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RESPONSE TO CEC STAFF DATA REQUEST SET 3 (104-129)

Great Oaks South Backup Generating Facility (20-SPPE-02)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION

SUBMITTED BY: Digital Realty

November 2021



INTRODUCTION

Attached are Digital Realty's responses to California Energy Commission (CEC) Staff Data Request Set No. 3 (104-129) for the Lafayette Backup Generation Facility (LBGF) Application for Small Power Plant Exemption (SPPE) (20-SPPE-02). Staff issued Data Request Set No. 3 on October 6, 2020.

The Data Responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as Staff presented them and are keyed to the Data Request numbers (104-129). Additional tables, figures, or documents submitted in response to a data request (e.g., supporting data, stand-alone documents such as plans, folding graphics, etc.) are found in Attachments at the end of the document and labeled with the Data Request Number for ease of reference.

For context the text of the Background and Data Request precede each Data Response.

GENERAL OBJECTIONS

Digital Realty objects to all data requests that require analysis beyond which is necessary to comply with the California Environmental Quality Act (CEQA) or which requires Digital Realty to provide data that is in the control of third parties and not reasonably available to Digital Realty. Notwithstanding this objection, Digital Realty has worked diligently to provide these responses swiftly to allow the CEC Staff to prepare the Draft Environmental Impact Report (DEIR).

PROJECT REVISIONS

After receipt of this set of data requests, Digital Realty, based on the BAAQMD policy changes for engines larger than 1000 BHP, revised the project to replace the proposed Tier 2 engines with compliant Tier 4 engines. The Revised Project Description was docketed on June 6, 2021 (TN 238299). Several the responses herein are based on the revised engine proposals, revised emissions, revised impacts, revised HRA results, etc., docketed on June 15, 2021 (TN 238218).

AIR QUALITY

FOLLOW-UP TO DATA REQUEST 22 BACKGROUND: CONSTRUCTION EMISSIONS

The original SPPE application contained two different versions of Table 4.3-6 (one each in TN 233041-1 and TN 233041-2), neither of which were supported by the CalEEMod report submitted at that time in SPPE application Appendix AQ4. The applicant recently filed a replacement Response 22 (in TN 234531; submitted: 8/28/2020) including electronic modeling files uploaded on 8/31/2020 to staff's ftp site. As before, the overall mitigated construction emissions in the CalEEMod results report do not match the construction emissions totals originally shown of the SPPE Application Table 4.3-6. At this time, the construction emissions estimates should be updated to reflect the activity of excavating for installing the generator fuel tanks below grade as described in Response 91 (in TN 234295).

DATA REQUEST

104. Please provide an updated analysis of demolition and construction emissions with a summary table to replace erroneous emissions rates previously summarized in the SPPE application Table 4.3-6.

RESPONSE TO DATA REQUEST 104

The reason for the difference in the two tables noted in the CEC request is as follows: (1) table 4.3-6 in TN233041-1 is based on a preliminary construction period of 21 months (462 workdays), while (2) the values in Table 4.3-6 in TN 233041-2 were based on a revised construction period of 24 months (544 work days). Both tables are consistent with the CalEEMod results dated 3/20/2020. The table below shows the Mitigated Construction CalEEMod output values, and the calculated values, i.e., tons/period and average lbs/day.

Units	POC	NO _x	со	SO ₂	Fugitive PM10	Exhaust PM10	Fugitive PM2.5	Exhaust PM2.5	CO₂e
Tons/period	3.69	3.03	2.89	0.0083	0.46	0.101	0.161	0.101	839
Avg lbs/day	13.6	11.1	10.6	0.031	1.67	0.371	0.592	0.371	NA
BAAQMD Threshold	54	54	NA	NA	NA	82	NA	54	NA
Lbs/day									
Exceeds Threshold	No	No	NA	NA	NA	No	NA	No	NA

In addition, it should be noted that the installation of the 17 underground fuel tanks will involve a maximum of 3,400 yd³ of cut and fill. The CalEEMod analysis included a total

cut and fill value of 38,000 yd³. This value incorporated a 20% markup to account for cut and fill contingencies such as the tank trenches, therefore there is no need to update the 3/20/20 analysis as referenced in Response to Data Request 91 (TN234295).

FOLLOW-UP TO DATA REQUEST 27

BACKGROUND: CONSTRUCTION EQUIPMENT EXHAUST FROM FUGITIVE DUST

The applicant recently filed a replacement Response 27 (TN 234531; 8/28). The table in Response 27 includes an apparent typo in the construction-phase PM10 annual-average impacts, which appear to be greater than PM10 24-hour average impacts. Staff needs additional detail to confirm whether or why the annual-average PM10 impact should exceed the 24-hour impact. Also, staff would like to see the PM10 and PM2.5 results separated to distinguish construction equipment exhaust from fugitive dust.

DATA REQUESTS

105. Please confirm whether the construction-phase PM10 annual-average impacts would exceed the 24-hour average impacts and revise the table for Response 27.

RESPONSE TO DATA REQUEST 105

The table which follows presents the updated construction impact assessment results.

Pollutant	Averaging Time	Maximum Construction Impacts (μg/m³)	Background (μg/m³)	Total Impact (µg/m³)	State Standards (µg/m³)	Federal Standards (µg/m³)
NO ₂	1-hour C	10.09	162	172.1	339	-
	1-hour N	9.76	101	110.8	-	188
	Annual	0.996	22.6	23.6	57	100
SO ₂	1-hour	0.03	38.0	38.1	655	196
	3-hour	0.03	38.0	38.0	-	1300
	24-hour	0.007	3.9	3.9	105	365
	Annual	0.003	0.6	0.6	-	80
со	1-hour	9.44	2,863	2,872.4	23,000	40,000
	8-hour	4.52	2,405	2,409.5	10,000	10,000
PM10	24-hour	4.22	122	126.2	50	150
	Annual ^a	0.96	23.1	24.1	20	-
PM2.5	24-hour	1.61	43	44.6	-	35
	Annual ^a	0.36	12.8	13.2	12	12.0

^a Maximum Annual Arithmetic Mean.

106. Please quantify separately the PM10 and PM2.5 emissions rate and impacts from onsite construction equipment exhaust to distinguish them from the quantities of PM10 and PM2.5 emissions and impacts caused by fugitive dust.

RESPONSE TO DATA REQUEST 106

The table presented in Response to Data Request 104 above delineates the breakout of PM10 and PM2.5 for both fugitive and exhaust emissions. The table presented in Response to Data Request 105 above presents the construction impact assessment and is broken out by combustion and fugitive dust impacts.

FOLLOW-UP TO DATA REQUEST 37 BACKGROUND: SENSITIVE RECEPTORS

The applicant did not fully respond to the data request to provide the information staff needs. The response indicated that "[t]he sensitive receptor list in Appendix AQ5 is presented below." But a list was not provided in the data response.

DATA REQUESTS

107. Please confirm that an update is not needed for Appendix AQ5 or provide the sensitive receptor list omitted in the Response to Data Request Set 1.

RESPONSE TO DATA REQUEST 107

The nearfield sensitive receptor list is presented below. In addition, the Comstock residences are based on receptor numbers 946, 947, 981 and 982 and are located approximately 52 meters from the northern project boundary. Table 4.3-10 has been updated to reflect the Comstock receptor locations.

Table 4.3-10: Sensitive Receptors Nearfield of the LBGF

Receptor Type	UTM Coordinates	Distance from Site, ft.	Elevation, AMSL ft.
Nearest Residence	593037.0, 4136913.0	171	39
Nearest Hospital	589321, 4136778	12,750	51
Nearest School	592005.25, 4136664.00	3,418	54
Nearest Daycare	594941, 4139336	10,200	58
Nearest College/Univ.	593425, 4138352	5,290	24
Source: Google Earth Image 09/2020			

Lafayette Data Center						
				Dista	ance from S	ite
Receptor ID	UTM Em	UTM Nm	Elev., ft.	meters	feet	miles
Site (approx middle point) *	593207.00	4136753.00	40	na	na	
School Admin Ofc	593759.00	4137426.00	63	870.4	2855.9	0.54
Arts/College	597074.00	4138045.00	51	4077.1	13377.0	2.53
Headstart	597362.00	4138016.00	56	4342.7	14248.5	2.70
School Dist Ofc	597196.00	4138592.00	49	4392.5	14411.8	2.73
Child Dev Center	594941.00	4139336.00	58	3111.1	10207.4	1.93
College	594779.00	4138458.00	24	2319.1	7609.0	1.44
College	593425.00	4138352.00	24	1613.8	5294.9	1.00
School	593299.00	4138575.00	22	1824.3	5985.6	1.13
UC Ext Bldg	591007.00	4137803.00	32	2437.7	7998.2	1.51
School	591952.00	4136337.00	45	1322.2	4338.0	0.82
School	590882.00	4136078.00	53	2421.0	7943.3	1.50
School	590565.00	4137350.00	66	2708.6	8887.0	1.68
School	591139.00	4135057.00	66	2674.5	8775.1	1.66
School	590665.00	4135023.00	70	3074.8	10088.6	1.91
School	592151.00	4135121.00	66	1943.9	6377.8	1.21
Residential SSW	592532.00	4135453.00	56	1464.8	4806.0	0.91
University	590468.00	4138777.00	21	3405.7	11174.1	2.12
College	590105.00	4138743.00	91	3685.4	12091.9	2.29

Hospital	589321.00	4136778.00	51	3886.1	12750.2	2.41
Residential N	592885.00	4138037.00	26	1323.8	4343.3	0.82
School	597758.00	4136575.00	63	4554.5	14943.2	2.83
Mobile Home Park	598021.00	4136795.00	60	4814.2	15795.3	2.99
Residential ESE	596033.00	4135506.00	51	3088.9	10134.7	1.92
School	596266.00	4135738.00	50	3223.0	10574.7	2.00
School	597335.00	4134610.00	61	4651.1	15260.3	2.89
School	595723.00	4133424.00	79	4172.8	13691.1	2.59

108. With only UTM coordinates, Staff cannot match the sensitive receptors in Appendix AQ5 with the receptors in Table 4.3-17, Table 4.3-21 and Table 4.3-23. Which sensitive receptor in Appendix AQ5 is the maximum exposed individual sensitive receptor (MEIS) (HARP #4531) in Table 4.3-17, Table 4.3-21 and Table 4.3-23?

RESPONSE TO DATA REQUEST 108

For clarification, the sensitive receptor list provided in Response to Data Request 107 above does not represent the only receptors which may become sensitive receptors such as the PMI, MEIR, MEIS, MEIR, etc., subsequent to modeling. The list above is simply a delineation of nearfield receptors that are classified as "sensitive". The impact modeling results in conjunction with the HRA analysis will determine the locations of the real sensitive receptors such as the PMI, MEIR, MEIS, and MEIW. Therefore, it is quite possible, and not unexpected, that the real sensitive receptors, may not be on the list above.

FOLLOW-UP TO DATA REQUEST 40 BACKGROUND: TABLES 4.3-21 AND 4.3-22

Staff is still confused about the information presented in Tables 4.3-21 and 4.3-22. There are two points of maximum impact (PMIs), one from Table 4.3-21 and another from 4.3-22.

DATA REQUESTS

109. Please explain why there are two PMIs (one from Table 4.3-21 and another from 4.3-22), and which one is the PMI applicable to the proposed project?

RESPONSE TO DATA REQUEST 109

Please see the revised Tables 4.3-14 which includes the Comstock residences. The PMI in Table 4.3-14 represents the point of maximum impact for the residential HRA and in Table 4.3-15 shown below in Response to Data Request 110, the same receptor location is the point of maximum impact for the worker HRA. They are the same location; they just represent different HRA results based on either residential or worker exposure calculation methods.

Table 4.3-14: LBGF Residential/Sensitive Health Risk Assessment Summary

Location	Receptor #	UTM	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	51	593354.91, 4136644.49	7.14E-06	0.00192	NA	NA
MEIR	946*	593037.00, 4136913.00	6.36E-06	0.00141	NA	NA
MEIS	4531	592005.25, 4136664.00	1.27E-07	0.000034	NA	NA

Notes: See acronym definitions above. *810 Comstock Resident Location

110. Please verify that the PMI in Table 4.3-22 is the maximum exposed individual

worker receptor (MEIW) and describe how it was derived.

RESPONSE TO DATA REQUEST 110

The PMI listed in Table 4.3-15 is the point of maximum impact and represents the highest risk of all the receptors used in the analysis. This receptor (#51) is located along the property boundary/fenceline on the east side of the project next near the existing rail line. This represents a non-habitable location that neither represents a worker or residential location.

Table 4.3-15: LBGF Worker Health Risk Assessment Summary

Location	Receptor #	UTM	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	51	593354.9, 4136644.49	2.49E-06	0.00192	NA	NA
MEIW	1608	593397, 4136613	2.41E-06	0.00186	NA	NA

FOLLOW-UP TO DATA REQUEST 42 BACKGROUND: TABLE 4.3-23

The cancer risk of PMI in Table 4.3-23 is 1.07E-05, which is higher than the threshold of 10 in one million.

DATA REQUEST

111. Please justify using a risk number which is higher than the threshold or provide mitigation to lower the potential health risk during construction so that the threshold is not exceeded.

RESPONSE TO DATA REQUEST 111

The revised construction HRA results are presented below.

Table 4.3-23 Revised Construction Risk Summary

Location	Receptor #	UTM	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	3	593353.97, 4136661.85	1.07E-05	0.00624	NA	NA
MEIR	981*	593057.00, 4136913.00	2.3E-06	0.00134	NA	NA
MEIW	1608	593397.00, 4136613.00	5.85E-07	0.00539	NA	NA
MEIS	4531	592005.25, 4136664.00	7.18E-09	0.000042	NA	NA

Notes: See acronym definitions above.

