DOCKETED	
Docket Number:	19-SPPE-05
Project Title:	Mission College Data Center SPPE
TN #:	233440
Document Title:	Sarvey Reply Testimony
Description:	Exhibit 300 Sarvey Reply Testimony
Filer:	Robert Sarvey
Organization:	Robert Sarvey
Submitter Role:	Intervenor
Submission Date:	6/11/2020 4:29:55 PM
Docketed Date:	6/11/2020

State of California
State Energy Resources Conservation and Development Commission

In the matter of:	
Mission College Data Center	Docket 19-SPPE-05

Sarvey Reply Testimony

Generating Capacity

According to the IS/MND *"The MCBGF would consist of 43, 2.5 MW diesel-fired emergency backup generators, arranged in two generation yards, each designed to serve one of the two data center buildings that make up the MCDC. In addition, the MCBGF would include two house power diesel fired generators, each capable of generating 600 kilowatts (kW) to support its respective building phase in an emergency."*[1] The total generating capacity of the project is 108.7 MW as calculated according to the requirements of Section 2003. The project exceeds the 100 MW generating capacity required to qualify for SPPE treatment.

While the Commission Staff has argued that Section 2003 does not apply to diesel backup internal combustion engines the commission has applied section 2003 to the calculation of generating capacity for power plants that utilize IC engines many times before. In the Humboldt Generating Station Proceeding (06-AFC-07) the Commission determined that, *"The HBRP would consist of 10 dual-fuel Wärtsilä 18V50DF 16.3 MW reciprocating engine-generator sets and associated equipment with a combined nominal generating capacity of 163 MW."* [2] In the Eastshore Energy Center Proceeding (06-AFC-06) the commission used Section 2003 to determine that, "*The proposed facility would be a nominal 115.5 megawatt (MW) simple cycle power plant consisting of 14 Wartsila 8.4 MW 20V34SG natural gas-fired reciprocating engine*

[1] Exhibit 200 Page 31 of 402
[2] https://ww2.energy.ca.gov/2008publications/CEC-800-2008-005/CEC-800-2008-005-CMF.PDF page 17 of 447

generators and associated equipment."[3] In the Quail Brush Proceeding (11-AFC-03) the Commission utilized Section 2003 when determining that the projects 11 internal combustion engines totaled 100 MW of capacity.[4]

The Commission has also utilized Section 2003 in determining the generating capacity of a data center. In the Santa Clara Data Center Phase 2 application the applicant claimed the commission had no jurisdiction because the maximum generating capacity of the backup generating system would be limited by the 49.1 MW load of the data center. As the Santa Clara SPPE application states "*In a letter dated April 21, 2008, the Commission asserted permitting jurisdiction over the backup generators. (See Appendix F.) Xeres disagrees with the Commission's assertion of jurisdiction because the Data Center will never sell power on the electrical grid, is not a "power plant" under the Warren-Alquist Act, and because the maximum output of the backup generators for both project phases is 49.1 MW, which is less than the Commission's 50 MW jurisdictional threshold."*[5] The Commission clearly rejected data center load as the maximum generating capacity for the Santa Clara Data center in 2011.[6] In the Santa Clara Data Center Initial /Study and Mitigated Negative Declaration CEC Staff calculated generating capacity stating , "*The current review by the Energy Commission considers the entire Data Center project, Phases 1 and 2, with the Phase 2 project as the trigger for analysis as it adds 16 additional backup generators, totaling 32 generators capable of 2.25 megawatts each, bringing total generation capacity of the backup system to 72 megawatts of installed capacity*."[7]

In the commissions jurisdictional determination for the Santa Clara Data Center the commission rejected the data center load as the maximum generating capacity of the backup generating system. The jurisdictional determination found that each of the

---

[3] https://ww2.energy.ca.gov/sitingcases/eastshore/documents/index.html

[4] https://ww2.energy.ca.gov/sitingcases/quailbrush/index.html

[5] 11-SPPE-01 SPPE Application Page 26 of 70
https://ww2.energy.ca.gov/sitingcases/santaclara/documents/applicant/SPPE_Application/01_SPPE_Application.pdf

