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| Filer: | Robert Sarvey |
| Organization: | Helping Hand Tools filed by Robert Sarvey |
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**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA**

In the Matter of
McLaren Backup Generating Facility

Docket Number 17-SPPE-01

Helping Hand Tools (2HT) Request for Reconsideration of the Final Decision for the McLaren
Data Center.

Introduction

On December 7, 2018 the Committee for the McLaren Backup Generating Facility (MBGF) approved its proposed decision, granting a Small Power Plant Exemption (SPPE) for the MBGF. Pursuant to Section 25530 of the Warren Alquist Act and Section 1720 of the Commission's Rules of Practice and procedure 2HT hereby requests reconsideration of the Commission's December 7, 2018 decision granting an SPPE to the McLaren Data Center. Section 1720 (a) of the Commission's Rules of Practice and Procedure provides that, "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 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 decision is rife with legal and factual errors and misinterprets 2HT's primary arguments. The decision does not even correctly spell Helping Hand Tools acronym which is 2HT not H2T, as the decision incorrectly states 12 times. The decision adopts a method of calculating generating capacity that has never been used in any Energy Commission proceeding since the Commission's inception and lacks any statutory authority in the Commission's regulations. The method of calculation relies on an expected design PUE of 1.43 provided by the applicant, which is nothing more than an estimate. The decision commits factual error when it assumes that the NO₂ and diesel particulate air quality impacts have been evaluated under emergency operation with all 47 generators running simultaneously. The record demonstrates

that NO₂ and diesel particulate matter impacts have not been evaluated under emergency operating conditions. The evidence reveals that with just two diesel generators operating simultaneously the project will likely violate the Federal NO₂ standard which is a significant impact ignored by the decision.¹ The entire proceeding is tainted by a lack of adherence to the Commission's public participation, environmental justice requirements, and the rules of evidence. These matters were raised before and ignored by the commission, hence the need to request reconsideration to correct the factual and legal errors in the decision.

The Commission Rejected the Use of Data Center Load as the Proxy for Generating Capacity of a Data Center in the Santa Clara Data Center Proceeding.

Page 8 of the decision states, "*We recognize that in the Santa Clara decision cited by H2T, (sic) the Energy Commission used the approach of multiplying nameplate capacity times the number of generators. However, in that matter, the upper limit of Section 25541 was not in issue because the calculation only totaled 72 MW—well within the upper jurisdictional limit for consideration of an SPPE.*"² The decision mischaracterizes 2HT's argument about the calculation of the generating capacity determination in the Santa Clara Data Center. 2HT has consistently argued in this proceeding that the Energy Commission did not accept Santa Clara Data Centers maximum data center load of 49.1 MW as the generating capacity of the data center which would exclude the project from energy commission jurisdiction. Instead in the Santa Clara Data Center proceeding the commission rejected the load of the data center as maximum generating capacity, and instead used nameplate capacity of the 32 2.25 MW diesel generators as maximum generating capacity making the project subject to Energy Commission SPPE jurisdiction. 2HT's argument related to the Santa Clara Data Center has been mischaracterized. That is why 2HT submitted exhibit 306, which is the letter from CEC Executive Director Melissa Jones to the Santa Clara applicant. In that letter the CEC executive director explained that generating capacity is calculated under Section 2003 and did not allow the Santa Clara Data Center to avoid energy commission jurisdiction because the load of the Santa

¹ Commission Final Decision Page 70 of 361. "the operation of a pair of generators (with one located above the other and both having same stack exit heights and similar locations, or two adjacent generators) could cause eight hours of operation from two generators to impact a given receptor location and result in a significant impact for the 98th percentile (eighth highest value) for the NAAQS."

² Proposed Decision Page 8

Clara Data Center was only 49.1 MW which is less than the 50 MW which is required for Energy Commission Jurisdiction. In response to 2HT's assertion that the CEC rejected Santa Clara Data Centers maximum load as generating capacity, CEC Staff witness Matt Layton, who helped draft the Santa Clara Data center letter, stated at the recent status conference:

12 MR. LAYTON: I helped craft the Santa Clara letter
13 and I think we are inconsistent. That being said, I think I
14 was wrong in Santa Clara. **I don't know how to do data**
15 **centers. I'm not a data center expert**, but I've learned a
16 lot. And now staff strongly recommends that load is a way to
17 make a determination of generating capacity for data centers.
18 That's what we've done on Vantage 4, 5. That's what we
19 recommend on McLaren as well. If we went back and looked at
20 Santa Clara, we might come to the different conclusion.³