*810 Comstock Resident Location

Although the PMI value is above the "10 in a million" significance level, this receptor is on the eastern fenceline and is next to an existing rail line. This is a non-habitable, non-worker receptor such as a fence-line receptor, roadway/sidewalk receptor, body of water receptor, etc.

The revised operational HRA results <u>based upon the newly proposed Tier 4 engines</u> are presented in the at Tables 4.3-13, 4.3-14, and 4.3-15 of the Revised Air Quality and Public Health Analysis docketed on June 15, 2021 (TN 238218). None of the values in Tables 4.3-14 and 4.3-15 exceed the threshold value of 10 in a million.

FOLLOW-UP TO DATA RESPONSE 53

BACKGROUND: CO2E CARBON INTENSITY (CI) FACTOR

The responses to Data Request 53 states that the applicant recalculated indirect GHG emissions using the CO2e carbon intensity (CI) factor of 222 pounds per megawatt- hour (lbs/MWh), and references Attachment GHG DR-53. Staff was unable to find the attachment GHG DR-53. Staff will need an adequate and referenceable document to use the forecasted CI value of 222 lbs/MWh.

DATA REQUEST

112. Please provide the reference for the carbon intensity factor of 222 lbs/MWh and/or the attachment GHG DR-53.

RESPONSE TO DATA REQUEST 112

Attached GHG DR-53 is attached.

FOLLOW-UP TO DATA RESPONSE 55 BACKGROUND: FUEL CELLS

Documents filed in the Walsh Data Center (19-SPPE-02) and other SPPE dockets assert that fuel cells and other alternative technologies could be viable at these data center project sites. Docket number 19-SPPE-02 TN# 233099, from the National Fuel Cell Center, states that fuel cells and other alternative technologies are practical for these applications.

DATA REQUESTS

113. Please discuss the viability of PEM (Proton Exchange Membrane) fuel cells and/or alternative technologies at the project site to potentially achieve carbon neutrality for the project's direct GHG emissions. Address how the facility's site would need to be redesigned or configured to accommodate fuel cells and any hydrogen storage tanks. Alternatively, discuss using other nearby sites to accommodate a fuel cell alternative. Include in the response alternative methods of providing feedstock for the fuel cell to the site and the reliability of each method versus

refueling the onsite petroleum diesel storage tanks. For each fuel option, including diesel, including a full description of how the applicant weighs the risks of failure of fuel availability for each option.

RESPONSE TO DATA REQUEST 113

Digital Realty is very familiar with fuel cell technology as it has considered fuel cells at its current data centers. Fuel cells can provide both primary and off grid power. The fuel cells utilized by Bloom Energy and others are solid Oxide Fuel Cells (SOFC) that operate in high temperature of 750 Deg C, they need to stay hot to provide power. As a choice of backup, fuel cells need to run continuously in dual modes, as a primary source, or a standby mode when the grid is off (islanding mode). The fuel cells have additional ultracapacitors to cope with the 10-20 second load transfer time to match up with diesel generation technology.

The fuel cell has the following technical issues that negatively affect its ability to utilized as an emergency backup generation option.

- 1) It needs to run continuously to provide base load electricity to stay hot. This is why large data centers (Equinix, Apple, Yahoo) use Bloom Energy as primary source and maintain their existing emergency diesel generation fleet as backup.
- 2) Fuel cells require approximately 3 times more space than the emergency generators proposed for the LBGF and stacking is challenging and difficult and expensive to design to applicable codes.
- 3) Fuel cells rely on the natural gas as feed stock, so the issues with natural gas infrastructure and onsite storage described above also limit reliability.

There are fuel cell technologies (Proton Exchange Membrane) that utilize liquid hydrogen as a fuel. This type of fuel cell is mostly used for mobile sources and can start cold quicker similar to a combustion engine. Digital Realty understands that there are pilot programs to scale this type of fuel cell to larger sizes. However, the issues that affect the Project Objectives of this technology include:

- 1) The technology is not yet commercially available at sizes necessary for a large data center.
- 2) The footprint is projected to be about twice the size of the proposed emergency generators.
- 3) Onsite storage of 24 hours of liquid hydrogen will take significant additional space not available at the site.
- 4) The potential for on-site and offsite impacts of a large release of liquid hydrogen which would be stored at pressure (6000 PSI) at the project site would be likely unacceptable within Santa Clara.

114. Please discuss whether having a fuel cell as a primary supply of electricity, and using the local grid as backup, is or is not a feasible alternative to diesel backup generating units to meet the project's reliability objectives.

RESPONSE TO DATA REQUEST 114

Digital Realty has evaluated generating primary electricity with fuel cells on-site and relying on the electricity grid for emergency backup electricity for the LDC. One example of primary power is that Equinix has partnered with Bloom Energy over the last 5 years to deploy over 45 MW of fuel cell technology at various sites around the country using fuel cells as base load. There are other sites, such as Home Depot where Bloom Energy fuel cells provide primary electricity. However, we are unaware of any data center fuel cell application where fuel cells provide the full electricity needs for the data center without the bulk of the primary power being delivered by a utility.

There are two primary reasons that this solution cannot achieve the Digital Realty LDC Project Objectives. The first is that it is unlikely that Silicon Valley Power (SVP) would procure and reserve the amount of electricity necessary to power the LDC in perpetuity as a backup source on a moment's notice. The magnitude of electricity for such an event after full buildout of the LDDC would render such an option infeasible.

As currently designed, the LBGF will provide a N+1 protection scheme for the LDC. In other words, the primary electricity will be provided by the extremely reliable AVP electric system and if that system fails, the diesel-fired emergency generators would provide the electricity that the LDC requires. Utilizing fuel cells as the primary generation and relying on the grid as backup in the event or fuel cell failure would also provide a N+1 protection scheme. However, this alternative would provide lower reliability during an earthquake the design natural disaster for California projects. During an earthquake, it is possible that the natural gas system cannot deliver the fuel to the fuel cells at the same time that the SVP electrical system is experiencing an outage. In that case, in order to provide the same reliability as the proposed design, emergency backup generators would still be necessary (N+2) to provide electricity to the LDC during the design natural disaster case. Therefore, in order to have the same reliability, the same number and size of emergency backup generators would be required.

Therefore use of fuel cells as primary generation would not replace the proposed emergency backup generators in order to meet the Project Objectives.

FOLLOW-UP TO DATA RESPONSE 57

BACKGROUND: RENEWABLE DIESEL INVESTIGATION

In response to Data Request 57, the applicant states that a preliminary investigation was used to answer the data request 57; however, the applicant could not verify any emission reductions in order to properly respond to Data Request 57.

DATA REQUEST

115. Please provide additional details along with any assumptions that were used in the applicant's preliminary investigation that led to the conclusion that renewable diesel fuel is not practical for data center applications.

RESPONSE TO DATA REQUEST 115

Please see Response to Data Request 117 below.

FOLLOW-UP TO DATA RESPONSE 61 BACKGROUND: RENEWABLE DIESEL FUEL

The response to Data Request 61 states "Digital Realty has been unable to find verifiable data relating to the use of renewable diesel fuel as a replacement for the CARB diesel fuel". The response states that renewable diesel may increase emissions of NOx and reduce PM10 emissions. Staff believes that the applicant may be confusing biodiesel with renewable diesel.

DATA REQUESTS

116. Please provide the "available unverified information" that provides evidence that renewable diesel may increase emissions of NOx and reduce PM10 emissions.

RESPONSE TO DATA REQUEST 116

Please see Response to Data Request 117 below.

117. Please review and comment on the 2011 CARB technical report titled "CARB Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California -- Biodiesel Characterization and NOx Mitigation Study" and address the emissions expected to occur if renewable diesel or biodiesel were to be used at this facility rather than conventional petroleum diesel.

RESPONSE TO DATA REQUEST 117

The Applicant has reviewed the 2011 CARB report titled *CARB Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California "Biodiesel Characterization and NOx Mitigation Study"*, as well as other numerous technical articles on biodiesel and renewable diesel.

Our comments are as follows:

- Biodiesel was introduced into California in 2000 and Renewable Diesel in 2012. Biodiesel is predominantly made from soybean and recycled oils into a unique diesel fuel. Renewable Diesel is predominantly made from animal waste oils and the finished fuel is nearly identical to petroleum-based diesel.
- 2. For purposes of permitting in the BAAQMD, NOx emissions are seen as the most critical pollutant from the standpoint of impacts on the ozone compliance status of the air district, while PM10 emissions are most important with respect to health risk issues, i.e., DPM. The proposed Tier 4 engines with add-on controls result in low NOx and PM10 emissions which are equal to or less than the EPA/CARB Tier 4 standards.
- 3. The CARB report presents voluminous data on testing of engines within the HP range of 37.8 to 450, for a variety of fuels including California ULSD, a range of vegetable based and animal-based biofuels, and several renewable fuels.
- 4. These tests were conducted using four (4) basic procedures, i.e., Urban Dynamometer Driving Schedule (UDDS), the Federal Test Procedure (8 mode test cycle for variable speed engines, per 40 CFR 89 Subpart E, Appendix B, Table 1), and 40 and 50 mph tests to simulate on-highway emissions.
- 5. The proposed engines for the LDC are rated at approximately 4309 HP (for the proposed 45 large engines), and 1482 HP (for the one proposed small engine). Emissions results derived from tests on engines that are many times smaller than the LDC engines are in no way indicative of emissions from the proposed engines.
- 6. The certifications granted to the proposed LDC engines are based on the EPA (5 mode) test cycle as presented in 40 CFR 89, Subpart E, Appendix B, Table 2, which applies to constant speed engines. Emissions data derived from the procedures noted in the report on variable speed engines would not be applicable to engines that are certified via a 5-mode test cycle for constant speed designed engines.

- 7. The CARB Report also includes data on non-road engines in Section 8.0 (p. 115-). This data was gathered from tests on two (2) engines rated as follows: (1) 1998 Kubota TRU, pre-Tier 1, 37.8 BHP, and (2) 2009 John Deere, Tier 3, 115 BHP unit. The Applicant contends that data from either or both of these engines is in no way applicable to the proposed Tier 4 engines rated at 1482 and 4309 BHP respectively, which are equipped with DPF, and 3-way catalyst systems for the control of NOx, CO, and VOC. Data presented in the CARB report (Section 8.0) states "the NOx emissions show general increases in NOx emissions with increasing biodiesel blend level for both off-road engines as compared to CARB ULSD. The NOx increases were statistically significant for the B50 and B100 soybased blends for both engines. The soy-based B20 blends also showed increases that were statistically significant for the John Deere engine and statistically significant at the lesser 90% confidence level for the TRU engine".
- 8. Additionally we note the following in a study performed by independent researchers, i.e., "Effect of Biodiesel on Engine Performance and Emissions", J. Xue et al., Elsevier, 2010:
 - a. As a renewable, sustainable and alternative fuel for compression ignition engines, biodiesel instead of diesel has been increasingly fueled to study its effects on engine performances and emissions in the recent 10 years. But these studies have been rarely reviewed to favor understanding and popularization for biodiesel so far. In this work, reports about biodiesel engine performances and emissions, published by highly rated journals in scientific indexes, were cited preferentially since 2000 year. From these reports, the effect of biodiesel on engine power, economy, durability and emissions including regulated and non-regulated emissions, and the corresponding effect factors are surveyed and analyzed in detail. The use of biodiesel leads to the substantial reduction in PM, HC and CO emissions accompanying with the imperceptible power loss, the increase in fuel consumption and the increase in NOx emission on conventional diesel engines with no or fewer modification. And it favors to reduce carbon deposit and wear of the key engine parts. Therefore, the blends of biodiesel with small content in place of petroleum diesel can help in controlling air pollution and easing the pressure on scarce resources without significantly sacrificing engine power and economy. However, many further researches about optimization and modification on engine, low temperature performances of engine, new instrumentation and methodology for measurements, etc., should be performed when petroleum diesel is substituted completely by biodiesel.
 - b. The study presents the following table which summarizes the literature review on biodiesel fuel use in lieu of regular diesel fuel:

Statistics of Effects of Pure Biodiesel on Engine Performance and Emissions

Parameter	Number of References	References Showing Increases		References Sh	owing Similar	References Showing Decreases	
		Number	%	Number	%	Number	%
Power Performance	27	2	7.4	6	22.2	19	70.4
Economy Performance	62	54	87.1	2	3.2	6	9.7
PM Emissions	73	7	9.6	2	2.7	64	87.7
NOX Emissions	69	45	65.2	4	5.8	20	29.0
CO Emissions	66	7	10.6	2	3.0	57	84.4
HC Emissions	57	3	5.3	3	5.3	51	89.5
CO2 Emissions	13	6	46.2	2	15.4	5	38.5
Aromatic Compounds	13	-	-	2	15.4	11	84.6
Carbonyl Compounds	10	8	80.0	-	-	2	20.0

- 9. Furthermore, we note that CARB never arrives at or presents a useable set of emissions factors for the various fuels. Appendix G of the report details emissions results, but these values are based on the 8-mode cycle tests, dynamometer tests, and 40-50 mph highway simulation tests, not the 5-mode test applicable to the LDC proposed engines.
- 10. The statement in Response 61 to which the CEC refers was made in the context of using the term renewable fuels to include biofuels, biodiesel, and renewable fuels. In that context, the CARB report shows that some blends of these fuels increase emissions and some result in emissions decreases, but none of the data is applicable to the proposed LDC engines based upon the preceding statements.
- 11. The Applicant understands that demand and supply are growing in California for renewable type diesel fuels, but without emissions and performance data directly related to the types and sizes of engines proposed, with the add-on control systems as proposed, the Applicant cannot accept the economic and performance risks of using such fuels.
- 12. And lastly, unless the engine manufacturer is willing to present emissions guarantees for the proposed engines for any biofuel or renewable fuel similar to that obtained via the EPA certification for ULSD, then the project could not obtain financing. To date, the Applicant is not aware of any manufacturer of engines in the size range as those proposed for LDC that has supplied such emissions guarantees for any biodiesel or renewable fuel. As a point of clarification here, the Applicant understands that many engine manufacturers have indicated that biodiesel or renewable diesel may be used in specific engines, but that is not the same as an emissions guarantee, etc.

