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STATE OF CALIFORNIA

Energy Resources **Conservation and Development Commission**

In the Matter of:	DOCKET NO. 19-SPPE-03
Application For Small Power Plant Exemption for the SEQUOIA BACKUP GENERATING FACILITY	DECLARATION OF MARCELA DELONG

I, Marcela DeLong, declare as follows:

- 1. I am presently employed as a Project Architect, Senior Associate for Corgan.
- 2. I have been retained by CyrusOne, the sole owner of C1-Santa Clara, LLC to be the Project Manager for the permitting of the Seguoia Backup Generating Facility and the Seguoia Data Center.
- 3. A copy of my professional qualifications and experience was included with the previously filed Opening Testimony Package and is incorporated by reference in this Declaration.
- 4. I prepared the attached Supplemental Reply Testimony to Intervenor Sarvey's Cross-Examination Questions for the Sequoia Backup Generating Facility CEC Docket Number 19-SPPE-03, dated May 4, 2021 (TN 237644).
- 5. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
- 6. 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.

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 at Dallas, TX on May 05, 2021.

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

Application For Small Power Plant Exemption for the SEQUOIA BACKUP GENERATING FACILITY DOCKET NO. 19-SPPE-03

DECLARATION OF STEVEN BRANOFF

I, Steven Branoff, declare as follows:

- 1. I am presently employed as Principal with Ramboll.
- 2. A copy of my professional qualifications and experience was included with the previously filed Opening Testimony Package and is incorporated by reference in this Declaration.
- I prepared the attached Supplemental Reply Testimony to Intervenor Sarvey's Cross-Examination Questions for the Sequoia Backup Generating Facility CEC Docket Number 19-SPPE-03, dated May 4, 2021 (TN 237644).
- 4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
- 5. 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.

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 at <u>Albany, California</u> on May_4_, 2021.

Steven Branoff

C1-SANTA CLARA, LLC SEQUOIA BACKUP GENERATING FACILITY SUPPLEMENTAL REPLY TESTIMONY TO INTERVENOR SARVEY'S CROSS-EXAMINATION QUESTIONS

I. <u>Name</u>: Marcela DeLong Steven Branoff

II. <u>Purpose</u>:

Our Supplemental Reply Testimony addresses the Cross-Examination Questions submitted by Intervenor Sarvey (TN 237644) that were directed to C1 related to the previously proposed Condition of Exemption PD-3 for the Sequoia Backup Generating Facility (SBGF) CEC Docket 19-SPPE-3. Additionally, Mr. Sarvey asked several cross-examination questions comparing potential noise generation from the Great Oaks South Backup Generating Facility (GOSBGF) to the SBGF. Even though these questions were not directed to C1, we have provided a response for use by the Committee at its discretion.

III. Qualifications:

<u>Marcela DeLong</u>: I am presently employed as Project Architect, Senior Associate with Corgan, the project architecture firm hired by CyrusOne, the owner of C1-Santa Clara, LLC (C1). I have been employed by Corgan for the past 8 years. I have a master's degree in Architecture from Ohio State University, and I have 8 years of experience developing critical infrastructure projects such as data centers.

I am the Project Manager for the permitting of the SBGF and the Sequoia Data Center. I caused to be prepared and reviewed the Application For SPPE, as well as the post-filing information, data responses, and supplemental filings.

<u>Steven Branoff:</u> I am presently employed as a Principal at Ramboll and have been for the past 20 years. I have a Master of Science Degree in Environmental Engineering from the University of California at Berkeley and I have 25 years of experience in conducting air quality and public health analyses within California and other western states.

I have been engaged by C1-Santa Clara, LLC (C1) to prepare the Bay Area Air Quality Management District Authority to Construct applications and the air quality and public health analyses for development of the SBGF. I prepared or caused to be prepared the Air Quality section of the Application For SPPE and Air Quality Technical Reports, as well as the post-filing information, data responses, and supplemental filings.

Detailed descriptions of our qualifications are presented in our resumes which were included in Attachment A to C1's Opening Testimony package (TN 232420).

