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State of California State Energy Resources Conservation and Development Commission

In the matter of:	
Walsh Data Center	Docket 19-SPPE-02

Intervenor Sarvey's Opening Brief

Committee Question 1

Page 5.8-15 of the Initial Study/Mitigated Negative Declaration states in pertinent part: "[The Cap-and-Trade Program, through the regulation of upstream electricity producers, would account for GHG emissions from the project and require emissions from covered sectors to be reduced by the amount needed to achieve AB 32's 2030 goal." How does the Cap-and-Trade Program apply, if at all, to the analysis under CEQA Guideline 15064.4, of the greenhouse gas emissions from the electricity consumption of the proposed project?

The CAP and Trade Program is a tax designed to incentivize electricity producers to limit their carbon emissions. The Cap and Trade program is not intended to be applied to the individual projects or end users such as the WDC. The Cap and Trade program does not lower the 108,396 MTCO2e/yr that this project is projected to generate through the indirect GHG emissions from the generation of electricity.

The Cap and Trade Program would not cover GHG emissions from SVP facilites that emit less than 25,000 metric tons per year like the Gianera Generating Station, the NCPA combustion turbine, and the NCPA Geothermal Plants, which all emit less than 25,000 metric tons per year. Cap and Trade would also not cover any emissions purchased on the spot market from in state facilites that emit less than 25,000 tons per year. Unspecifed sources of power which is 28% of SVP' nonresidential power supply may or may not be covered by Cap and Trade. Cap and Trade is just one of the tools the State of California uses to limit GHG emission impacts but it is designed as a carbon

¹ Exhibit 28 Silicon Valley Power Integrated Resource Plan Page 99 of 109

² Exhibit 507

tax to discourage excessive GHG emissions not as a project level GHG emission reduction program.

Local agencies develop climate action plans which provide standards and rules that limit emissions from individual projects like the WDC. Cap and Trade is not designed to regulate individual projects like the WDC because it does not lower the actual emissions from the WDC which will remain at 108,396 MTCO2e/yr. The climate action plan is the mechanism whereby an individual project is evaluated and mitigated to achieve the agencies climate goals and targets. In this case the Santa Clara Climate Action Plan is the relevant document but the document does not address emissions beyond 2020 so it is not applicable to the project.

Committee Question Number 2

2. Explain whether the incremental contribution of the project's greenhouse gas emissions indirectly caused by the electricity consumption of the proposed project are significant.

CEQA Guidelines § 15064.4 provides the framework for a lead agency to determine if a project like the WDC 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 project 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." The evidence in the proceeding shows that the incremental contribution of the WDC is in fact significant.

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.⁴ The 108,396 MTCO2e/yr emitted from the indirect energy use from operation of the WDC is 22% of Silicon Valley Powers high 2030 GHG emission target of 485,000 MTCO2e/yr and 39% of SVP's low 2030 GHG target of 275,000 MTCO2e/yr as reported in its 2018 Integrated Resource Plan.⁵

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 2030.⁶ At 219 pounds per MWh the projects GHG emissions from the consumption of 700,800 MWh per year⁷ of electrical consumption would still be approximately 69,000 MTCO2e/yr which is 14% of SVP's high target of 485,000 MTCO2e/yr and 25% of SVP's low 2030 GHG target of 275,000 MTCO2e/yr. This is still a significant part of SVP's 2030 GHG targets.

The projects GHG emissions combined with the GHG emissions from just the other CEC Santa Clara Data Center projects is 693,519 MTCO2e/yr based on annual electrical use of 3,764,276 MWh.⁸ Those cumulative emissions of 693,519 MTCO2e/yr from just the data centers alone would be 1.42 times higher than SVP's high 2030 GHG target of 485,000 MTCO2e/yr and 2.5 times higher than the SVP low 2030 target of

 $^{^3}$ Exhibit 200 Page 174 of 352

⁴ Exhibit 28 Silicon Valley Power Integrated Resource Plan Page 24 of 109

⁵ Exhibit 28 Silicon Valley Power Integrated Resource Plan Page 24 of 109

⁶ Exhibit 30

⁷ Exhibit 200 Page 174 of 352

⁸ Exhibit 500 Page 3

275,000 MTCO2e/yr. The emissions that will occur from these projects will make it impossible for SVP to meet its GHG reduction targets.

The eight data centers before the Commission have the potential to emit 947,641 MTCO2e/yr not including GHG emissions from the Lafayette Data Center (20-SPPE-02) and the Great Oaks South Data Center (20-SPPE-01).9 The combined potential emissions from these data centers represents 3% of the electricity sectors low 30 MMTCO2e a year 2030 target and 1.7% of the electric sectors high GHG 2030 emission target of 53 MMTCO2e.

Pursuant to the evidence in this proceeding that is the extent to which the project may increase greenhouse gas emissions individually and cumulatively as compared to the existing environmental setting. Staff and applicant prefer not to look at the reality of the numbers but instead want to speculate that somehow SVP will meet its 2030 GHG high emissions target of 485,000 metric tons of CO2e per year without analysis. The evidence in the proceeding demonstrates that SVP will not meet its targets due to the overwhelming increase in electrical demand form the WDC and the other CEC reviewed data centers.

Exhibit 28 page 59 of 109 shows SVP's 2030 projected energy requirements. SVP projects that 2030 energy demand will be 5,281,000 MWh. SVP's 2030 carbon expected carbon intensity is projected to be 219 pounds per MWh.¹⁰ The 5,281,000 MWh at 219 pounds per MWH sill generate 524,745 metric tons of CO2e per year which is over 9 % higher than SVP's 2030 high target of 485,000 metric tons of CO2e per year. SVP cannot meet its GHG targets due to the ever-increasing demand created by the new data centers. We don't have to speculate.