BACKGROUND: NO2 AMBIENT AIR QUALITY IMPACTS

The application models NO2 ambient air quality impacts for compliance with CAAQS and NAAQS using NO2 background conditions that should be updated. As in the May 2020 SPPE Application (p.66): "NO2 background data, also from the 158 East Jackson Street monitoring site, were calculated on a contiguous seasonal basis by hour for the last three years of monitoring data (December 2014 to November 2017)," Newer background data would be more representative of recent air quality trends.

DATA REQUEST

118. Please reevaluate NO2 compliance with CAAQS and NAAQS using the most recent NO2 background conditions available and update Table 4.3-16 accordingly.

RESPONSE TO DATA REQUEST 118

Please see the Revised Air Quality and Public Health Analysis docketed on June 15, 2021 (TN 238218) for the revised air quality data, revised background data, and revised impact analysis for NO_x. The background data now includes the 2019 data.

BACKGROUND: SENSITIVE RECEPTORS

During the September 4, 2020, Committee Conference and in public comments filed on September 12, 2020 (TN#234648), Rosalie Montalbano, Trustee of the Rosalie Montalbano Trust, stated a concern regarding the residences at 810 Comstock Street about 300 feet away from the project. It is said: "[The project] would be built near my property at 810 Comstock which consists of four detached single family residences that have been present at this location for 70+ yrs. They are grandfathered into the City of Santa Clara's plan for this area which is an industrial area. They are however legal, in existence, and house 4 families."

DATA REQUESTS

119. Please redo the Air Quality Analysis for criteria pollutant by including this receptor for both construction and operation activities.

RESPONSE TO DATA REQUEST 119

The Revised Air Quality and Public Health Analysis docketed on June 15, 2021 (TN 238218) contains receptors which cover the property at 810 Comstock. The high resolution 20-meter receptor grid covers this address and is represented by receptors 946, 947, 981 and 982. These receptors were also used in the previously submitted criteria pollutant and HRA analyses for construction. The risk tables presented above utilized these receptors in the analyses and if noted, this location represented the maximum residential impact.

120. Please redo the Health Risk Assessment for toxic air contaminants by including this receptor for both construction and operation activities.

RESPONSE TO DATA REQUEST 120

Please see Response to Data Request 119 above. These receptors were included in the previous construction impact assessments for criteria pollutants and the HRA and were also used in the revised Tier 4 operational analyses for both the criteria pollutants toxics.

BACKGROUND: PROJECT OWNERSHIP

During the August 12, 2020 Business Meeting at which the Walsh SPPE was approved, there was some discussion about whether or not the Lafayette Data Center and the Walsh Data Center have common ownership interests and should be treated as one project. BAAQMD Regulation 1-215 defines a facility as any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites.

DATA REQUESTS

121. Please provide information supporting the contention that Walsh and Lafayette are separate projects according to the BAAQMD Rules and Regulations during the permitting process.

RESPONSE TO DATA REQUEST 121

Please see Attachment AQ DR-121. The ultimate decision on how the BAAQMD will issue Authority To Construct Permits has no bearing on whether or not the Commission should treat the Walsh and Lafayette Projects, as determined by the filings and the Commission ruling contained in AQ DR-121. However, the information contained in Attachment AQ DR-121 clearly provides the factual basis for the ultimate finding that the facilities are two separate sources.

122. Please explain the relationship between the ownership interests of the Lafayette Data Center and the Walsh Data Center. If there is a common parent company for both, explain how the interests of each subsidiary company, in ownership percentage, relate to the parent company and how they are or are not treated as independent owners.

RESPONSE TO DATA REQUEST 122

See Response to Data Request 121 above and Attachment AQ DR-121.

TRANSPORTATION

BACKGROUND: CITY OF SANTA CLARA VMT POLICY AND PROJECT VMT ANALYSIS

CEC staff has previously used the Office of Planning and Research guidance to identify potential vehicle miles travelled (VMT) impacts for projects located within the City of Santa Clara. However, on June 23, 2020, in accordance with Senate Bill 743, the City of Santa Clara adopted a VMT Policy (Resolution No. 20-8861). For the City of Santa Clara to be able to rely on the CEC's CEQA document as a responsible agency, a VMT analysis is required for the project. Project VMT must be evaluated using the Santa Clara County VMT Evaluation Tool and must include consideration of the city's VMT thresholds of significance. The VMT evaluation tool can be accessed on the Santa Clara Valley Transportation Authority website and the city's VMT Policy resolution is attached to TN 235077.

DATA REQUEST

123. Please prepare and submit a VMT analysis for the Lafayette project in accordance with City of Santa Clara's VMT Policy.

RESPONSE TO DATA REQUEST 123

The CEQA Guidelines Section 15064.3, Subdivision (b)(1) states that land use projects with vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. For industrial projects such as the proposed data center, the City's VMT policy states that a project would have a significant impact if the VMT per employee is greater than the existing Countywide VMT per employee. The VTA's VMT Evaluation Tool was used to determine the project's VMT in comparison to the Countywide average. The VMT Evaluation Tool determined that the project's VMT per employee would be 15.89, which is below the Countywide average of 16.64 (refer to Attachment TRANS DR-123). The project does not exceed applicable thresholds of significance in the City's VMT policy. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Additionally, the City's Climate Action Plan requires the project to achieve a25 percent VMT reduction, 10 percent coming from a transportation demand management program. As a result, the project's VMT would be even lower than shown in the VMT Evaluation Tool.

BACKGROUND: FAA DETERMINATIONS OF NO HAZARD AND SITE ELEVATION DISCREPANCY

Staff reviewed the Federal Aviation Administration (FAA) Determinations of No Hazard included in Appendix E of the small power plant exemption (SPPE) application. The site elevation presented in the determinations is listed as 38 feet above mean sea level (AMSL) for all seven structures, Point A through Point G. The site elevation in the SPPE application and in the applicant's recent data responses is listed as 40 feet AMSL, a difference of two feet. The seven building points are located very close to where the airport runway ends, and a two-foot difference could result in changes to the FAA determinations. All seven forms must be re-filed with the FAA using a site elevation of 40 feet AMSL and re-submitted to the CEC.

DATA REQUEST

124. Please resubmit FAA Form 7460-1 for the project's seven structures using the 40-foot AMSL site elevation presented in the SPPE application. Please file to the docket copies of the re-filed information to the FAA and the resulting determinations when available.

RESPONSE TO DATA REQUEST 124

The revised FAA Forms 7460-1 were submitted to the FAA for approval and the FAA issued No Hazard Determinations for the new filings, which were docketed on June 18, 2021 (TN 238277).

BACKGROUND: DEMOLITION AND CONSTRUCTION TRIP GENERATION

The Project Description section of the SPPE application states there would be demolition and construction activities, but no information is provided on the daily roundtrips generated by workers commuting to the project site and delivery and truck haul trips for demolition and construction activities. The SPPE application also states during site demolition activities and construction of the Lafayette Data Center (LDC) "roughly 4,000 cubic yards of fill would be removed from the site, to be replaced by 34,000 cubic yards of fill to be imported to the site" (page 17). However, no information is provided on the number of roundtrips generated from the removal and delivery of soil and/or fill.

On page 112 of the SPPE application the applicant stated, using the Institute of Transportation Engineers (ITE) rate, the project would produce an estimated 540 daily vehicle trips but that the ITE rate is a conservative estimate.

DATA REQUESTS

125. Please provide the average number of daily roundtrips, including both worker and delivery and truck haul trips, for the demolition and construction period of the project (LBGF and LDC).

RESPONSE TO DATA REQUEST 125

Digital Realty estimates delivery and truck haul trips would average about 5 trips per day. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual, Tenth Edition's trip generation rate for general light industrial land uses (land use code 110) is 3.05 daily one-way trips per employee. Applying that rate to the estimated 90 daily construction workers yields 274.5 daily one-way trips, or 137.25 daily round trips.

126. Please provide an estimate of the actual the average number of daily roundtrips, including both worker and delivery and truck haul trips, for the operational period of the project (LBGF and LDC).

RESPONSE TO DATA REQUEST 126

As described in the SPPE Application, using the standard trip generation rate of 0.99 trips per 1,000 square feet for data centers published by the Institute of Transportation Engineers (ITE, Land Use Code 160), the LDC could generate up to 570 daily vehicle trips. The ITE rate is based on survey data and includes all trip types (i.e., worker, delivery, and truck haul trips). As stated on page 112 of the SPPE Application, this estimate of the project's trip generation is conservative because it does not account for the elimination of existing vehicle trips associated with the project site.

The same methodology used to estimate the trip generation of the project can be used to estimate the trip generation of the existing uses on the site. The site is currently developed with two two-story office buildings totaling approximately 326,000 square feet. Applying the ITE trip rate of 9.74 trips per 1,000 square feet for general office land uses (ITE, Land Use Code 710) to the existing development on the site yields a daily trip generation of 3,175 trips.

Subtracting the existing trips associated with the site from the estimated trips resulting from the proposed LDC yields a net project trip generation of -2,605	
	Subtracting the existing trips associated with the site from the estimated trips resulting from the proposed LDC yields a net project trip generation of -2,605

UTILITIES AND SERVICE SYSTEMS

BACKGROUND

In the responses to Data Request Set 2, the applicant stated that it filed an application with the City of Santa Clara to get recycled water for industrial and landscaping uses. The applicant did not provide any information about the likelihood that the city will approve its request. Staff would like to know if the applicant contacted the city regarding availability and the likelihood that the city would approve the request for recycled water and the time frame for such approval to be granted.

DATA REQUESTS

127. Please provide any information the applicant might have received from the City of Santa Clara regarding availability of recycled water for the project and the likelihood that the city would grant approval to the project to get recycled water.

RESPONSE TO DATA REQUEST 127

Recycled water will be limited to irrigation water. The amount of water that will be requested will be similar to the amount of water that was previously used by the site. Therefore, we anticipate that the Santa Clara Water Department will approve Digital Realty's request for recycled water.

128. Please provide any information the applicant might have regarding the time frame for the city to process its application.

RESPONSE TO DATA REQUEST 128

Digital Realty's Design Team asked the Santa Clara Water Department for a status on our approval. The Water Department (Ryan Harrison) indicated:

"We have not received the authorization yet from SBWR. I have sent another request to them to review the applications submitted in September. Once we receive an update we will send it to you."

Digital Realty is reengaging with the City of Santa Clara and will provide an update response to the CEC once received from the City of Santa Clara.

BACKGROUND

The applicant indicated in the application to the city that the project's demand would be approximately 106 acre feet per year (AFY) (100 AFY for industrial use + 6 AFY for irrigation). That is an increase of more than 50 percent over what the applicant had stated in the SPPE application. Staff would like an explanation for the substantial increase in the project's demand.

DATA REQUEST

129. Please explain why the amount of recycled water requested from the city is larger than that stated in the SPPE application by more than 50 percent.

RESPONSE TO DATA REQUEST 129

In September 2020 Digital Realty explained to the Santa Clara Water Department that the water quality of the recycled water causes more water to be needed for our heat rejection equipment compared to using City of Santa Clara domestic water. The City does not test for silica, which has a disproportional impact on the water volume required for portion of the water that will be used for HVAC cooling water. Digital Realty Design Team used an educated guess on the silica level when we estimated the volume of recycled water required. As of June 2021, we have revised our application to reduce our requested recycled water volume and will limit our recycled water to just irrigation water.

ATTACHMENT GHG DR-53

Debby Fernandez Brianna Bohonok FW: NEW Carbon intensity number Monday, February 11, 2019 1:40:56 PM

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Talk a look...

From: Alexander Abbe Sent: Wednesday, February 06, 2019 2:50 PM To: Debby Fernandez Subject: Fwd: NEW Carbon intensity number

Please forward to the consultant.

Sent from my iPhone

Begin forwarded message:

From: Kathleen Hughes < khughes@SantaClaraCA.gov> Date: February 6, 2019 at 2:46:10 PM PST To: Alexander Abbe aabbe@SantaClaraCA.gov> Subject: RE: NEW Carbon intensity number

Sorry to take so long. I still do not have the 2018 number finalized (it will take a couple of weeks until all the data is verified). Use the 2019 number for now. These are the forecasted numbers through 2030 but do not account for market sales which will make the number lower in some years. These are all in LBs.

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
341	348	271	230	222	278	277	279	276	273	270	219

ATTACHMENT AIR DR-57

Scott A. Galati DAYZEN LLC 1720 Park Place Drive Carmichael, CA 95608 (916) 441-6574

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

Application For Small Power Plant Exemption for the WALSH BACKUP GENERATING FACILITY

DOCKET NO: 19-SPPE-2

651 WALSH PARTNERS. LLC'S **OPPOSITION TO INTERVENOR ROBERT SARVEY'S PETITION FOR** RECONSIDERATION

INTRODUCTION

651 Walsh Partners, LLC in accordance with the Committee Notice of Hearing, dated September 17, 2020¹, for Intervenor Robert Sarvey's (Petitioner) Petition For Reconsideration (Petition), hereby files its Opposition to the Petition in support of its Application for a Small Power Plant Exemption (SPPE) for the Walsh Backup Generating Facility (WDC)² located at 651 Walsh Avenue, Santa Clara, California. For the reasons articulated herein, the California Energy Commission (Commission) should summarily reject the Petition because it is not allowed by statute or regulation for a SPPE Decision. The Commission should also reject the Petition because it fails to raise any new factual or legal issues or errors that are relevant or contrary to the analysis and rationale of the Commission Final Decision on the WDC (Final Decision).