[6] Attachment 1

[7] 11-SPPE-01 XERES VENTURES LLC, SANTA CLARA SC-1 DATA CENTER **Small Power Plant Exemption Initial Study and Negative Declaration Recommendation** Page 18 of 122
https://ww2.energy.ca.gov/2012publications/CEC-700-2012-001/CEC-700-2012-001.pdf

Santa Clara Data Centers 32 diesel generators had a maximum load of 2.87 MW which would bring the total generating capacity of the Santa Clara Data Center to 91.8 MW.[8]

Cancer Risks

The applicant calculated the cancer risk at the Point of Maximum Impact (PMI) for the MCDC at 27.2 in a million.[9] This exceeds BAAQMD's threshold of significance for an individual project risk. The IS/MND on page 5.3-40 estimates the cancer risk for Maximally Exposed Individual Resident from just the readiness and testing of the generators to be 8.4 in a million. The IS/MND provides no estimate of the cancer risk from Phase 1 of the projects construction. The IS/MND does present a combined phase 2 construction and operational risk and the maximum cancer risk to the Maximally Exposed Individual Resident is 6.56 in a million. The applicant estimated the cancer risk from the project at the point of maximum impact to be 51.39 in a million at the point of maximum impact five times the BAAQMD significance level.[10]

GHG Emissions Significance

Staff and applicant propose no threshold of significance to evaluate the indirect GHG emissions from the MCDC. Staff finds that the GHG emissions from the project are not significant relying on the Santa Clara Climate Action Plan and the Silicon Valley Integrated Resource Plan. The Santa Clara Climate Action Plan was developed to regulate a projects emissions before 2021. The projects emission will not occur until 2021 or later. The City of Santa Clara has not developed or approved a 2030 Climate Action Plan. The Silicon Valley Integrated Resource Plan is not intended to mitigate emissions from individual projects. The Silicon Valley Integrated Resource plan is roadmap for meeting future energy demand in the most cost-effective way.

---

[8] Attachment 1 Page 1 *"We also understand that each back up generator has a generating capacity of 2.87 MW which would make the total generating capacity 91.8 MW."*

[9] Exhibit 400 Page 98 of 402

[10] TN 230845 **MCBGF Sppe Application Appendix A - Air Quality Impact Assessment** Page 67 of 412

CEQA Guidelines § 15064.4 provides the framework for a lead agency to determine if a project like the MCDC emits levels of GHG emissions that are significant. According to § 15064.4 (B) the lead agency should consider:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

§ 15064.4 (b) (1) - The extent to which the MCDC may increase or reduce greenhouse gas emissions as compared to the existing environmental setting .

Section § 15064.4 (b) (1) states that the lead agency should consider, "The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting."[11] The evidence in the proceeding shows that the City of Santa Clara's 2016 GHG emissions were estimated to be 1,769,178 MTCO2e/yr. The evidence also shows that the projects indirect emissions from energy use are estimated to be 136,384[12] MTCO2e/yr based on the maximum electrical usage of 684,156[13] MWh per year. The estimated 136,384 MTCO2e/yr from the MCDC electrical use would be about 7.7% of the City of Santa Clara's estimated 2016 GHG emissions.

[11] Exhibit 200 Page 174 of 352
[12] Exhibit 200 Page 212 of 402
[13] Exhibit 200 Page 210 of 402

According to SVP's 2018 Integrated resource plan CARB has assigned a targeted 2030 range of between 275,000 and 485,000 MTCO2e for SVP; this amounts to 0.915 percent of the 2030 electricity sector emissions.[14] The 136,384 MTCO2e/yr emitted from the indirect energy use from operation of the WDC is 28% of Silicon Valley Powers high 2030 GHG emission target of 485,000 MTCO2e/yr and 49% of SVP's low 2030 GHG target of 275,000 MTCO2e/yr as reported in its 2018 Integrated Resource Plan.[15]

According to the evidence the carbon content from SVP's retail sales is expected to decrease from 341 pounds per MWh in 2019 to 219 pounds per MWh hour in 2030. At 219 pounds per MWh the projects GHG emissions from the consumption of 684,156[16] MWh per year of indirect electrical use would still be approximately 67,981 MTCO2e/yr which is about 14% of SVP's high target of 485,000 MTCO2e/yr and 24% of SVP's low 2030 GHG target of 275,000 MTCO2e/yr.