(2) Whether the projects 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**

⁹ Exhibit 500 Page 3

¹⁰ Exhibit 30

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. The Energy Commission could adopt 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 eight data centers before it which have the potential to emit 947,641 MTCO2e/yr not including GHG emissions from the Lafayette Data Center (20-SPPE-02) and the Great Oaks South Data Center (20-SPPE-01). The combined potential emissions from these data centers represents 3% of the electricity sectors low 30 MMTCO2e a year target and 1.7% of the electric sectors high GHG 2030 emission target of 53 MMTCO2e.

¹¹ Exhibit 500 Page 3

(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.

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 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 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 WDC. 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. ¹² As stated in Silicon Valley Powers Integrated Resource Plan, "Meeting the GHG targets assumes that only SVP-owned resources count towards the emissions target." ¹³

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

¹² Exhibit 28 Silicon Valley Integrated Resource Plan Page 8 or 109 and Page 98 of 109

¹³ Exhibit 28 Silicon Valley Integrated Resource Plan Page 8 or 109 and Page 98 of 109

exceed the GHG target."¹⁴ 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)" 15

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 2,313 MTCO2e/yr every year for just the testing of the emergency generators. ¹⁶ None of that output from the emergency generators produces any useful energy nor is it stored in a battery. Over a 20-year period the project would emit over 46,000 MTCO2e. The emissions from the emergency generators are not regulated by any Climate Action Plan, CAP and Trade Program, Integrated Resource Plan, or any general plan policies.

¹⁴ Exhibit 28 Silicon Valley Integrated Resource Plan Page 8 or 109 and Page 98 of 109

¹⁵ Exhibit 505 Page 11 of 14 (PDF Page 24 of 594)

¹⁶ Exhibit 200 Page 173 of 352

As the IS /MND for the WDC states, "The total quantities of diesel fuel used for all the generators operating at full load would be approximately 8,171 barrels per year (bbl/yr) or 343,200 gallons per year." The output of those generators at 50 hours at 100 % load would be about 4,800 MWh per year. That energy is completely wasted. The energy could be stored in a battery energy storage system eliminating the waste of 343,200 gallons of diesel per year and 4,800 MWh of electricity.

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 the backup generators.

The project does not increase the use of renewable energy. The commission can mitigate this by requiring the applicant to employ biodiesel in the generators and storing the output in a battery energy storage system for later use at the data center.

The Projects has Substantial Impacts to Energy Resources

According to CEQA Guidelines Appendix F, "The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include decreasing overall per capita energy consumption." The Project increases overall per capita energy consumption. According to the IS/MND, "On an annual basis, the project would consume up to the maximum electrical usage of 700,800 MWh per year." The total energy use for Silicon Valley Power in 2019 was 3,729,345 MWh. 19 Addition of the power required to power the Walsh Data Center would increase per capita energy use in Santa Clara by approximately 18% per year.

Appendix F of the CEQA Guidelines lists other energy impacts that should be considered by the lead agency. The guidelines indicate that projects that increase peak demand could lead to a significant impact to energy resources. Projects that increase peak demand lead to additional resources being constructed. Projects that increase peak demand push up energy prices The evidence in the proceeding is that peak

¹⁷ Exhibit 200 Page 5.6-3

¹⁸Exhibit 200 IS/MND Page 5.8-9

¹⁹ Exhibit 512

demand in SVP's service territory was 587 MW in 2019.²⁰ The maximum electrical load of the WDC would be up to 80 MW.²¹ Data Centers are around the clock operations so the project can impact peak demand by 13%.

The WDC is just one of the six data centers in Santa Clara being reviewed by the commission. The peak demand for those six data centers totals almost 550 MW²² which would almost double SVP's current peak demand of 587 MW in 2019.²³ The cumulative impact to peak demand in SVP's service territory is significant.

Appendix F of the CEQA Guidelines lists as an environmental impact, "The effects of the project on local and regional energy supplies and on requirements for additional capacity." Silicon Valley Power currently has, "672 megawatts of carbon-free resources in our mix, out of our total of 978 MW." ²⁴ SVP's peak demand was 587 MW in 2019.²⁵ The total demand for the six data centers being reviewed in Santa Clara is 550 MW.²⁶ The 978 MW of supply SVP currently has is not enough to supply existing demand and another 550 MW of demand. Much of the 978 MW of SVP's supply is wind and solar which have lower net qualifying capacity as they are intermittent and not available around the clock to match the load profile of the data centers. Obviously, SVP will have to find additional resources to supply the WDC and the other data centers being located in Santa Clara which is a significant impact to SVP's current energy supplies.

Conclusion

The evidence shows that the project has significant impacts to energy resources. The evidence shows that the project individually and in conjunction with the other six Santa Clara data center applications being reviewed by the commission will have significant GHG emissions. Staff and applicant both rely on SVP meeting its GHG

²⁰ Exhibit 512

²¹ Exhibit 200 Page 7 of 352

²² Exhibit 300 Page 3

²³ Exhibit 512

²⁴ RT 5-27-2020 Page 26 of 154

²⁵ Exhibit 512

²⁶ Exhibit 500 Page 3

goals as proof there will be no significant impacts for GHG emissions which the evidence indicates SVP will not. Even the Silicon Valley Power Integrated Resource Plan, the plan that staff and applicant rely on 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."²⁷

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²⁷ Exhibit 28 Silicon Valley Integrated Resource Plan Page 8 or 109 and Page 98 of 109