¹ TN 234815.

² The Walsh Backup Generating Facility is the backup generating facility for the Walsh Data Center. For purposes of this Opposition, the term "WDC" includes both the Walsh Data Center and the Walsh Backup Generating Facility.

REBUTTAL OF PETITIONER'S CONTENTIONS

I. Petitioner has no right to file a Petition for Reconsideration under Section 1720 of the Commission Regulations³

Section 1720 governs the filing of a Petition for Reconsideration *only* for Commission Orders or Decisions for Notice of Intent (NOI) and Application for Certification (AFC) proceedings. Section 1720 was promulgated pursuant to Public Resources Code Section 25530, which provides that the Commission may order the reconsideration of a Commission decision or order on its own motion or on petition of any party. The Commission's exercise of the permissive language of Section 25530 authorized it to adopt Section 1720 and apply it only to decisions and orders in NOI and AFC proceedings. It is clear that the Commission intended Section 1720 to apply only to NOI and AFC proceedings because Section 1720 falls within Article 1 of the CEC Regulations, entitled "General Provisions Applicable to Notices of Intent and Applications for Certification." Section 1701(a) specifically states that Article 1 "applies to all notice of intent proceedings and all application for certification proceedings." The regulations governing Small Power Plant Exemptions are located within a separate section of the CEC Regulations, Article 5, entitled "Small Power Plant Exemptions." Section 1701(e) states that "Article 5 ... shall apply to all applications for a SPPE." Thus, only Article 5 controls SPPE proceedings, not Article 1. Notably, Article 5 does not include any provision for filing a Petition for Reconsideration for a decision on a SPPE application.

II. Petitioner has failed to raise any new evidence or errors of facts or laws that undermine any substantive element of the Final Decision.

Even if the Commission were to consider the Petition -- notwithstanding that Section 1720 applies only to AFC and NOI proceedings – the Petition should be denied for failing to satisfy the very elements set forth in Section 1720.

Section 1720 provides:

(a) Within 30 days after a decision or order is final, the commission may on its own motion order, or any party may petition for, reconsideration

³ The term CEC Regulations refers to the Power Plant Site Certification regulations found in Title 20, Division 2, Chapter 5 of the California Code of Regulations.

thereof. A petition for reconsideration must specifically set forth either:

1) new evidence that despite the diligence of the moving party could not have been produced during evidentiary hearings on the case; or 2) an error in fact or change or error of law. The petition must fully explain why the matters set forth could not have been considered during the evidentiary hearings, and their effects upon a substantive element of the decision. In addition to being served on all parties as required by section 1211, the petition for reconsideration shall be filed with the chief counsel of the commission. 20 Cal. Code Regs. § 1720(a) (emphasis added).

Thus, Petitioner has the burden to prove two substantive elements in the Petition. The first element can be satisfied by one of two methods: 1) producing new evidence that could not have been produced during evidentiary hearings; or 2) producing proof of an error in fact or change or error of law. However, proof of the first element alone does not satisfy Section 1720's requirements for granting the Petition. Petitioner must also satisfy the second element of causation. Petitioner has the burden of proving that the new evidence or the error in fact or change or error of law *has an effect upon a substantive element of the decision.* As explained below, the Petitioner's contentions fail to satisfy either the first or second element.

III. The Generating Capacity of the WDC does not exceed 100 MW

A. The Walsh Data Center (WDC) and the Lafayette Data Center (LDC)⁴ are two separate Projects.

The Petitioner contends that the WDC and LDC are a single project and therefore the electrical demand of both data centers should be combined. As explained at the August 12, 2020 Business Meeting at pages 124 and 125 of the official transcript and reiterated herein, the projects are separate – they are owned and proposed by distinct entities, on two different sites, and are independent with no shared infrastructure. Therefore their respective electrical demands should not be combined for jurisdictional purposes.

⁴ The Lafayette Backup Generating Facility is the backup generating facility for the Lafayette Data Center. For purposes of this Opposition, the term "LDC" includes both the Lafayette Data Center and the Lafayette Backup Generating Facility.

1. The two projects are owned by two different owners.

The Petitioner wrongly contends that Applicant's counsel deliberately misled the Commission by claiming at the Commission Business Meeting at which the Commission adopted the Committee Proposed Decision for the WDC that the applicants of the WDC and the LDC are two different entities. In fact, the WDC and LDC applicants are different.

The WDC is owned and proposed by 651 Walsh Partners, LLC (Walsh Partners), which is a joint venture between two unrelated entities – Pelio 651 Walsh, LLC (Pelio) and Digital Walsh Holding, LLC (Digital Walsh). Pelio owns a 87.90% interest in Walsh Partners. Digital Walsh, whose member is Digital Realty Trust, L.P., serves as managing member of, but owns only a 12.10% interest in, Walsh Partner. Digital Walsh's authority as managing member is expressly limited in the partnership agreement with Pelio to mostly administrative matters, and all major decisions regarding the business or development (including development plans, budgets, and identity of major contractors) of the WDC are determined by approval of Walsh Partners' members. Further, the existing building on the WDC site has been and will continue to be managed by Pelio until October 31, 2020 or demolition of the existing structure. Please see the Declaration of Les Pelio, attached hereto as Exhibit 1.

In contrast, the LDC is wholly owned by Digital Lafayette, LLC. While Digital Lafayette, LLC's member is Digital Realty Trust, L.P., it is an entirely different entity and managed separately from Walsh Partners. Please see the Declaration of Justin Landfair, attached hereto as Exhibit 2.⁵

The Petitioner points to Digital Realty Trust, Inc.'s 2017 Federal Form 10-K to argue that Digital Lafayette, LLC. and 651 Walsh Partners, LLC are owned and controlled by Digital Realty Trust, Inc. However, that is not the case. Petitioner incorrectly assumes that the term "subsidiary" on the Form 10-K denotes sole ownership and control. It does not, and the reference was included merely because a subsidiary of Digital Realty Trust, Inc. serves as the managing member of Walsh Partners, LLC.

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⁵ Additionally, see Affidavit of Rafal Rak filed with the SPPE application as Digital Lafayette LLC, TN 233049.

2. The LDC and WDC are on two different sites.

The WDC is located at 651 Walsh Avenue on parcel APN 224-04-059. The LDC would be located at 2825 and 2845 Lafayette Street on parcel APN 224-04-093 and a portion of 2805 Lafayette Street, APN 224-04-094, where a substation would be constructed as part of the LDC.

Petitioner relies on a site location map included in WDC's SPPE Application⁶ and a site location map included in the SPPE Application for the LDC. The site location map included in the LDC SPPE Application identifies the entirety of both parcels that are involved in the LDC. As explained in the LDC SPPE Application at page 15:

There are currently two legal parcels within the project site, the northern 13.04-acre parcel located at 2825 and 2845 Lafayette Street and the southern 9.72-acre parcel located at 2805 Lafayette Street. A lot line adjustment is proposed for this project to create an expanded 15.45-acre parcel at 2825 Lafayette Street and a smaller 7.31-acre parcel at 2805 Lafayette Street.

Therefore, the existing data center at 2805 Lafayette Street will be between the WDC and LDC once the lot line adjustment is completed and the LDC is constructed. No lot line adjustment is required for the WDC as it is wholly within its own parcel. Additionally, there is a railroad spur owned by the railroad between the southeastern portion of the WDC and a portion of the LDC site as it will exist after the lot line adjustment. See Figure 2.2-3 of the SPPE Application. Therefore, the WDC and LDC are not adjacent to each other and are not on the same site.

3. The WDC and LDC are independent of each other and share no infrastructure.

The WDC and LDC each have their own:

- Dedicated Silicon Valley Power distribution substation and metering;
- Water supply pipelines and metering;
- Sewer lines;

5

⁶ Exhibit 1 of the WDC evidentiary record.

- Security;
- Independent fencing around each site;
- Exclusive site entrances;
- Independent backup generating facilities;
- Separate architectural features; and
- Separate employees.

If the two projects were master planned as one project, they would have shared some infrastructure including a single security entrance, a single larger substation, and been designed to allow movement freely between the two buildings. The two projects do not contain any features that would indicate that they were master planned as one project, because, in fact, they were not. Please see Exhibits 1 and 2, attached hereto.

In citing to the alleged common boundary and ownership of WDC and LDC, along with their having the same Standard Industrial Classification code, Petitioner appears to conflate the standard for aggregating the emissions of two facilities for purposes of permitting under the Clean Air Act with applicable requirements under the California Environmental Quality Act (CEQA). See, e.g. U.S. Environmental Protection Agency letter to Secretary of the Pennsylvania Department of Environmental Protection regarding Meadowbrook Energy LLC. dated April 30, 2018. In fact, the relevant standard for the Commission's environmental review of WDC is found in CEQA, not the Clean Air Act. Similar activities are not considered one "project" for purposes of CEQA review if they are independent of each other and are not part of a contemplated larger project. Christward Ministry v. County of San Diego (1993) 13 Cal.App.4th 31, 44-46. Further, projects are deemed different under CEQA where they are not interrelated, can be implemented independently of each other, and are not contingent on each other. Sierra Club v. West Side Irrigation Dist. (2005) 128 Cal.App.4th 690, 699-700. Here, as detailed above, the WDC and the LDC are separate, independent projects undertaken by different owners.

6

⁷ Available on the U.S. Environmental Protection Agency website at https://www.epa.gov/sites/production/files/2018-05/documents/meadowbrook 2018.pdf

B. <u>Petitioner had actual knowledge of the LDC prior to the WDC</u> evidentiary hearing.

The Petitioner incorrectly claims that the location of the LDC was withheld from the Commission and Petitioner. It is clear that Petitioner knew the SPPE Application for the LDC was filed because he referred to it in the WDC proceedings. See Petitioner's Exhibit 501 (TN 232748), Page 5 and Petitioner's Opening Brief (TN 233478), Pages 4 and 5. Petitioner had actual knowledge of the LDC and its location at the WDC evidentiary hearing, so he cannot meet his regulatory burden and demonstrate that he could not have raised the generating capacity issue at the evidentiary hearing -- the LDC SPPE application was filed prior to the WDC evidentiary hearing and the information was available well before the issuance of the proposed decision on the WDC.

C. <u>Staff Had Actual Knowledge of the LDC and included it in its Health</u> Risk Assessment

Petitioner claims that the location of the LDC was withheld from Staff in an attempt to avoid analysis. Petitioner is incorrect. As described by Staff at the evidentiary hearing, the LDC was considered by Staff as a source for its cumulative Health Risk Assessment.⁸ In addition, Staff included the existing data center at 2805 Lafayette Street, which is located between the WDC and the LDC as described above, in the Health Risk Assessment.⁹ Staff's Health Risk Assessment demonstrated there was no significant impact to public health, even taking into account the LDC and the existing data center located at 2805 Lafayette.

IV. The Governor's Recent Proclamations Do Not Undermine Any Substantive Element of the Final Decision.

Petitioner contends that Governor Newsom's Proclamations of a State of Emergency (attached hereto as Exhibit 3) issued on August 16, 2020 and September 3, 2020 pursuant to two extreme heat events are new facts sufficient to undermine the Commission's Final Decision. As described below, while they are new, these facts do not change any of the assumptions, rationale, or analysis

⁹ Ibid.

7

⁸ 5/27/20 RT Page 135:15-25; referenced as 2845 Lafayette Street – There are two existing buildings at the LDC site, 2825 Lafayette Street and 2845 Lafayette Street. After demolition of the buildings and construction of the LDC, only the 2825 address number will be retained.

contained in the Final Decision. Therefore, Petitioner fails to demonstrate that these new facts have a causative effect on how the Final Decision addressed potential emergency operations.

Specifically, Petitioner contends at Page 2 of his Petition:

In light of the **testimony by the California Air Resources Board** and the Bay Area Air Quality Management District the commission remanded the Sequoia proposed decision back to the Sequoia committee for analysis of energy emergencies and the air quality and public health impacts.

Emergency operation is **possible** in **light** of the rolling blackouts and PSPS events that were not occurring until after the evidentiary hearing for the project was conducted. Executive orders have been issued to allow data center backup generators to operate outside of their permits which their impacts were analyzed under. These are **new facts** for the commission to consider **which indicate significant impacts to the environment could occur** and call into question the decision on the Walsh Data Center approved on August 12, 2020. (**Emphasis Added**)

An analysis of Petitioner's contentions and the comments provided by California Air Resources Board and the Bay Area Air Quality Management District relating to the Sequoia project, relied upon by the Petitioner, is presented below.

1. The extreme heat events identified in the Governor's Proclamations actually caused very few generators to run voluntarily and only approximately 12 MW of data centers were forced to run due to actual curtailment of grid power.

The Governor's Proclamations suspended any permit, regulation, or law prohibiting, restricting, or penalizing the use of emergency backup generators. Existing law only allows an owner to operate emergency backup generators for testing and maintenance or during an actual emergency. An emergency is defined as an unforeseeable (to the owner) loss of utility power to the owner's

facility.¹⁰. Therefore, in order for an owner to be allowed to voluntarily shed utility load and operate a facility using emergency backup generators, laws or permit conditions restricting use of backup generators have to be suspended. The last time this occurred was during the energy crisis in 2001. This is an extremely infrequent event.