The projects GHG emissions combined with the estimated GHG emissions from just the other CEC Santa Clara Data Center projects is 833,803 MTCO2e/yr.[17] Those cumulative emissions of 833,803 MTCO2e/yr from just the data centers alone would be 1.8 times higher than SVP's high 2030 GHG target of 485,000 MTCO2e/yr and 3.2 times higher than the SVP low 2030 target of 275,000 MTCO2e/yr.

[14] Silicon Valley Power Integrated Resource Plan Page 24 of 109
[15] Silicon Valley Power Integrated Resource Plan Page 24 of 109
[16] Exhibit 200 Page 210 of 402
[17] Table 1 Santa Clara Data Centers Before the CEC.

Table 1 Santa Clara Data Centers Before The CEC

Project	CEC #	Testing	Construction	Other	Electricity
Mission College	19-SPPE-05	3,875[18]	1,231[19]	2,663[20]	136,384[21]
Laurelwood	19-SPPE-01	2,583[22]	1,043[23]	1,600[24]	170,170[25]
Sequoia	19-SPPE-03	4,301[26]	1,395[27]	5,640[28]	170,865[29]
McLaren	17-SPPE-01	5,044[30]	2539	1,048[31]	116,848[32]
Walsh	19-SPPE-02	2,313[33]	970 [34]	756[35]	108,396[36]
Lafayette	20-SPPE-02	5,000[37]	762[38]	1,813[39]	131,140[40] Totals
Total MTCO2e/yr		23,116	7,940	20,520	833,803

The six Santa Clara Data centers before the Commission have the potential to emit 833,803 MTCO2e/yr. The combined potential emissions from these data centers represents almost 3% of the electricity sectors low 30 MMTCO2e a year 2030 target and about 1.6% of the electric sectors high GHG 2030 emission target of 53 MMTCO2e.

The combined construction, maintenance and generator testing excluding indirect emissions from electricity production and other emissions from the six data

[18] Exhibit 200 Page 209 of 402
[19] Exhibit 200 Page 208 of 402
[20] Exihbit 200 Page 212 of 402
[21] Exhibit 200 Page 212 of 402
[22] TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 160 of 291
[23] TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 160 of 291
24 TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 163 of 291
[25] TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 163 of 291
[26] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 169 of 322
[27] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 169 of 322
[28] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 168 of 322
[29] TN 233095 CEC Staff Responses to Committee Questions Page 16 of 39
[30] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329
[31] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329
[32] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329
[33] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 173 of 352
[34] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 172 of 352
[35] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 176 of 352
[36] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 176 of 352
[37] TN 223041-1 LBGF SPPE Application - Part 1 Page 118 of 194
[38] TN 223041-1 LBGF SPPE Application - Part 1 Page 118 of 194
[39] TN 223041-1 LBGF SPPE Application - Part 1 Page 120 of 194
[40] TN 223041-1 LBGF SPPE Application - Part 1 Page 120 of 194

centers is 51,576 MTCO2e/yr[41] which are not covered by any Integrated Resource Plan or Climate Action Plan. Those additional unmitigated emissions are 10% of SVP's high GHG target for 2030 and 18% of SVP's low 2030 GHG target. The cumulative impact of the commissions actions is not assessed in the GHG evaluation.

§ 15064.4 (b) (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

The second factor lead agencies should consider in evaluation of the significance of GHG emissions from an individual project is whether the projects emissions exceed a threshold of significance that the lead agency determines applies to the project. CEC Staff and applicant propose that no threshold of significance be applied to the project.

A lead agency has the discretion to select and develop appropriate thresholds of significance to analyze a project's environmental impacts, or rely on thresholds developed by other agencies that it deems applies to the project. The selection and development of thresholds requires a lead agency to "make a policy decision in distinguishing between substantial and insubstantial adverse environmental impacts based, in part, on the setting." (*North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 625.")