The CEC has never used generating capacity to determine the load of a project. CEC Staff cannot cite one example where the Commission used the load of a project to compute maximum generating capacity. Utilizing Section 2003 provides a consistent method of computing generating capacity where the load calculation method promoted by the applicant does not provide a consistent method to determine generating capacity of a project that is supported by the Energy Commission Regulations. In this proceeding the applicant has three different methods to compute generating capacity, which results in three different approximations of generating capacity. The applicant's capacity less redundant generation method produces a generating capacity of 97.4 MW.⁴ The applicants second method of computing generating capacity, the continuous rating method, results in a generating capacity of 92.51 MW.⁵ Lastly the applicant asserts maximum generating capacity of 98.6 MW as the projects maximum load assuming a design value for PUE is achieved of 1.43. Since this is nothing more than a design value there is no guarantee that the PUE will be achieved. In fact, the record indicates that the project engineer for this data center estimated the PUE at 1.5 which would result in a maximum generating capacity above 100 MW. The Energy Commission staff

³ TN 225108 Transcript of the 10-10-2018 Committee Status Conference Page 36 of 50 Lines 12-20

⁴ TN 224897 **VANTAGE DATA CENTERS' RESPONSE TO COMMITTEE'S NOTICE OF STATUS CONFERENCE AND FURTHER ORDERS** Page 11,12 of 50

⁵ TN 224897 **VANTAGE DATA CENTERS' RESPONSE TO COMMITTEE'S NOTICE OF STATUS CONFERENCE AND FURTHER ORDERS** Page 12 of 50

calculated the maximum capacity of the MBGS as 94.1 MW.⁶ None of these methods are consistent or comply with commission regulations.

2HT has consistently stated that the Energy Commission has already dealt with jurisdictional issues surrounding the generating capacity of multiple back up diesel generators at data center locations. The applicant for the Santa Clara Data Center tried to evade Energy Commission jurisdiction by claiming that the design of the data center would limit the 36 back up diesel generators output to 49.1 megawatts, thereby removing it from Energy Commission jurisdiction. Again, in that case the CEC Executive Director Melissa Jones sent the Santa Clara Data Center applicant a letter explaining that the 32 diesel generators had a combined output of 91.8 MW pursuant to Section 2003 and informed the applicant that the Energy Commission had jurisdiction. The executive director also recommended an AFC proceeding ***“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 projects emission, assess their impacts, identify feasible mitigation, and assess the potential health risks from this concertation of diesel engines.”***⁷

The Final Decision for the Santa Clara Data Center⁸ correctly applies Section 2003 of Title 20. The decision calculates the generating capacity as follows, *“Each backup generator has a capacity to generate 2,250 kilowatts, or 2.25 megawatts (MW), a total capacity of 72 MW.”*⁹ Staff’s proposal to utilize an ad hoc formula¹⁰ to compute the generating capacity of the MBGF at the data center design value has no support in the regulations and no support in any Energy Commission proceeding or any data center siting case.

The Decision adopts Mitigation Measure PD-1 which allegedly limits the demand of the McLaren data center to under 100 MW. First, the Energy Commission has no jurisdiction over the demand of the data center. The demand of the data center is outside the Commission’s jurisdiction. Secondly, the Commission has no verification mechanism to determine if the

⁶ TN 224909 Page 8 of 14

⁷ Attachment 1 Page 1 - Appendix F Pages 315-317 of 376 Project to Add 16 Emergency Backup Generators to the Santa Clara SC-1 Data Center Santa Clara, California Application for Small Power Plant Exemption Submitted to the California Energy Commission Submitted by Xeres Ventures LLC November 2011

https://www.energy.ca.gov/sitingcases/santaclara/documents/applicant/SPPE_Application/02_Application_Appendices_A-H.pdf Pages 315 of 376

⁸ Exhibit 304

⁹ Exhibit 304 Page 40 of 142

¹⁰ CEC Staff Witness Matt Layton

demand of the data center exceeds 100 MW, as the Commission has no meter on the electricity input to the data center, nor does it have any way of ensuring that the backup generators do not exceed 100 MW of demand. Each data center lessee has his own meter and contracts his own electricity contract. The condition is essentially meaningless, as there is no way for the commission to monitor or enforce it.