On August 17, 2020 after the first extreme heat event, Governor Newsom sent a letter to the Commission, the California Public Utilities Commission (CPUC), and the California Independent System Operator (CAISO), collectively the "energy agencies", requesting an explanation of the disruption to electrical energy supply, among other things. 11 On August 19, 2020, the energy agencies responded to the Governor, identifying "that capacity shortfalls played a major role in the CAISO's ability to maintain reliable service on the grid". 12 The energy agencies stated that in response to the capacity shortfalls, "The CEC coordinated with data center customers of Silicon Valley Power to move approximately 100 MW of load to backup generation facilities onsite" (emphasis added).

The Petition, and the comments at the September 9, 2020 Commission Business Meeting by CARB referenced therein, assume a large amount of backup generator deployment during the extreme heat events. It has been estimated that approximately 500 MW of emergency backup generation for data centers exists in the Silicon Valley Power's (SVP) service area. To put the event of August 17, 2020 in perspective, the 100 MW of voluntary load shedding from data centers represents approximately 20 percent of the total load capacity and not the whole scale deployment of generation assumed by Petitioner. The only involuntarily curtailment occurred when CAISO ordered SVP to curtail up to 13 MW for 30 minutes on August 14, 2020. See Exhibit 6, attached hereto. Of the 13 MW, 12 MW was curtailment of data centers. ¹³

It is also extremely important to note that the data centers that were not curtailed by SVP *voluntarily elected to participate in the load shedding program at great risk to customers solely because the Commission requested they do so.* Other than the handful of generators (12 MW) that operated on August 14, 2020 due to the CAISO order to SVP forcing curtailment, none of the emergency

A copy of the Governor's August 17, 2020 correspondence is provided herein as Exhibit 4.

¹⁰ 13 Cal. Code Regs. § 2453(m)(4)(E)(i).

¹² A copy of the energy agencies collective response to the Governor dated August 19, 2020 is provided herein as Exhibit 5.

¹³ Personal Communication with Kevin Kolnowski, Chief Operating Officer of Silicon Valley Power.

generators would have been deployed in SVP's service territory were it not for the request of the Commission. This voluntary deployment arranged by the Commission allowed SVP's resources to be used elsewhere to minimize rolling blackouts in areas where there was a capacity shortfall. As the WDC Final Decision concluded, SVP operates a very reliable system and had sufficient capacity to avoid curtailment from either of the two extreme heat events covered by the Governor's Proclamations.

Petitioner has assumed that the extreme heat events caused and would continue to cause widespread deployment of emergency backup generators. This assumption is not supported by any evidence and contrary to the facts of the actual deployment on August 14, 2020. This emergency is not unlike the other types of emergencies considered by the Commission Staff and determined to be speculative for CEQA¹⁴ purposes in the Final Decision.

2. Emergency operations of all types are very infrequent within Silicon Valley Power's service territory and modeling of emergency operations requires speculative assumptions.

The WDC Final Decision at page 21 concludes that modeling of emergency operations requires numerous speculative assumptions.

When the Backup Generators operate in the event of a power outage to the Data Center, they will emit criteria air pollutants. Staff typically evaluates the impact of criteria pollutant emissions using modeling, but in the case of emergency operations, found that the numerous assumptions that must be made in order to conduct a modeling analysis render the results of any such efforts speculative. These assumptions include the frequency of operation of the Backup Generators; the length of time the Backup Generators would operate; the load at the time of the outage and thus the number of Backup Generators that must be run; the location of the specific generators that would run; and the meteorological and background air quality conditions during the operation of the Backup Generators. The IS/PMND further noted that the results from modeling can be highly sensitive to even minor adjustments of all these variables.

¹⁴ Public Resources Code Section 21000 et. seq.

The Final Decision at pages 21 and 22 states:

In the IS/PMND, Staff also pointed out that emergency operations are highly unlikely, testifying that the risk of an outage at any data center within the SVP service territory has historically been 1.6 percent per year. Staff explained that the historical data indicates that any future outage would likely be of short duration, and thus that potential ambient air quality impacts would similarly be short-term. The IS/PMND then concluded that the number of assumptions that would need to be made to evaluate the impacts associated with operation of the Backup Generators render the results too speculative to be meaningful and concluded that such an analysis is not required under CEQA.

Ultimately after hearing Petitioner's challenges to Staff's analysis and rationale at the evidentiary hearing and again in briefing, the Final Decision correctly concluded at page 23:

In sum, we find that it is not possible to reasonably estimate the likelihood or timing of an outage, the extent of an outage, or the ambient air quality conditions at the time of any such outage. Thus, we conclude that any quantification of the criteria pollutant impacts that would result would be too speculative to be meaningful and is therefore not required under CEQA.

Petitioner's attempt to yet again raise this issue in the Petition is not a new fact that has an effect upon a substantive element of the Final Decision. This emergency is not unlike the other types of emergencies determined to be speculative by the Commission Staff and by the Commission in the Final Decision. Petitioner has not met his burden under the requirements of Section 1720.

3. The extreme events that led to voluntary operation of backup generators to shed load pursuant to the Governor's Proclamations are even more unlikely than other types of circumstances that could cause interruption of electricity at data centers.

In order for the events covered by the Governor's Proclamations to reoccur, the following must happen simultaneously:

- There must be extreme heat event affecting California, Oregon, and Washington;
- Imports from the north are generally unavailable due to the extreme heat and/or fires:
- California must be unable to import sufficient electricity to meet demand;
- The California energy agencies have done nothing to resolve the capacity shortfall issues and failed to increase the capacity of resources available, including to offset normal imports; and
- The Governor suspends the rule that prohibits voluntary operation of emergency backup generators for load shedding.

While each of the above conditions may be foreseeable, in combination the probability of reoccurrence is astronomically low. Petitioner makes the unreasonable assumption that the energy agencies will do nothing to correct the capacity shortage and plan for these extreme weather events. This is nonsensical. Within two days of the August 14⁷ 2020 event, the energy agencies committed to study the causes of the event and take swift action to develop recommendations and implement remedies. It is unreasonable to assume that the energy agencies will not follow through with action.

4. The solution to avoiding voluntary operation of backup generators in response to an extreme heat event is a coordinated approach by the energy agencies to solve the capacity shortage issues, not prevention of individual data center projects.

As discussed above, Petitioner makes the unreasonable assumption that the energy agencies will remain stagnant in the face of the most recent capacity shortfalls. We, however, have confidence in the Commission and its sister energy agencies that the capacity shortage issues during extreme heat events will be solved. We have good reason to be confident. Nineteen years ago, the energy agencies and the State rose to the occasion and addressed the causes of the worst energy crisis in California's recent history, which has not been repeated.

However, if the Commission is not as confident as 651 Walsh Partners, LLC, 651 Walsh Partners, LLC is willing to accept the following Condition of Exemption that would prevent it from ever *voluntarily* operating its emergency backup generators for load shedding. Even if the Commission assumes, as Petitioner incorrectly speculates, that the events identified in the Governor's Proclamations will be more frequent, the fact that the WDC will not voluntarily participate assures that it will not voluntarily contribute to any potential speculative environmental impact that may be assumed.

Condition of Exemption PD 3

The granting of the Small Power Plant Exemption for the Walsh Backup Generating Facility is specifically conditioned on the provision that at no time shall the Project owner of the Walsh Data Center voluntarily participate in a load shedding and/or demand response program that would allow it to voluntarily use electricity generated by the Walsh Backup Generating Facility in order to participate in any load shedding and/or demand response request from the CEC, any utility, or any State agency.

V. The Final Decision Does Not Require an Alternative Analysis

Petitioner alleges that the recent capacity shortfall events should cause the Commission to conduct an alternative analysis. If the Petitioner is referring to an alternative analysis under CEQA, no such analysis is required. CEQA is clear that an environmental document describes alternatives to a proposed project that would avoid or substantially lessen any *significant environmental impacts of the project.*¹⁵ As demonstrated in the Final Decision, the WDC would not result in any significant environmental impacts such that alternatives should be evaluated. Petitioner's suggestion that the extreme heat events would cause such impacts is unsupported conjecture that ignores the evidence that such impacts are speculative and, if the Commission adopts Condition of Exemption PD-3, impossible.

If, however, Petitioner is referring to a broader policy discussion about the use of backup generating technologies, such discussions should take place in the forums provided by the energy agencies. Petitioner should be encouraged to participate in the Integrated Energy Policy Report proceedings and load forecasting forums at the Commission, and the Resource Adequacy procurement proceedings at the CPUC. The

 $^{^{15}}$ Pub. Resources Code \S 21002; 14 Cal. Code Regs. \S 15126.6.

best way to ensure emergency backup generation is not deployed, no matter what technology is used, is to support an extremely reliable and robust energy system with enough capacity to weather future heat events. SVP is a good model.

CONCLUSION

The Commission must deny the Petition because it fails to demonstrate that there are new facts that undermine any of the rationale, assumptions or analysis of the Final Decision. The WDC will provide an essential service to the State, has recently received its approval from the City of Santa Clara, and is therefore ready to begin construction. 651 Walsh Partners, LLC is looking forward to moving ahead with this essential service project.

Dated: September 25, 2020

Respectfully Submitted,

Sex A. C

Scott A. Galati

Counsel to 651 Walsh Partners, LLC

EXHIBIT 1

Declaration of Les Pelio, 651 Walsh Partners, LLC

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of

Application for Small Power Plant Exemption for the WALSH BACKUP GENERATING FACILITY DOCKET NO: 19-SPPE-2

DECLARATION OF W. LESLIE PELIO IN SUPPORT OF 651 WALSH PARTNERS, LLC'S OPPOSITION TO INTERVENOR ROBERT SARVEY'S PETITION FOR RECONSIDERATION

- I, W. Leslie Pelio, declare:
- I have personal knowledge of the matters set forth herein and could competently testify thereto if called as a witness to this proceeding.
- I am Managing Member of Pelio 651 Walsh, LLC (Pelio Walsh). Neither Digital Realty Trust, Inc. nor any of its subsidiaries or affiliated companies have any ownership or management interests in Pelio Walsh.
- 3. 651 Walsh Partners, LLC (Walsh Partners) is a Delaware limited liability company with two members Digital Walsh Holding, LLC (Digital Walsh) and Pelio Walsh. As of September 24, 2020, Pelio Walsh owns a 87 90% interest and Digital Walsh owns a 12.10% interest in Walsh Partners. Walsh Partners owns the Walsh Data Center located at 651 Walsh Avenue, Santa Clara, California (on parcel APN 224-04-059).
- Prior to Walsh Partners' ownership of the real property located at 651 Walsh Avenue, Santa Clara, CA, I owned title to that property as an individual.
- 5. Digital Walsh is managing member of Walsh Partners, but its authority as managing member is expressly limited in the partnership agreement with Pelio Walsh to mostly administrative matters, and all major decisions regarding the business or development (including development plans, budgets, and identity of major contractors) of the Walsh Data Center are determined by approval of Walsh Partners' members.
- The existing building on the WDC site has been and continues to be managed by Pelio until October 31 or demolition of the existing structure.
- 7. The Walsh Data Center is separate and distinct facility from the Lafayette Data Center that is proposed by Digital Lafayette, LLC and to be located at 2825 Lafayette Drive in Santa Clara, California.
- The Walsh Data Center does not share any property or infrastructure with the Lafayette Data Center proposed by Digital Lafayette, LLC.
- The Walsh Data Center is not master planned as one facility with the Lafayette Data Center proposed by Digital Lafayette, LLC.
- The Walsh Data Center does not share any of the following with the Lafayette Data Center;
 - . The Dedicated Silicon Valley Power distribution substation and metering:
 - · Water supply pipelines and metering;

- · Sewer lines;
- · Independent fencing around each site;
- · Exclusive site entrances;
- Independent backup generating facilities;
- · Separate architectural features; and
- · Separate employees.

This declaration is made under penalty of perjury under the laws of the State of California and is executed at Saratoga, California on the date set below.

DATED: September 24, 2020

2

W Leslie Pelio

EXHIBIT 2

Declaration of Justin Landfair, Digital Lafayette, LLC

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

Application for Small Power Plant Exemption for the WALSH BACKUP GENERATING FACILITY

DOCKET NO: 19-SPPE-2

DECLARATION OF JUSTIN LANDFAIR IN SUPPORT OF 651 WALSH PARTNERS, LLC'S OPPOSITION TO INTERVENOR ROBERT SARVEY'S PETITION FOR RECONSIDERATION

I, Justin Landfair, declare:

- The matters set forth herein are stated based on personal knowledge or on information and belief, for which I am informed and believe them to be true. I could competently testify thereto if called as a witness to this proceeding.
- 2. I am Vice President, Legal Operations of Digital Realty Trust, Inc.
- 651 Walsh Partners, LLC (Walsh Partners) is a Delaware limited liability company and owns the Walsh Data Center located at 651 Walsh Avenue, Santa Clara, California.
- 4. Walsh Partners has two members Digital Walsh Holding, LLC (Digital Walsh) and Pelio Walsh. As of September 24, 2020, Pelio Walsh owns a 87.90% interest and Digital Walsh owns a 12.10% interest in Walsh Partners. Digital Walsh's member is Digital Realty Trust, L.P., of which Digital Realty Trust, Inc. is general partner.
- Digital Lafayette, LLC is a Delaware limited liability company and owns the proposed Lafayette Data Center to be located at 2825 and 2845 Lafayette Drive in Santa Clara, California (on parcel APN 224-04-093) and a portion of 2805 Lafayette Street (on parcel APN 224-04-094).
- Digital Lafayette, LLC has filed an Application for Small Power Plant Exemption with the California Energy Commission (20-SPPE-02).
- The Lafayette Data Center is a separate and distinct facility from the Walsh Data Center proposed by Walsh Partners.