The CEC initially embarked on a process in the 2009 IPER but never finalized the GHG significance thresholds in a publicly reviewed final CEQA document. The Energy Commission has several options in adopting a threshold of significance for GHG emissions. First the Energy Commission could utilize BAAQMD's threshold of 1,100 metric tons of CO2e/yr. In absence of any other approved agency threshold the 1,100 metric tons per year threshold would be a logical choice for the Commission.

The Energy Commission can use the only statewide GHG significant emission threshold for industrial uses which was proposed by CARB in 2009. The Air Resources Board Staff established a numerical threshold of 7,000 metric tons of CO2e/yr as significant for industrial projects which includes indirect emissions from electricity use.

[41] See Table 1 Santa Clara Data Centers GHG emissions (above)

The Energy Commission could adopt a 10,000 metric tons of CO2e/yr threshold as it coincides with the mandatory GHG reporting requirement which indicates a level that the State of California deems significant.

The decision lies with the energy commission to choose a threshold of significance to evaluate the six Santa Clara data centers before it which have the potential to emit over 883,000 MTCO2e/yr. The combined potential emissions from these data centers represents 3% of the electricity sectors low 30 MMTCO2e a year target and 1.6% of the electric sectors high GHG 2030 emission target of 53 MMTCO2e.

§ 15064.4 (b) (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)).

The third factor lead agencies should consider in evaluation of the significance of GHG emissions from an individual project is the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Staff proposes to use the Santa Clara Climate Action Plan which does not cover emissions after 2020 so it is not designed to address the emissions from the MCDC.

Staff and applicant propose that Silicon Valley's Integrated Resource Plan be considered the local plan for the reduction or mitigation of greenhouse gas emissions. According to Staff and applicant compliance with the SVP's IRP would ensure that the projects GHG emissions are not significant. Silicon Valleys Integrated Resource Plan does not address individual projects like the WDC. Silicon Valley's IRP does not provide mitigation measures or development standards designed to lower the emissions from an individual project like the MCDC. The SVP IRP is the roadmap where the utility plans to meet its electrical needs in a reliable and cost-effective manner.

SVP's integrated resource plan assumes that only SVP-owned resources count towards the emissions target. The IRP does not address GHG emissions from spot market purchases. As stated in Silicon Valley Powers Integrated Resource Plan,

"*Meeting the GHG targets* ***assumes that only SVP-owned resources count towards the emissions target.***"[42]

The Integrated Resource Plan also admits that, "***SVP finds that the generic emissions rate of 0.428 Mt CO2e/MWh for spot market purchases per the CEC guidelines to be too high. If this rate is applied, SVP's portfolio emissions will exceed the GHG target.***"[43] The Silicon Valley Integrated Resource Plan that CEC Staff and applicant rely on to demonstrate that the projects GHG emissions are not significant admits that the plan will not meet its GHG targets.

That conclusion is echoed by the Santa Clara General Plan EIR. The City of Santa Clara's General Plan EIR clearly states that, *"The City's projected 2035 GHG emissions would constitute a cumulatively considerable contribution to global climate change by exceeding the average carbon-efficiency standard necessary to maintain a trajectory to meet statewide 2050 goals as established by EO S-3-05.(Significant Impact)"*[44]

Evaluating Emergency Operations

Staff claims that no air quality impacts from emergency operations evaluation is necessary because SVP experienced no impacts from the 2019 PSPS shutoffs. Staff is wrong as SVP lost access to both geothermal resources and small hydro resources during the two PSPS shutoffs in 2019. Wildfires are expected to increase and be more severe so a PSPS shutoff for SVP is reasonably foreseeable.