The projects NO₂ and diesel particulate matter impacts have not been modeled under emergency operation.

The decision states on page 15 that, “*We find that the Backup Project’s emissions of NO_x are not significant and will not violate any air quality standard or contribute substantially to an existing or projected air quality violation.*” The decision bases this on the mistaken assumption that the project’s NO₂ emissions have been modeled with all 47 generators operating at once. The evidence demonstrates that NO₂ air quality impacts have been modeled with only 1 diesel engine operating at once. As staff stated in its recent position statement,

“The Order states on page 5 that “ ... the potential impacts of the generators based on 50 hours per year per generator have been modeled.” While the statement is true, this modeling was done for carbon monoxide (CO) and toxic air contaminants. Short-term CO and acute Health Risk Assessments were based on all the engines operating at the same time for every hour of the 5 modeling years in the analysis. Chronic hazard index and cancer risk were based on all engines operating at the same time for 50 hours/year. **For 1-hour N02 (nitrogen dioxide) impacts, staff analyzed testing of each engine one at a time.**”

This factual error in the decision, that the projects NO₂ and diesel particulate matter impacts will not cause a significant impact, is based on the false assumption that these impacts have been modeled, when in fact, they haven’t. Staff instead argues that emergency operation is speculative so there is no need to model NO₂ and diesel particulate matter impacts under emergency operations. But staff’s argument is clearly false, as CO emissions have been modeled under emergency conditions with all 47 diesel backup generators running, so there is no reason that the same modeling cannot be performed for NO₂ and diesel particulate air quality impacts. The Commission Final Decision on Page 70 of 361 states, “*the operation of a pair of generators (with one located above the other and both having same stack exit heights and similar locations, or two adjacent generators) could cause eight hours of operation from two generators to impact a given receptor location and result in a significant impact for the 98th percentile (eighth highest*

value) for the NAAQS.”¹¹ The evidence is clear that just the operation of two of the diesel generators operating simultaneously will violate the federal NO₂ standard. Operation of all 47 generators at once has not been evaluated because CEC, “Staff contends that analyzing cumulative air quality impacts would be too speculative.”¹²

Potential GHG Emissions are Significant.

As with the other emission estimates for this project, CEC staff only considered engine testing and maintenance emissions for GHG emission estimates. Potential emergency use of the diesel fired engines was not evaluated. There is no limit on GHG emissions from the project under emergency operation. GHG emissions can be significant since there is no limit on the hours of operation of the project under the decision. Without a cap on fuel use there is no limit on GHG emissions during emergency operation and therefore these emissions are significant under CEQA.

Under normal operation according to CEC Staff in the initial study, “*With implementation of the efficiency measures included in the project in combination with the green power mix utilized by SVP, the project would comply with the City’s CAP, and would not conflict with plans, policies or regulation adopted for the purpose of reducing the emissions of GHG*”¹³ McLaren Data center has already responded to the BAAQMD which recommended the use of SVP Green Power. According to the applicant, “*In response to the portion of this comment that suggests the project applicant purchase Santa Clara Green Power from SVP, it is important to note that the project would be a **multi-tenant data center with each tenant independently purchasing electricity measured by separate sub-meters.** The project applicant has confirmed that for its own offices and building support spaces, the applicant will purchase Santa Clara Green Power. In addition, the applicant will offer the purchase of Santa Clara Green Power as an alternative for its tenants as part of its commitment to reducing GHG from electricity use, **but cannot guarantee that every tenant will choose to enroll in the program.***”¹⁴ The CEC Staff’s mitigation measure is ineffective because it is unenforceable and the applicant is operating a multi-tenant data center, where each lessee independently purchases their electricity. The

¹¹ Decision Page 135 of 361 Initial Study Page 5.7-15

¹² Decision Page 15

¹³ Decision Page 135 of 361 Initial Study Page 5.7-15

¹⁴ santaclaraca.gov/home/showdocument?id=51500 Page 4 of 13

mitigation measure is unenforceable. Under emergency operation GHG emissions are not limited and have not been evaluated because CEC, “*Staff contends that analyzing cumulative air quality impacts would be too speculative.*”¹⁵ The final decision concurs with 2HT that emergency operation is not speculative. The final decision states, “*We agree with Staff that the likelihood of the Backup Project being required to run is unlikely. However, unlikely operation does not equal speculative impacts.*” Despite this CEC staff has not analyzed GHG emissions under emergency operation to determine if they are significant.¹⁶