- 8. The Lafayette Data Center does not share any property or infrastructure with the Walsh Data Center proposed by Walsh Partners.
- The Lafayette Data Center was not master planned as one facility with the Walsh Data Center proposed by Walsh Partners.
- 10. The Lafayette Data Center does not share any of the following with the Walsh Data Center:
 - · The Dedicated Silicon Valley Power distribution substation and metering;
 - Water supply pipelines and metering;
 - Sewer lines;
 - Independent fencing around each site;
 - Exclusive site entrances;
 - · Independent backup generating facilities;
 - · Separate architectural features; and
 - Separate employees.

This declaration is made under penalty of perjury under the laws of the State of California and is executed at Orinda, California on the date set below.

DATED: September 25, 2020

2

EXHIBIT 3

Governor Newsom's Proclamations of State Emergency

EXECUTIVE DEPARTMENT STATE OF CALIFORNIA

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS beginning on August 14, 2020, a significant heat wave struck California and the surrounding Western states, bringing widespread temperatures well in excess of 100 degrees throughout the state (the "Extreme Heat Event"); and

WHEREAS as a result of this Extreme Heat Event, the National Weather Service issued multiple Excessive Heat Warnings and Red Flag Warnings within the State; and

WHEREAS the Extreme Heat Event has put a significant demand and strain on California's energy grid as well as limiting energy imports from surrounding states; and

WHEREAS the California Independent Service Operator (CAISO) has, to date, issued multiple Stage 2 and Stage 3 System Emergencies during the Extreme Heat Event, the first Stage 3 Emergencies issued due to heat in two decades, resulting in rolling blackouts for customers throughout the State; and

WHEREAS the Extreme Heat Event is expected to last through at least August 20, 2020, and CAISO has advised that additional Stage 2 and Stage 3 System Emergencies are likely unless action is taken to conserve power and increase output; and

WHEREAS it is necessary to take action to reduce the strain on the energy infrastructure and increase energy capacity during the Extreme Heat Event; and

WHEREAS under the provisions of Government Code section 8558, subd. (b), I find that conditions of extreme peril to the safety of persons and property exist due to the Extreme Heat Event throughout California; and

WHEREAS under the provisions of Government Code section 8625, subd. (c), I find that local authority is inadequate to cope with the magnitude and impacts of the extreme heat event; and

WHEREAS under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this Order would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the Extreme Heat Event.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code sections 8567, 8571, 8625 and 8627, HEREBY PROCLAIM A STATE OF EMERGENCY to exist in California.



IT IS HEREBY ORDERED THAT:

- 1. In preparing for and responding to the Extreme Heat Event, all agencies of state government use and employ state personnel, equipment, and facilities or perform any and all activities consistent with the direction of the Governor's Office of Emergency Services and the State Emergency Plan. Also, all residents are to heed the advice of emergency officials with regard to this emergency in order to protect their safety.
- 2. For purposes of regulations concerning stationary generators, the Extreme Heat Event shall be deemed an "emergency event" under California Code of Regulations (CCR), title 17, section 93116.1, subd. (b)(14), and a loss of electrical service shall be deemed "beyond the reasonable control of the owner or operator" under CCR, title 17, section 93116.2, subd. 2(a)(12)(A)(2). In addition, use of stationary generators during the Extreme Heat Event shall be deemed an "emergency use" under CCR, title 17, section 93115.4, subd. (a)(30).
- 3. In regulations concerning portable generators, the Extreme Heat Event shall be deemed an "emergency event" under CCR, title 13, section 2452, subd. (j), and interruptions caused by the Extreme Heat Event shall be deemed an "unforeseen interruption of electrical power from the serving utility" under CCR, title 13, section 2453, subd. (m)(4)(E)(i).
- 4. In regulations concerning the use of auxiliary engines by ocean-going vessels berthed in California ports, the Extreme Heat Event shall be deemed an "emergency event" under CCR, title 17, section 93118.3, subd. (c)(14).
- 5. This Order shall be deemed to provide notice to reduce use of grid-based electrical power under CCR, title 17, section 93118.3, subd. (c)(14)(C), and notice under that same section that reduction is no longer necessary at 11:59 p.m. on August 20, 2020. Ships that initially berthed at California ports between August 17, 2020 and August 20, 2020 shall not be required to use shore power until August 24, 2020.
- 6. A ship operating on auxiliary engines pursuant to an "emergency event" under Paragraph 4 of this Order shall be deemed to qualify for an exemption under CCR, title 17, section 93118.3, subd. (d)(1)(E)(1)(a), and any visit occurring during the period described in Paragraph 5 of this Order shall be counted towards compliance under CCR, title 17, section 93118.3, subd. (d)(1)(F)(1).
- 7. The Air Resources Board shall exercise maximum discretion to permit the use of stationary and portable generators or auxiliary ship engines to reduce the strain on the energy infrastructure and increase energy capacity during the Extreme Heat Event.
- 8. Any permit, regulation or law prohibiting, restricting or penalizing the use of stationary or portable generators or auxiliary ship

engines allowed by this Order during the Extreme Heat Event is suspended.

9. The provisions in paragraphs 3-7 shall expire at 11:59 p.m. on August 20, 2020.

I FURTHER DIRECT that as soon as hereafter possible, this proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 16th day of August 2020.

GAVIN NEWSOM
Governor of California

ATTEST:

UNION LASEL

ALEX PADILLA Secretary of State

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS beginning on September 2, 2020, a significant heat wave struck California, bringing widespread near-record temperatures well in excess of 100 degrees throughout the State (the "Extreme Heat Event"); and

WHEREAS as a result of this Extreme Heat Event, the National Weather Service issued multiple Excessive Heat Warnings within the State; and

WHEREAS the Extreme Heat Event has and will continue to put significant demand and strain on California's energy grid; and

WHEREAS on September 3, 2020, the California Independent Service Operator (CAISO) issued a Flex Alert, calling for voluntary electricity conservation from September 5, 2020 through September 7, 2020 to mitigate impact to energy supplies during this Extreme Heat Event; and

WHEREAS the Extreme Heat Event is expected to last through at least September 7, 2020; and

WHEREAS it is necessary to take action to reduce the strain on the energy infrastructure and increase energy capacity during the Extreme Heat Event; and

WHEREAS it is critical that power plants in the State generate as much power as possible to satisfy the increased demand created by the Extreme Heat Event; and

WHEREAS under the provisions of Government Code section 8558, subd. (b), I find that conditions of extreme peril to the safety of persons and property exist due to the Extreme Heat Event throughout California; and

WHEREAS under the provisions of Government Code section 8625, subd. (c), I find that local authority is inadequate to cope with the magnitude and impacts of the Extreme Heat Event; and

WHEREAS under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this Order would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the Extreme Heat Event.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code sections 8567, 8571, 8625, and 8627, **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in California.

IT IS HEREBY ORDERED THAT:

- 1. In preparing for and responding to the Extreme Heat Event, all agencies of state government use and employ state personnel, equipment, and facilities or perform any and all activities consistent with the direction of the Governor's Office of Emergency Services and the State Emergency Plan. Also, all residents are to obey the direction of emergency officials with regard to this emergency in order to protect their safety.
- 2. For purposes of regulations concerning stationary generators, the Extreme Heat Event shall be deemed an "emergency event" under California Code of Regulations (CCR), title 17, section 93116.1, subd. (b)(14), and a loss of electrical service shall be deemed "beyond the reasonable control of the owner or operator" under CCR, title 17, section 93116.2, subd. 2(a)(12)(A)(2). In addition, use of stationary generators during the Extreme Heat Event shall be deemed an "emergency use" under CCR, title 17, section 93115.4, subd. (a)(30).
- 3. In regulations concerning portable generators, the Extreme Heat Event shall be deemed an "emergency event" under CCR, title 13, section 2452, subd. (j), and interruptions caused by the Extreme Heat Event shall be deemed an "unforeseen interruption of electrical power from the serving utility" under CCR, title 13, section 2453, subd. (m)(4)(E)(i).
- 4. In regulations concerning the use of auxiliary engines by ocean-going vessels berthed in California ports, the Extreme Heat Event shall be deemed an "emergency event" under CCR, title 17, section 93118.3, subd. (c)(14).
- 5. This Order shall be deemed to provide notice to reduce use of grid-based electrical power under CCR, title 17, section 93118.3, subd. (c)(14)(C), and notice under that same section that reduction is no longer necessary at 11:59 p.m. on September 8, 2020. Ships that initially berthed at California ports between September 4, 2020 and September 8, 2020 shall not be required to use shore power until September 11, 2020.
- 6. A ship operating on auxiliary engines pursuant to an "emergency event" under Paragraph 4 of this Order shall be deemed to qualify for an exemption under CCR, title 17, section 93118.3, subd. (d)(1)(E)(1)(a), and any visit occurring during the period described in Paragraph 5 of this Order shall be counted towards compliance under CCR, title 17, section 93118.3, subd. (d)(1)(F)(1).
- 7. The Air Resources Board shall exercise maximum discretion to permit the use of stationary and portable generators or auxiliary ship engines to reduce the strain on the energy infrastructure and increase energy capacity during the Extreme Heat Event.
- 8. The provisions of Water Code section 13385, subdivision (i)(1)(A) as they pertain to daily average and instantaneous temperature

limitations in waste discharge requirements for thermal power plants are suspended for any thermal power plant that maintains operations to abate the effects of the Extreme Heat Event. Any exceedance of the daily average or instantaneous temperature limitations resulting from maintaining operations during this time shall not constitute a violation for purposes of calculating mandatory minimum penalties under Water Code section 13385, subdivision (i).

- 9. Permitting requirements or conditions of certification adopted by the Energy Commission pursuant to section 25216.5, subd. (a), and sections 25500 et seq. of the Public Resources Code, as well as related permitting requirements adopted by local air quality management districts, that restrict the amount of power that a facility may generate, restrict the amount of fuel that a facility may use, or impose air quality requirements that prevent the facility from generating additional power during peak demand hours, from 3:00 p.m. to 10:00 p.m. or as otherwise needed to respond to the Extreme Heat Event, are suspended.
- 10. Any facility that operates in violation of permitting requirements or conditions of a certificate suspended by Paragraph 8 shall:
 - (i) notify the relevant local air quality management district, the Energy Commission, and the Air Resources Board of its actions within 48 hours; and
 - (ii) report additional fuel use, additional hours of operation, and energy produced by that additional use and operation to the relevant local air quality management district, the Energy Commission, and the Air Resources Board within 30 days of this Order.
- 11. Any permit, regulation or law prohibiting, restricting or penalizing the use of stationary or portable generators or auxiliary ship engines or other conduct allowed by this Order during the Extreme Heat Event is suspended.
- 12. The provisions in Paragraphs 2-9 of this Order shall expire at 11:59 p.m. on September 8, 2020, with the exception that, as provided in Paragraph 5, ships that initially berthed at California ports between September 4, 2020 and September 8, 2020 shall not be required to use shore power until September 11, 2020.

I FURTHER DIRECT that as soon as hereafter possible, this proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 3rd day of September 2020.
GAVIN NEWSOM
Governor of California
ATTEST:
ALEX PADILLA
Secretary of State
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EXHIBIT 4

Governor Newsom's August 17, 2020 Letter to Energy Agencies



OFFICE OF THE GOVERNOR

August 17, 2020

Marybel Batjer President California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Stephen Berberich President and Chief Executive Officer California ISO P.O. Box 639014 Folsom, CA 95630

David Hochschild Chair California Energy Commission 1516 Ninth Street, MS-32 Sacramento, CA 95814

Dear Ms. Batjer, Mr. Berberich, and Mr. Hochschild,

I write today to express my deep concern about the broadscale deenergizations experienced by too many Californians on August 14 and 15th. These blackouts, which occurred without prior warning or enough time for preparation, are unacceptable and unbefitting of the nation's largest and most innovative state.

California residents, who are battling challenging conditions of a heat wave combined with a global pandemic in which we have encouraged people to

stay at home as much as possible, were forced to fend without electrical power -- a basic necessity. Residents, communities and other governmental organizations did not receive sufficient warning that these de-energizations could occur. In fact, I was not informed until moments before the blackouts started. Grid operators were caught flat footed, unable to avert disruptive blackouts and to adequately warn the public.

Collectively, energy regulators failed to anticipate this event and to take necessary actions to ensure reliable power to Californians. This cannot stand. California residents and businesses deserve better from their government. The failure to predict these shortages is unacceptable particularly given our state's work to combat climate change.

The California Independent System Operator (CAISO), the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) must do more to ensure reliable service and to safeguard California's energy future. More must be done to prevent outages and when they are unavoidable, CAISO must do more to warn residents about the possibility of blackouts.

I would like to better understand the causes of the supply deficiencies, why timely warnings were not provided and potential actions that can be taken in the coming days to minimize de-energization. Specifically, I request the following:

- Updated forecasts of energy demand for the coming days and any projected gaps between supply and demand.
- Actions the state can immediately take to increase resources available to fully serve California through the duration of the current weather event. As we discussed in our meeting this afternoon, I know we are already working with investor owned utilities, publicly owned utilities, community choice aggregators, major energy consumers and others on efforts to increase conservation, available supply and to shift use to non-peak hours. We are also working on actions the state can take to reduce its own energy consumption during peak hours. Additional actions to complement those we have already identified would be helpful.
- Immediate efforts to amplify and target Flex Your Power Campaign to emphasize the importance of actions of individuals and

businesses over the next few days. By altering the timing of use of electric appliances, and setting thermostats in homes and businesses higher than normal in the morning and lower than normal in the late afternoon and early evening, Californians can contribute to the solution over the next few days. As we have discussed, we are working with the Legislature, local government officials, business and labor leaders, newspaper publishers and others to increase energy conservation this week.