Staff relies exclusively on power curtailment by SVP to determine the probability of the Backup generators operating. There are other reasons why backup generators operate in emergency mode at data centers. Events like UPS failures, human error, weather impacts, and other emergency conditions lead to emergency operation of generators at data centers. An analysis of emergency operations and its air quality impacts must be performed to see if emergency operations cause an air quality or public health impact. Without this analysis the applicant has not met the burden of proof

[42] Exhibit 28 Silicon Valley Integrated Resource Plan Page 8 or 109 and Page 98 of 109
[43] Exhibit 28 Silicon Valley Integrated Resource Plan Page 8 or 109 and Page 98 of 109
[44] Exhibit 505 Page 11 of 14 (PDF Page 24 of 594)

that the project will not cause or contribute substantially to an air quality exceedance or health risk from toxic air contaminates when the project operates in emergency mode which is the purpose of the project.

The Backup Generators Diesel Use is a Wasteful and Unnecessary Consumption of Energy a Significant Impact.

CEQA Guidelines Section 15126.2 (b) requires that, "*If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy,* ***or wasteful use of energy resources, the EIR shall mitigate that energy use."*** Appendix F of the CEQA Guidelines provides the framework for assessing energy resources. Appendix F of the CEQA guidelines states that the goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include: (1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy sources.

The backup diesel generating system accomplishes none of these goals. According to the IS MND the projects emergency generators would emit 3,875 MTCO2e/yr every year for just the testing of the emergency generators.[45] None of that output from the emergency generators is utilized and it could be stored in a Battery Energy System. Over a 20 year period the project would emit over 77,500 MTCO2e. The emissions from the emergency generators are not mitigated by any Climate Action Plan or general plan policies.

The output for the MCDC generators at 50 hours at 100 % load would be about 5,375 MWh per year. That energy is completely wasted. The energy could be stored in a battery energy storage system eliminating the waste of 5,375 MWh of electricity per year. Over a 20 year period that would amount to a waste of 107,500 MWh,

The projects use of diesel to power the generators increases Santa Clara's and the State of California's fossil fuel dependence. The project in conjunction with the other large data centers being permitted by the CEC creates a cumulative waste of diesel in

[45] Exhibit 200 Page 209 of 402

the backup generators. The six data centers in Santa Clara alone would emit 32,116 MTCO2e/yr without generating a single MWh. (See Table 1 below)

Table 1 Santa Clara Data Centers Before the CEC

Project	CEC #	Testing	Construction	Other	Electricity
Mission College	19-SPPE-05	3,875[46]	1,231[47]	2,663[48]	136,384[49]
Laurelwood	19-SPPE-01	2,583[50]	1,043[51]	1,600[52]	170,170[53]
Sequoia	19-SPPE-03	4,301[54]	1,395[55]	5,640[56]	170,865[57]
McLaren	17-SPPE-01	5,044[58]	2539	1,048[59]	116,848[60]
Walsh	19-SPPE-02	2,313[61]	970 [62]	756[63]	108,396[64]
Lafayette	20-SPPE-02	5,000[65]	762[66]	1,813[67]	131,140[68] Totals
Total MTCO2e/yr		23,116	7,940	20,520	833,803

[46] Exhibit 200 Page 209 of 402
[47] Exhibit 200 Page 208 of 402
[48] Exihbit 200 Page 212 of 402
[49] Exhibit 200 Page 212 of 402
[50] TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 160 of 291
[51] TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 160 of 291
52 TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 163 of 291
[53] TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Declaration Page 163 of 291
[54] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 169 of 322
[55] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 169 of 322
[56] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 168 of 322
[57] TN 233095 CEC Staff Responses to Committee Questions Page 16 of 39
[58] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329
[59] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329
[60] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 106 of 329
[61] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 173 of 352
[62] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 172 of 352
[63] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 176 of 352
[64] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 176 of 352
[65] TN 223041-1 LBGF SPPE Application - Part 1 Page 118 of 194
[66] TN 223041-1 LBGF SPPE Application - Part 1 Page 118 of 194
[67] TN 223041-1 LBGF SPPE Application - Part 1 Page 120 of 194
[68] TN 223041-1 LBGF SPPE Application - Part 1 Page 120 of 194