Public Participation and Environmental Justice

The Energy Commission failed to engage the general public, much less the confirmed environmental justice community that will be impacted by this proposal. The Commission failed to hold the traditional Informational Hearing and Site Visit.¹⁷ An informational hearing is sponsored by the Energy Commission to inform the public about the project and to invite public participation in the review process. Staff never filed an issues identification report for the public.¹⁸ The issues identification report is published to aid the parties and the public in understanding the project and potential environmental impacts. Staff never held any meetings for the public in Santa Clara to provide and exchange information with the public.¹⁹ No document handling memo was sent out to the librarians informing the public where the proceedings documents could be accessed. No project materials were provided to the public in Spanish or other appropriate foreign languages. No hearings were held in Santa Clara. No workshop on the initial study was conducted in Santa Clara. All of the customary procedures for Energy Commission proceedings

¹⁵Decision Page 15

¹⁶ Final Decision Page 14 (Page 20 of 361)

¹⁷ Title 20 § 1709.7. Informational Hearing, Site Visit, and Schedule

(a) Within 45 days after the acceptance of a notice of intent or application for certification, the presiding member shall hold one or more informational hearings and site visits as close as practicable to the proposed sites. Notice of the first informational hearing shall comply with section 1209, shall include information on how to participate in the proceeding, and shall be provided to all persons identified by the applicant under section (a)(1)(E) of the information requirements in Appendix B.

¹⁸ Title 20 § 1709.7. Informational Hearing, Site Visit, and Schedule (b) At least five days before the first informational hearing, the staff shall file a written statement summarizing the major issues that the staff believes will be presented in the case.

¹⁹ Title 20 § 1207.5. Staff Meetings; Purposes.

(a) At any time, staff may initiate voluntary meetings with the applicant, other parties, interested agencies, stakeholders, or the public on matters relevant to a proceeding. Such meetings may include workshops, site visits, or other information exchanges.

designed to engage the public were not performed. The environmental justice community within 400 feet of the project was not engaged, in violation of the environmental justice requirements normally conducted for Energy Commission proceedings.

The Commission's December 15 Notice of Determination is Erroneous.

On December 15, 2018 the Commission filed its notice of determination with the Resources Agency. In the notice of determination it states that, "*Mitigation measures were not made a condition of the approval of the project.*" That is incorrect because the Final Decision contains mitigation measure PD-1.²⁰

Conclusion

The Commission has failed to follow its own regulations in computing the generating capacity of the MBGF and has allowed it to proceed through the SPPE process illegally. While the Commission Decision agrees that emergency operation of the MBGF is not speculative, the Commission has failed to evaluate emergency operations because CEC staff insists that emergency operation is speculative. The Commission Decision ignored substantial evidence in the record that the MBGF will cause an exceedance of the national NO₂ standard with only two of the 47 generators operating. The NO₂ and diesel particulate matter impacts from operation of all 47 generators simultaneously has not been analyzed by anyone and just the operation of two of the generators simultaneously can result in a significant impact. Because the project has no limits on GHG emissions from emergency operation, GHG emissions are significant. The decision is erroneous and unlawful and the Commission must now require the applicant to file an

²⁰ **Condition of Exemption PD-1. Notice of Events Affecting Electrical Demand of the Facility.**

The granting of the Small Power Plant Exemption for the McLaren Backup Generating Facility Project is specifically conditioned on the existing configuration of the McLaren Data Center and that its demand for electricity does not exceed 100 megawatts. In the event that the Project Owner seeks to alter the configuration or equipment of the McLaren Data Center so that the demand for electricity would then exceed 100 megawatts, the Project Owner shall notify the Energy Commission of any such planned change to the Data Center.

Verification. The Project Owner shall notify the Executive Director of the California Energy Commission of any proposed change to the existing configuration of the McLaren Data Center that would result in an increase of demand over 100 megawatts at least ninety (90) days prior to the change being effective. (Final Decision Page 9, Page 15 of 361)

Application for Certification, where a complete environmental analysis and appropriate public outreach can be conducted in the environmental justice community.

Respectfully Submitted,

_____/_____
Rob Simpson Director 2HT
Original signed and in possession of 2HT
501 W. Grant Line Rd, Tracy CA 95376
209-835-7162