 A deeper dive into the root causes of how this happened and what more California must do to ensure that we do not leave our residents and our businesses exposed to this type of vulnerability in our power grid going forward.

Our immediate focus must be on reducing disruption and increasing reliability in the coming days. However, the unexpected events over the last two days require a comprehensive review of existing forecasting methodologies and resource adequacy requirements. Specifically, the following actions are necessary:

- The CEC must review its forecast to ensure they reflect the impact of climate change and resulting likelihood of more frequent and longer extreme heat events.
- The CAISO must review its assumptions regarding solar power and other sources of energy to ensure its assumptions of available capacity are accurate.
- The CPUC must review its resource adequacy requirements, existing procurement plans and demand response programs to ensure they provide the needed foundation for reliable power.
- Collectively, energy regulators must examine the mix of imports and in state generation, as well as any needed improvements to requirements relating to imports to ensure these resources are available to the state when needed.

Energy service shutoffs are simply too disruptive and we must do more to prevent them in the future. I request the CAISO to complete an after-action report to identify root causes of these events. It is critical that state energy agencies – CAISO, the Public Utilities Commission, and the California Energy Commission—examine longer-term actions for more accurate forecasting and to provide certainty of resource availability. This week's events demonstrate the

state must do more and faster to prevent future outages as we continue to work to transform energy generation in our state to achieve our necessary goals to combat climate change.

I look forward to your prompt response and expanded efforts to support reliable energy service in our state now and into the future.

Sincerely,

Gavin Newsom

Governor of California

EXHIBIT 5

Energy Agencies August 19, 2020 Joint Response Letter to Governor Newsom







August 19, 2020

Governor Gavin Newsom 1303 10th Street, Suite 1173 Sacramento, CA 95814

Dear Governor Newsom,

We write in response to your letter from earlier this week regarding the power outages of August 14 and 15 that were triggered due to insufficient resources.

We agree that the power outages experienced by Californians this week are unacceptable and unbefitting of our state and the people we serve. We understand the critical importance of providing reliable energy to Californians at all times, but especially now, as the state faces a prolonged heat wave and continues to deal with impacts from the COVID-19 pandemic.

Californians have always responded to great disruptions with courage, determination, and creativity. This week was no exception. But it is unfair to make Californians endure disruptions that are within our reach to avoid. We, as individuals, and the organizations we lead, share in the responsibility for what many Californians unnecessarily endured. We also share in the commitment to pinpoint the causes and ensure they do not reoccur.

Your letter requests that our organizations provide information to understand the causes of the recent supply deficiencies and the actions that can be taken in the near and longer-terms to minimize power outages. These questions deserve a more thorough review and response from us in the coming days, but in the sections below we provide responses based on the information we have now.

Near-Term Energy Demand Forecast

In the near term, the California Independent System Operator (CAISO) expects that energy demand will remain high as the current heat wave persists. In the table below, the CAISO provides its most recent demand forecasts for August 20 through 24. The table shows forecasted demand for two times of the day when the demand on the grid peaks. The first is the peak load hour, which occurs from 5 to 6pm (peak load hour) and the second is when the demand on the system, net of expected wind and solar production, occurs which is from 7 to 8pm (net load peak hour) for each day:

Table 1: Short Term Demand Forecasts

Forecast Period	8/20	8/21	8/22	8/23	8/24
Peak Load Hour Demand	45,113	44,743	42,718	42,154	46,779
Net Load Peak Hour Demand	42,850	42,415	41,393	40,946	44,329

The CAISO estimates that August resource adequacy capacity provides approximately 46,000 megawatts (MW) of load carrying capability at the peak load hour, after considering estimated outages. This load carrying capability drops to approximately 43,000 MW during the net load peak hour. Based on these forecasts, there is currently a risk of resource insufficiency on Monday, August 24. If those projections materialize as forecasted, the CAISO will require economic import energy to meet system needs. If economic import energy is unavailable, it could lead to additional supply shortages. The CAISO will do everything it can to avoid service interruptions. As detailed later in this letter, significant efforts have been undertaken across the state in recent days to reduce demand and identify additional supply.

Lack of Advance Warnings for Supply Deficiencies

As the CAISO anticipated high loads and temperatures beginning on August 14, it issued an order restricting maintenance operations on August 12, an alert identifying a possible system reserve deficiency on August 13, and a Flex Alert for August 14. However, the situation deteriorated on the afternoon of August 14, with the unanticipated loss of supply and severe constraints on imports because of a developing, historic west-wide heat wave. The imbalance in supply and demand led to the need to order the utilities to turn off power to their customers later that evening. On August 15, the CAISO experienced similar supply conditions, as well as significant swings in wind resource output when evening demand was increasing. Wind resources first quickly increased output during the 4:00 pm hour (approximately 1,000 MW), then decreased rapidly the next hour. These factors, combined with another unexpected loss of generating resources, led to a sudden need to shed load to maintain system reliability. The combination of high system demand, unanticipated loss of supply, and low net import availability due to hot temperatures throughout the West created untenable system conditions. Although the CAISO could not have predicted the specific series of events that ultimately required power outages, better communications and advance warnings about tight supply conditions were possible, and should have been done. The CAISO is committed to improving its communications, and providing appropriate warnings of such circumstances.

Causes of Recent Supply Deficiencies

We are working closely as joint energy organizations to understand exactly why these events occurred. The grid conditions of August 14 and 15, with peak demands of approximately 47,000 MW and 45,000 MW respectively, were high but not above similar hot days in prior years. Given this, our organizations will need to conduct a deep dive into how we ensure sufficient electric supply, and will make modifications to our reliability rules to make sure reliability resources can be available to address unexpected grid conditions.

Assigning definite causes to events on the electricity grid requires careful analysis, which will take time, however, we do know a number of things already. We know that capacity shortfalls played a major role in the CAISO's ability to maintain reliable service on the grid. A major focus of our review will need to be on the joint organizations' process of determining the needed capacity.

The resource adequacy procurement requirements are set by the California Public Utilities Commission (CPUC), to be based on a 1-in-2 peak forecast, i.e., an average year forecast. This forecast is developed by the California Energy Commission (CEC) based on an agreed-upon methodology between the CEC, the CPUC, and the CAISO. To account for contingencies such as outages, import variability, load forecast error, and reserve requirements, the program requires utilities to procure a 15% planning reserve margin above the monthly

peak load forecast. The rules take into account the fact that the grid needs both a sufficient quantity and quality of resources to meet demand. As the events of the past few days indicate, a review of how the organizations forecast hourly demand and set reserve margins is critical. The forecasts and planning reserves need to better account for the fact that climate change will mean more heat storms and more volatile imports, and that our changing electricity system may need larger reserves.

Another factor that appears to have contributed to resource shortages is California's heavy reliance on import resources to meet increasing energy needs in the late afternoon and evening hours during summer. Some of these import resources bid into the CAISO energy markets but are not secured by long-term contracts. This poses a risk if import resources become unavailable when there are West-wide shortages due to an extreme heat event, such as the one we are currently experiencing. The CAISO has observed that during the current heat wave, energy supporting imports from other Western utilities have been significantly constrained during the late afternoon and evening hours, as those other utilities must plan to meet their own demand and have limited ability to export supplies to California. This hampers the CAISO's ability to secure net import energy sufficient to meet evening ramping requirements.

After this heat wave passes, as directed in your letter, our organizations will perform a root cause analysis of the events of August 14 and the following days, to understand the cause of the resource shortfalls. The CAISO will collaborate with the CPUC and the CEC on this analysis, and to promote long-term action to avoid these types of events in the future.

Collectively, our organizations want to be clear about one factor that did not cause the rotating outage: California's commitment to clean energy. Renewable energy did not cause the rotating outages. Our organizations understand the impacts wind and solar have on the grid. We have already taken many steps to integrate these resources, but we clearly need to do more. Clean energy and reliable energy are not contradictory goals.

Our collective investigation will include, at a minimum, a review of the following:

- Resource sufficiency, including:
 - Level of resource adequacy requirements relative to grid loads and grid conditions,
 - Imports and exports and their impact on reliability during periods of system stress conditions,
 - Outages, derates, and resource performance during system stress hours,
 - Performance of resources supplied to grid operator by CPUC and non-CPUC jurisdictional entities,
 - Availability of CAISO import capability to CPUC jurisdictional entities;
- Transmission grid performance, including outages and availability constraints;
- Sufficiency of existing incentives and penalty structure for deterring nonperformance of reliability resources;
- Demand forecasts and how they are utilized in resource planning;
- Review of interagency coordination on summer reliability planning and assessment;
- Challenges to contracting for the retention of gas fleet resources needed for reliability; and
- Market performance observations and opportunities.

Since August 14, a number of immediate actions have been taken to minimize disruption and increase reliability. A collective effort, led by you and your staff, created a massive statewide mobilization to conserve electricity and maximize existing generation resources. The efforts led to reductions in peak demand on Monday and Tuesday of nearly 4,000 MW and an addition of nearly 950 MW of available temporary generation.

Some specific examples of actions that were taken include:

<u>Demand Side Conservation Actions</u>

- The CAISO called on demand response programs and other available demand relief;
- The CPUC issued a letter on Monday, August 17th, clarifying use of backup generators in connection with specific demand response programs is allowable, which resulted in at least 50 MW of additional demand reduction each day;
- Solar and storage companies, including Sunrun and Tesla, worked with their customers to change battery charging patterns so that they are maximizing effectiveness between 4 and 9pm;
- The CEC coordinated with data center customers of Silicon Valley Power to move approximately 100 MW of load to backup generation facilities onsite;
- The CEC coordinated with the US Navy and Marine Corps to disconnect 22 ships from shore power, move a submarine base to backup generators, and activate several microgrid facilities resulting in approximately 23.5 MW of load reduction; and
- Six Electric Program Investment Charge (EPIC)-funded microgrids reduced load by a total of approximately 1.2 MW each day.

Supply Side Resources Actions¹

- The CAISO procured available emergency energy;
- The CAISO executed significant event Capacity Procurement Mechanism to procure additional supply resources;
- The CAISO Suspended a market feature to ensure physical certainty of solution;
- Department of Water Resources (DWR) and Metropolitan Water District (MWD) adjusted water operations to shift 80 MW of electricity generation to the peak period;
- DWR and the U.S. Bureau of Reclamation (USBR) shifted on-peak pumping load that resulted in 72 MW of load flexibility;
- The CEC worked with the City and County of San Francisco to maximize power output at Hetch Hetchy which allowed for an additional 150 MW during the peak period;
- The CEC worked with private power producers to contribute an additional 147 MW from the following sources: SEGS Solar Plant: 60 MW, Ivanpah Solar Power Plant: 42 MW, and Sentinel: 45 MW;
- PG&E deployed temporary generation, that was procured for public safety power shutoff purposes, across its service territory totaling approximately 60 MW;
- SCE worked with generators to ensure that additional capacity was made available to the system from facilities with gas onsite or through invertor changes; and

¹ The additional capacity highlighted in this section is part of the 950 MW of available temporary generation, but does not comprise the totality of the 950 MW.

 LADWP helped bring additional generation from Haynes 1 and Scattergood power plants totaling 300 to 600 MW

Conservation Messaging Actions

- The CAISO Issued Flex Alerts and warnings;
- The CAISO, CEC and CPUC supported the Governor's Office and the California Governor's Office of Emergency Services to publicly request electricity customers lower energy use during the most critical time of the day, 3:00 pm to 10:00 pm;
- The CPUC issued a letter to the investor owned utilities on August 16 requesting that they aggressively pursue conservation messaging and advertising, and requested Community Choice Aggregators do the same; and
- The CPUC redirected the Energy Upgrade California marketing campaign messaging and media outreach to focus on conservation messaging.

With these efforts, we hope to reduce or prevent immediate future outages to the greatest extent possible.

Going-Forward Actions to Ensure Reliability

Our organizations are committed to collaborating on longer-term solutions and to re-examining our forecasts and existing reliability policies and programs to avoid future supply shortfalls.

The CEC will continue to refine its demand forecast, which currently accounts for climate change, based on improving science and stakeholder engagement, and will expand its demand forecasting process to include a broader set of scenarios that capture extreme weather events and associated load impacts. New peak demand forecasts could be used in the CPUC's resource adequacy program, which currently requires a 1-in-2 peak forecast. In addition, the CEC will:

- Develop an aggregate statewide view of resource adequacy obligations and available resources serving those obligations.
- Continue work to enable distributed energy resources and load flexibility, including development of load management standards to support grid reliability.

The CAISO will review its assumptions regarding solar power and other sources of energy to ensure its assumptions of available capacity are accurate.

The CPUC will review its resource adequacy requirements, existing procurement plans and demand response programs. The results of the root cause analysis will better help to strengthen and inform this reassessment. Some of the work that will contribute to the holistic reassessment you request has already been initiated.

- In 2019, the CPUC tightened electricity import rules to ensure imports and all other resources the state relies on are actually delivered to California on peak days.
- The CPUC ordered 3,300 MW of new capacity to come online by 2023 to meet potential shortfalls that were identified when it adjusted assumptions to reflect that peak demand occurs later in the day.
- The CPUC opened a phase in its Resource Adequacy proceeding to consider changing the framework for determining reliability rules. These changes may be needed to adjust for the fact that community choice aggregators dominate the retail electricity market.

Beyond that, the CPUC will work to ensure that increasingly prevalent distributed resources can be efficiently activated to support the grid even if they do not qualify to provide reliability services.

With regard to your request to review the mix of imports and in-state generation, our organizations agree that further attention is required to ensure that these resources are available when needed. As discussed above, the CPUC has already taken action to make imported electricity more dependable, and has also reduced the planning assumption for how much imported electricity will be available into California. The changes in those assumptions resulted in the directive to build 3,300 MW of new resources that will start coming online in 2021.