Electrical Demand of Santa Clara Data Centers	
Lafayette	867,240[69]
Sequoia	867,240[70]
Laurelwood	867,240[71]
Walsh	700,800[72]
McLaren	665,760[73]
Mission College	684,156[74]
Total MWh	4,652,426

4,652,426 X 219 pounds/ 2204 = 462,288 $MTCO_{2e}/yr$

[69] TN 223041-1 LBGF SPPE Application - Part 1 Page 119 of 194

[70] TN 231651 Sequoia Data Center Initial Study and Proposed Mitigated Negative Declaration Page 170 of 322

[71] 71 TN 229584 Laurelwood Data Center Initial Study and Proposed Mitigated Negative Dec Page 162 of 291

[72] TN 232078 Walsh Data Center Initial Study and Proposed Mitigated Negative Declaration Page 174 of 352

[73] TN 223911 McLaren Data Center Project Initial Study and Proposed Mitigated Negative Dec. Page 105 of 329

[74] Exhibit 200 Page 210 of 402

STATE OF CALIFORNIA - THE RESOURCES AGE ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

April 21, 2008

Mr. W. Tate Cantrell, Jr.
Vice President, Data Center Technologies
DuPont Fabros Technology, Inc.
1212 New York Avenue, NW
Suite 900
Washington, DC 20005

RE: Diesel Backup Generators (Xeres Permit S-1 through S-32)

Dear Mr. Cantrell:

The California Energy Commission has received information regarding 32 low-use diesel backup generators that we understand Xeres Ventures, LLC, plans to install to support a data center at 535 Reed Street in Santa Clara, California. We also understand each backup generator has a rated capacity of 2.87 megawatts, which would make the total generating capacity at the site be 91.8 megawatts. We also understand Xeres is seeking a permit from the Bay Area Air Quality Management District, as well as a use permit from the City of Santa Clara.

The purpose of this letter is to inform you that the Energy Commission has permitting jurisdiction over the 32 diesel generators. As a general matter, the Energy Commission has jurisdiction over any site for a thermal power plant with a generating capacity of 50 megawatts or more. (Pub. Resources Code §§ 25110, 25120, 25500.) Here, the 32 generators, each to use diesel as a source of thermal energy to generate electricity, constitute a thermal power plant with more than 50 megawatts in generating capacity.

The aggregation of all 32 generators is based on their common location for a computer server campus and their common purpose to provide power conditioning and backup power to the data center that is also planned for the site. The issue of whether to aggregate the backup generators and view them as a thermal power plant under the Energy Commission's jurisdiction is one we have dealt with on more than one occasion. In all these cases, including a few in which the power plants were to be located a mile or more apart and two others which also involved diesel backup generators for a data center, the Energy Commission's Chief Counsel concluded the Commission has jurisdiction based on aggregating the proposed power plants, including backup diesel generators.

The factors supporting aggregation include such matters as the separate generating units: (a) being served by common structures, for example, a common control room or a common gas line, (b) if lacking a common control room, nevertheless being triggered to operate by the same event , for example, grid failure, (c) being under common ownership or subject to a common permit to operate, (d) being proposed as part of a foreseeable plan of development and, thus, constituting a "project" under the California Environmental Quality Act for purposes of environmental review by the permitting agency, and (e) being installed to serve a common industrial or commercial host.

Here, the generators will be located on one site proposed for the development of a data center. The generators are considered by the Air District to be components of a single project. The generators have the common purpose of serving as power conditioning and backup generators for a computer server campus being developed by a single project proponent. Their operation is likely to be triggered by the same event, for example, lightning storms or grid failure. Moreover, the potential for the generators to operate simultaneously should be analyzed in a comprehensive environmental document in accordance with the California Environmental Quality Act. Such analysis would identify the project's emissions, assess their impacts, identify feasible mitigation, and assess the potential health risks from this concentration of diesel engines.

For all these reasons, we believe the Energy Commission has permitting authority over the 32 generators, regardless of whether the power will be sold to the grid or used exclusively on-site. Thus, to receive a valid permit for the 32 diesel generators, Xeres must file with the Energy Commission either an application for a small power plant exemption (for a thermal power plant of 50 to 100 megawatts) or an application for certification. We believe an application for certification would be most appropriate, given the potential for adverse impacts from the use of diesel fuel in as many as 32 generators operating at one time.

