Application acknowledges that air quality violations and exceedances of the State and Federal ozone and PM standards continue to persist with nonattainment for ozone, PM10, and PM2.5.¹⁴ In fact, the actual air quality report suggests that the emissions may be some 20% higher in subsequent analyses for some pollutants that reported in the Initial Study (e.g., the Initial Study reports daily NOx emissions of 217 lbs./day, while

¹⁴ SPPE Application, Environmental Analyses, page 4-8.

Appendix E appears to estimate emissions of 263 lbs./day).¹⁵ This is particularly troubling, because it appears Applicants have only applied to the BAAQMD for an Authority to Construct (ATC) for only 32 of the 48 generators and the life safety generator.¹⁶ Thus, the Applicants have not received BAAQMD approval for the entire size of the project. This is particularly concerning when the Applicant has proposed a near 50% increase in the potential emissions.

V. The Energy Commission should evaluate mitigating these impacts with some amount of solar and storage to reduce both the need and impact from diesel emissions.

Given these potential substantial adverse effects a source of generation that does not emit pollutants would be feasible. In framing the objectives of the project, the Applicants sought to provide “the most reliable and flexible backup generating system to support its McLaren Data Center (MDC) clients.”¹⁷ The Applicants failed to consider obvious and demonstrated alternatives to mitigate some impacts. In particular, Applicants rejected battery storage as an alternative, because of concerns around the duration of discharge without recharging. However, because the historic average outage duration in the region is less than 2 hours,¹⁸ even a short duration emission free battery solution would avoid the use of diesel generators during most outage circumstances. Additionally, it seems clear that Applicants never considered using a combination of solar+storage to both meet daytime needs and to recharge batteries to offset the need for diesel generation, either entirely or partially. Applicants state incorrectly that “once the stand-alone batteries are completely discharged, the only way they can be recharged without onsite generation is if the electrical system is capable of delivering electricity to the site.”¹⁹ The Alternatives selection here is deficient because it does not include any alternatives regarding solar+storage. Solar+storage is a proven source of backup power. As battery prices and balance of system costs continue to decrease, solar+storage needs to be affirmatively considered as source of backup generation. Today, the combination of solar+storage with an advanced inverter allows for multiple uses of the energy storage platform. The Applicant also did not consider providing a portion of their backup generation from solar+storage, rather than the entire supply of backup generation. This would help maintain an adequate level of reliability, yet also reduce emissions associated with both maintenance and emergency operation.

Also, by adopting “Industry Standard” technology as an objective, Applicants effectively limited their analysis to backup diesel generators with no room for alternatives. Diesel fuel has

¹⁵ Compare Initial Study, Table 3.5-6 with Application for Small Power Plant Exemption for McLaren Backup Generating Facility - Appendix E, Docket Number: 17-SPPE-01. TN#: 222041-11. Docketed: December 21, 2017.

¹⁶ SPPE Application, Environmental Analyses, p. 4-12.

¹⁷ SPPE Application, Section 5 Alternatives, Section 5.1 Evaluation Criteria, p. 5-1.

¹⁸ Five-year average outage duration of 71 minutes per year, 102 minutes average duration of sustained outages for this location. PG&E Annual Electric Distribution Reliability Report 2016, p. 120.

¹⁹ SPPE Application, Section 5 Alternatives, Section 5.1 Evaluation Criteria, p. 5-1.

been the traditional fuel of choice for commercial and industrial backup power applications dating back to the middle of the last century, but alternatives are available now.²⁰ By stating the objective to include the industry standard technology, widely regarded as backup diesel generators, the Applicant assumes the conclusion of the technology choice and does not make an adequate alternatives analysis.

VI. Conclusion

The SPPE Application should be denied, because the environmental analysis supporting it fails to address the serious environmental justice impacts of running the facility during an electrical outage. The fact that the environmental justice analysis fails to even assess the environmental setting using data from the CalEnviroScreen tool strongly indicates that that analysis is woefully lacking. The SPPE application also underestimates the impact of diesel emissions to the surrounding communities. Finally, the Alternatives Analysis is also flawed by not adequately considering more emission-free sources of generation to at least meet a portion of the electrical needs of the proposed data centers.

²⁰ Michael Kirchner, *Understanding backup power system fuel choices: While diesel remains popular as a fuel supply, engineers have several additional fuel options from which to choose.* Consulting-Specifying Engineer Magazine. December 26, 2012. Found at: <https://www.csemag.com/single-article/understanding-backup-power-system-fuel-choices.html>