Each of our organizations has more work to do in order to be fully responsive to your letter and to ensure that we are taking every measure necessary to guarantee the events of this past week will not be repeated. We thank you for your leadership and will each be sending you individual follow on letters that will address the questions and directives in your letter in more depth.

Sincerely,

Marybel Batjer

President

California Public Utilities Commission

Stephen Berberich

President and Chief Executive Officer

California Independent System Operator

David Hochschild

Chair

California Energy Commission

EXHIBIT 6

Email Confirming CalSO Order for SVP to Curtail 13 MW on August 14, 2020 for 30 Minutes

From: <u>Michael Keate</u>

To: <u>Alan Kurotori; "Alan Kurotori Cell"; Albert Saenz; Alex Chua; Allan Agatep; Ann Hatcher; Arielle Romero Cell;</u>

Arielle Romero Cox; Arielle Romero's gmail; Betty Sargent; Billy Ouach; Brent Runyon; Chris Karwick; Damon Beck; Darlene Gomez; Dave Padilla; Dave Padilla; "Dawid Coetzee"; DeAnna Hilbrants; DeAnna Hilbrants Cell; DL CCO All Users; DL FIN Contact Center All; Edbert Nguyen; Elizabeth Elliott; Greg Garcia; "Greg Garcia Cell"; Gwen Goodman; "Gwen Goodman Cell"; "Gwen Goodman Gmail"; Heather Heinbaugh; Heather Heinbaugh Cell; Irma Munoz; Jay Sheth; Jean-Paul Hill; Jeevan Valath; Jeff Ipsaro; "Jeff Ipsaro Cell; Jim Tucker; "Jim Tucker"; John Roukema; John Sanders; Julia Black; "Julia Black Cell"; Kathleen Hughes; Kathleen Hughes; "Kathleen Hughes Gmail"; Ken Winland; Kevin Keating; "Kevin Keating Cell"; Kevin Kolnowski; Lenka Wright; Lenny Buttitta; Manuel Pineda; Manuel Pineda; Mark Guerrero; Mary Medeiros McEnroe; Michael Keate; "Mike Keate Gmail"; Mike Vitarelli; Naomi Dale; Nilda Ramos; Robert P. Cell; Robert Pritchard; Sachin Bajracharya; Sandra Pacheco; Shane Kubo; Sharon Laughlin; Shelton Honda; Shreya Kodnadu; Shreya Kodnadu cell; Son Le; Stephanie Entizne; SVPReliability; SVPSched; Tajina Casey; Tera Curren; Tony Ochoa; "Troubleshooter Cell"; Veronica Bogan; Voula Margelos; Wendy Stone; "Wendy Stone Cell"; "Wendy

stone Gmail"

Subject: CAISO DIRECTED LOAD SHED AND RESTORED

Date: Friday, August 14, 2020 8:23:00 PM

CAISO issued an Operating instruction to shed 13MW of Firm load at 1930. At 1936 13 MW of micro grid load was shed. At 2005 CAISO terminated the load shed operating instruction and 13MW of micro grid load was restored at 2009

DOCKETED	
Docket Number:	19-SPPE-02
Project Title:	Walsh Data Center
TN #:	235709
Document Title:	ORDER ON PETITION FOR RECONSIDERATION
Description:	Order No: 20-1116-4
Filer:	Cody Goldthrite
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	11/19/2020 3:01:22 PM
Docketed Date:	11/19/2020



State of California State Energy Resources Conservation and Development Commission

1516 Ninth Street, Sacramento, CA 95814 (800) 822-6228 – www.energy.ca.gov

APPLICATION FOR SMALL POWER PLANT EXEMPTION FOR THE:

WALSH BACKUP GENERATING FACILITY

Docket No. 19-SPPE-02

Order No: 20-1116-4

ORDER ON PETITION FOR RECONSIDERATION

On June 28, 2019, 651 Walsh Partners, LLC (Applicant)¹ submitted an application for a small powerplant exemption (SPPE) to the California Energy Commission (CEC)² for the Walsh Backup Generating Facility (Walsh) in Santa Clara, California.³ Walsh will include 32 3.0-megawatt (MW) and one 2.0-MW diesel backup generators to provide an uninterruptible power supply to the Walsh Data Center during interruptions of the electrical supply.⁴

On March 30, 2020, Robert Sarvey petitioned to intervene in the case.⁵ The Committee⁶ appointed to preside over this SPPE application issued an order granting intervenor status to Mr. Sarvey on April 27, 2020.⁷ The Committee issued the Committee Proposed Decision (Proposed Decision) on July 28, 2020,⁸ and invited interested

¹ 651 Walsh Partners, LLC, is managed by Digital Walsh Holding, LLC, which is a subsidiary of Digital Realty Trust, L.P. (TN 228877-2, p. 1, fn. 1.)

² The CEC is formally known as the "State Energy Resources Conservation and Development Commission." (Pub. Resources Code, § 25200.)

³ Information about this application, including a link to the electronic docket, may be found on the CEC's web page at https://ww2.energy.ca.gov/sitingcases/walsh/. Documents related to this application may be found in the online docket at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-02. The application is TN 228877-1 through -2.

⁴ TN 228877-2, p. 1.

⁵ TN 232587.

⁶ On July 15, 2019, the CEC appointed a Committee consisting of Karen Douglas, Commissioner and Presiding Member, and Patty Monahan, Commissioner and Associate Member. (TN 228984.)

⁷ TN 232849. Helping Hand Tools and California Unions for Reliable Energy (CURE) also petitioned to intervene and the Committee issued orders granting them intervenor status. (TNs 230809, 230808.) ⁸ TN 234026.

persons, public agencies, and members of the public to provide written comments on the Proposed Decision by August 7, 2020.⁹

The CEC held a public hearing on the Proposed Decision on August 12, 2020.¹⁰ At the hearing, Applicant and Staff provided comments on the Proposed Decision.¹¹ None of the intervenors nor any other members of the public offered oral comments during the public hearing.¹² At the conclusion of the public hearing, the CEC adopted the Proposed Decision as the Final Decision, making findings under the California Environmental Quality Act (CEQA), and granting the SPPE for Walsh (Final Decision).¹³

On September 10, 2020, Mr. Sarvey filed "Robert Sarvey's Petition for Reconsideration" (Petition). On September 17, 2020, we issued the original "Notice of California Energy Commission Hearing on Request for Reconsideration." On October 1, 2020 and October 30, 2020, we issued a "Revised Notice of California Energy Commission Hearing on Petition for Reconsideration" and a "Second Revised Notice of California Energy Commission Hearing on Petition for Reconsideration," respectively, which ultimately set the hearing on the Petition for the November 16, 2020 business meeting and invited the parties to file comments by October 30, 2020.

Staff filed an opposition to the Petition on September 24, 2020. ¹⁶ Applicant filed its opposition to the Petition on September 25, 2020. ¹⁷ Mr. Sarvey filed comments on the Petition on October 30, 2020, ¹⁸ which reference the October 15, 2020 written comments that the California Air Resources Board (CARB) filed in the Sequoia SPPE proceeding (Docket No. 19-SPPE-03). ¹⁹

The CEC held a hearing on the Petition on November 16, 2020. At that time, the CEC received comments from Mr. Sarvey, Applicant, Staff, CARB, Bay Area Air Quality Management District, Claire Warshaw, and the Santa Clara and San Benito Counties Building and Construction Trades Council. At the conclusion of the hearing, the CEC

⁹ TN 234048. Helping Hand Tool submitted written comments on the Proposed Decision on August 7, 2020. (TN 234265.)

¹⁰ The transcript of the August 12, 2020, business meeting is TN 234425.

¹¹ TN 234425, pp. 123-126. Enchanted Rock, LLC. filed written comments prior to the CEC's August 7, 2020, business meeting.

¹² *Id.* at pp. 126-127.

¹³ TN 234366. The CEC filed its Final Decision on August 21, 2020. (TN 234408.)

¹⁴ TN 234815.

¹⁵ TN 234980, TN 235459.

¹⁶ TN 234892.

¹⁷ TN 234918.

¹⁸ TN 235473.

¹⁹ TN 235473, pp. 3, 5.

voted to deny the Petition based on the findings adopted at the hearing. The CEC also ordered that this order be prepared.

FINDINGS

After considering the Petition, written comments, and oral comments presented at the November 16, 2020, Business Meeting, the California Energy Commission hereby adopts the following findings:

- Consistent with the broad discretion afforded to the California Energy
 Commission under Public Resources Code section 25530, it is appropriate to
 apply the principles found in California Code of Regulations, title 20, section 1720
 to determine whether to grant Mr. Sarvey's Petition.
- 2. While Mr. Sarvey has filed CARB's written comments in the Walsh Backup Generating Facility docket, Mr. Sarvey has not presented any evidence to show how CARB's written comments filed in the Sequoia small power plant exemption proceeding can, or should, be applied to the Walsh Backup Generating Facility.
- 3. While the heat storm and public safety power shutoff events of August and September 2020 were not contemplated at the time of the adoption of the Final Decision, a review of the Final Decision indicates that it considered a broad range of potential events that could cause an outage and necessitate operation of the Walsh Backup Generating Facility's backup diesel generators. These events do not undermine the conclusion in the Final Decision that operation of backup generators is likely to be infrequent and of limited duration nor do they call into question whether Silicon Valley Power will have sufficient resources to provide power to the Walsh Data Center.
- 4. The Bay Area Air Quality Management District participated throughout this proceeding and indicated that their concerns were addressed by the analyses presented by Staff. We appreciate the Bay Area Air Quality Management District's participation at the November 16, 2020 business meeting and earlier in the proceeding but note that, despite their awareness of the significance of this issue of emergency operations in this proceeding, they failed to provide comments that were specific to Walsh and did not provide enough specificity for us to ascertain how the information could affect the conclusions in the Final Decision. Similarly, we value CARB's participation at the November 16, 2020 business meeting as well, but their comments also lacked sufficient specificity to support the Petition or affect our original conclusions.

- 5. The Final Decision relied on the Bay Area Air Quality Management District's California Environment Quality Act Guidelines to analyze air quality impacts. Under those guidelines, because the emissions from the backup generators did not exceed the project-level thresholds of significance, no separate cumulative impact analysis is required.
- 6. The Final Decision addresses comments received regarding the use of technology alternatives to diesel-powered backup generators; no alternatives analysis is required because there is no substantial evidence that Walsh will have a significant adverse impact on the environment.
- 7. The California Energy Commission considered the contention that the Walsh and Lafayette projects should be reviewed as a single project. The Applicant responded to and refuted the claim at the August 12, 2020, public hearing before the adoption of the Final Decision. Mr. Sarvey has not presented any new evidence to support the argument that the relevant legal standard to find that Walsh and Lafayette are a single project has been met nor has he shown a change in law supporting the argument.
- 8. Based on the foregoing, Mr. Sarvey has not presented new evidence or shown an error in fact or change or error of law to support his Petition.

ORDER

Therefore, the California Energy Commission hereby adopts the following order:

The California Energy Commission **DENIES** the Petition for Reconsideration of the Final Decision granting a small power plant exemption to the Walsh Backup Generating Facility.

CERTIFICATION

The undersigned Secretariat to the California Energy Commission does hereby certify that the foregoing is a full, true, and correct copy of an Order duly and regularly adopted at a meeting of the California Energy Commission held on November 16, 2020.

AYE: Hochschild, Scott, Douglas, McAllister, Monahan

NAY: None

ABSENT: None ABSTAIN: None

Cody Goldthrite

Cody Goldthrite

Secretariat

ATTACHMENT TRANS DR-123



Project Details

Timestamp of Analysis: November 02, 2020, 09:25:07 AM

Project Name: LBGF SPPE Application

Project Description: Construction of a 576,120 square foot

data center facility.

Project Location

Jurisdiction:APNTAZSanta Clara224040931229

Inside Transit Priority Area (TPA)?

No (Fail)

Analysis Details

Santa Clara Countywide VMT Evaluation Tool Version:

Data Version: VTA Countywide Model December 2019

Analysis Methodology: Parcel Buffer Method

Baseline Year: 2020

Project Land Use

Residential:

Single Family DU: Multifamily DU:

Total DUs: 0

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF: 576120

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

Motor Vehicle Parking:

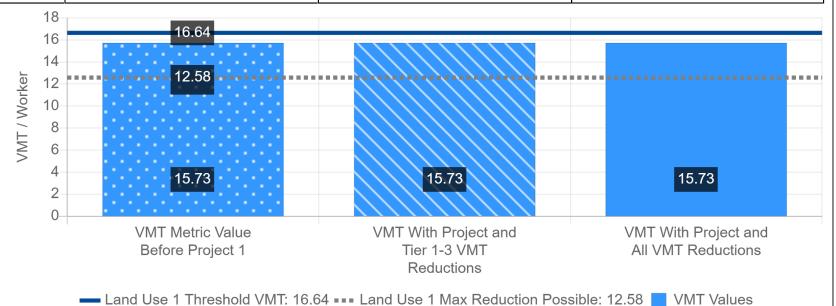
Bicycle Parking:



Industrial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Industrial
VMT Without Project:	Home-based Work VMT per Worker
VMT Baseline Description 1:	County Average
VMT Baseline Value 1:	16.64
VMT Threshold Description 1:	0%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	15.73	15.73	15.73
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)





	Page 3
Tier 1 Project Characteristics	



	Page 4
Tier 2 Multimodal Infrastructure	
TICL 2 Mattilload Illiastracture	



	Page 5
Tier 3 Parking	
Tiel 3 Falking	



	Page 6
Tier 4 TDM Programs	