In either case, the Energy Commission, as a matter of statute, serves as lead agency under the California Environmental Quality Act. As lead agency, it is responsible for preparing the appropriate environmental document for public review and consideration in deciding whether to approve the application. In the case of a small power plant exemption, the project is exempted from the Commission's jurisdiction and permitted at the local level. In the case of an application for certification, the project is permitted by the Energy Commission. During the certification process, the Commission and its staff work with the Air District, which is required under the Commission's regulations to issue a determination of compliance with the District's rules. The conditions of the District's determination, provided within the timeline of the Commission's proceeding, are incorporated into and become enforceable through the Commission's final decision.

Attachment 2 Silicon Valley Power 2018 Fact Sheet

https://www.siliconvalleypower.com/svp-and-community/about-svp/utility-fact-sheet

Utility Fact Sheet

Electric Utility
City of Santa Clara
FACT SHEET - JAN - DEC 2018

City Hall
1500 Warburton Avenue
Santa Clara, CA 95050

Phone:
(408) 261-5292

Form of Government:	Council-City Manager
No. of Employees (2018-19):	193
Operating Budget (2018-19):	$ 450,092,360

Fast Facts:

Electric Meters	55,383
Peak Demand	526.2 MW
Service Area	18.41 square miles
System Load Factor	80.1%
Transmission Lines	55.5 miles

Distribution Lines:

Underground	352.0 miles
Overhead	186.6 miles
Street Lights	7,076

2018 Calendar Year Retail Transactions:

Sales Revenues (note 1)	$ 414,019,366
kWh Sales	3,566,293,836

Purchased Power & Generation for Retail:

	kWh	
City-owned Generating Facilities	943,529,625	25.5%
Western Area Power Administration	231,119,803	6.3%
Northern California Power Agency	686,315,083	18.6%
Other Joint Power Agencies & City Purchases	1,833,347,659	49.6%
Total	3,694,312,170	100.0%

Average Monthly Customer Count & Total kWh Sales:

		kWh	
Residential	47,007	226,010,342	6.3%
Commercial	6,168	92,413,001	2.6%
Industrial	1,647	3,229,606,952	90.6%
Municipal	193	18,263,541	0.5%
Unmetered	379	N/A	N/A
Total	55,394	3,566,293,836	100.0%

Note 1: Unaudited; Includes revenue from unmetered accounts.
Note 2: kWh sales may include adjustments due to timing issues.

RESUME OF ROBERT SARVEY

Academic Background
BA Business Administration California State University Hayward, 1975
MBA Tax Law California State University Hayward, 1985

Experience

San Joaquin Valley Air Pollution Control District Citizens Advisory Board Industry Representative: Analyzed proposed air quality regulations and made recommendations to the Governing Board for approval.

GWF Peaker Plant 01-AFC-16: Participated as an Intervenor in the project and helped negotiate and implement a 1.3 million dollar community benefits program. Successfully negotiated for the use of local emission reduction credits with GWF to offset local air quality impacts.

Tesla Power Project 01- AFC-04: Participated as an Intervenor and provided air quality testimony on local land use and air quality impacts. Participated in the development of the air quality mitigation for the project. Provided testimony and briefing which resulted in denial of the PG&E's construction extension request.

Modesto Irrigation District 03-SPEE-01: Participated as an Intervenor and helped negotiate a $300,000 air quality mitigation agreement between MID and the City of Ripon.

Los Esteros: 03-AFC-2 Participated as an Intervenor and also participated in air quality permitting with the BAAQMD. Responsible for lowering the projects permit limit for PM-10 emissions by 20%.

SFERP 4-AFC-01: Participated as an Intervenor and also participated in the FDOC evaluation. My comments to the BAAQMD resulted in the projects PM -10 emission rate to be reduced from 3.0 pounds per hour to 2.5 pounds per hour by the District. Provided testimony on the air quality impacts of the project.

Long Beach Project: Provided the air quality analysis which was the basis for a settlement agreement reducing the projects NOx emissions from 3.5ppm to 2.5ppm.

ATC Explosive Testing at Site 300: Filed challenge to Authority to Construct for a permit to increase explosive testing at Site 300 a DOE facility above Tracy. The permit was to allow the DOE to increase outdoor explosions at the site from 100 pounds per charge to 300 pounds per charge and also grant an increased annual limit on explosions from 1,000 pounds of explosive to 8,000 pounds of explosives per year. Contested the permit and succeeded in getting the ATC revoked.

CPUC Proceeding C. 07-03-006: Negotiated a settlement with PG&E to voluntarily revoke Resolution SU-58 which was the first pipeline safety waiver of GO112-E granted in the State of California. Provided risk assessment information that was critical in the adoption of the Settlement Agreement with PG&E which, amongst other issues, resulted in PG&E agreeing to withdraw its waiver application and agreeing to replace the 36-inch pipeline under the sports park parcel after construction.

East shore Energy Center: 06-AFC-06: Intervened and provided air quality testimony and evidence of cancellation of Eastshore's power purchase agreement with PG&E.

Colusa Generating Station: 06-AFC-9: Participated as air quality consultant for Emerald Farms. Filed challenge to the PSD Permit.

CPUC proceeding 08-07-018: Tesla Generating Station CPCN participated in proceeding which was dismissed due to motion by IEP. Reviewed all filings, filed protest, signed confidentiality agreement and reviewed all confidential testimony.

GWF Tracy Combined Cycle 08-AFC-07: Participated in negotiation of the Air Quality Mitigation Agreement with the San Joaquin Valley Air Pollution Control District and GWF.

CPUC Proceeding 09-09-021: Provided Testimony that demonstrated PG&E failed to follow its environmental protocol in the LTPP. Provided testimony and evidence that PG&E's need had fallen since 2007 and that the Commission should limit PG&E's procurement to the 950-1000 MW Range.

CPUC Proceeding A. 09-04-001: Demonstrated PG&E had violated terms of Mariposa Settlement Agreement. PG&E was fined $25,000 for breach of settlement.

CPUC Proceeding A. 09-10-022: Provided Testimony on behalf of CAlifornians for Renewable Energy. Provided confidential evaluation of PPA value. Provided testimony and evidence that PG&E had violated the Mariposa Settlement. Provided testimony that demonstrated PG&E's demand had fallen sharply since the issuance of D. 07-12-052.

Oakley Generating Station 09-AFC-04: Participated as an intervenor. Provided testimony in Alternatives, Air Quality, Environmental Justice, and Water Quality. Negotiated settlement with CCGS to not use ERC's and instead exclusively use 2.5 million dollars to create real time emission reductions through BAAQMD real time emission reduction programs.

Pio Pico PSD Permit: Participated in the Pio Pico PSD permit. Comments resulted in a remand to the air district and a lowering of particulate matter emission limits by 10%

CPUC Proceeding A.11-12-003: Was credited by the decision for demonstrating that an additional 5 MW of firm capacity was not needed from the Thermal Energy Biomass Plant. Decision led to the plants closure.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of Mission College Data Center
Docket Number 19-SPPE-05

Declaration of Robert Sarvey

I Robert Sarvey Declare as Follows:

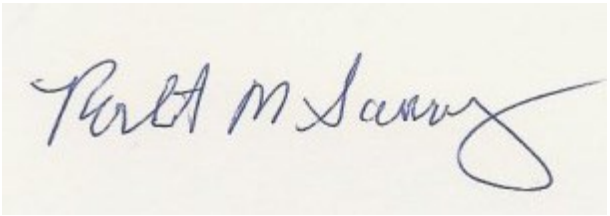
1. I prepared the attached testimony for the Mission College Data Center.

2. A copy of my professional qualifications and experience is included with this Testimony and is incorporated by reference in this Declaration.

3. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed in Tracy, California on June 11, 2020.



Robert M. Sarvey
501 W. Grant Line Rd.
Tracy. CA. 95376
209 835-7162