To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

IV. Exhibits

In addition to this written testimony, we will be sponsoring the exhibits listed on C1's Proposed Additional Exhibit List which will be docketed on or before May 7, 2021.

V. Opinion and Conclusions

Intervenor Sarvey Cross-Examination Questions

8) In the Great Oaks South proceeding the applicant has filed a new noise assessment for the application of SCR to the backup diesel generators. (Exhibit 317) The noise assessment states on page 1, "Noise data provided for generators equipped with the Tier 4 treatment indicates an increase in sound power level of about 5 dBA and a substantial shift in sound energy from higher to lower frequencies. Additionally, Tier 4 treatment would increase the height of the exhaust stack, the location where most noise originates. No other aspects of the project are anticipated to be affected." What is the expected increase in sound from application of the SCR? If there is no expected sound increase why would this project not have an increase in sound with application of SCR like the GOSBGS?

- 9) According to the updated sound analysis performed for application of SCR at the Great Oaks South Data Center, "This change in the frequency spectrum of generator noise would affect how the noise propagates throughout the site vicinity as lower frequency sound propagates further by diffracting around structures and through receiving less attenuation provided by absorption in the air." Where is staff's revised noise analysis to reflect the change in frequency spectrum of the generator noise form the application of SCR.
- 10) What is the increase in stack height with the application of SCR for the project? If there is no increase in stack height why is this project different than the Great Oaks South project?

Response to Questions 8, 9 and 10: Mr. Sarvey's question is irrelevant as it compares two projects with very different configurations and ignores the fact that C1 submitted actual sound level data provided by the equipment manufacturer for the specific application to SBGF as part of its Revised Project Description (TN 236429).

The Great Oaks South Backup Generation Facility (GOSBGF) is utilizing 33, 3.25 MW engines manufactured by Cummins. The pollution control equipment necessary to meet Tier 4 emission standards is provided by Miratech, but it is specifically configured to work with the engines proposed for the GOSBGF. Miratech provided specific sound level data for GOSBGF's specific configuration.

The SBGF is utilizing smaller engines designed and built by a different manufacturer and that will be installed below grade. Specifically, the SBGF will install 54, 2.25 MW engines manufactured by MTU and surrounded by MTU-designed noise enclosures. While the pollution control equipment is provided by Miratech, it is specifically configured for the SGBF engines. Miratech provided sound level data for the SBGF as

contained in the Revised Project Description (TN 236429). As described in TN 236429, each generator will be installed below grade and the stack tip elevation remains unchanged.

Therefore, the information relating to potential noise differences between the GOSBGF and the SBGF is irrelevant because the simplistic comparison expressed in Intervenor Sarvey's questions is like comparing an apple to an orange and ignores that C1 submitted actual noise data from Miratech for the SBGF proposed engines and configurations in its Revised Project Description. That noise data demonstrates that the noise generated from the Tier 4 compliant generators will not be different from the noise analyzed for the previous Tier 2 configurations.

14) The California Public Utilities Commission just approved the use of backup diesel generators in demand response programs for the upcoming several years in Decision D.21-03-056. The decision provides payment of \$1,000 per MWh for energy from backup diesel generators. Does the applicant intend to participate in this program? Applicant has proposed condition PD-3 as follows:

Condition of Exemption PD 3

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

15) Does the applicant still propose PD-3?

Response to Questions 14 and 15: Intervenor Sarvey mischaracterizes C1's position on Condition of Exemption PD-3. As explained in its

response to the Commission considering its motion to remand the SBGF back to the Committee in September 2020, C1 stated the following:

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

As discussed above, CARB makes the unreasonable and unsupported assumption that the energy agencies will remain stagnant in the face of the most recent capacity shortfalls, forcing the Governor to issue similar Emergency Proclamations routinely to solve the capacity shortages. 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. That crisis was caused by a variety of factors far more complex than the current capacity shortage that may occur during extreme heat events like those recently experienced.

<u>However, if the Commission is not as confident as C1,</u> <u>C1 will accept the following Condition of Exemption that</u> <u>would prevent it from ever voluntarily operating its</u> <u>emergency backup generators for load shedding.</u> (Emphasis added)

C1 offered, and continues to offer, the completely unnecessary Condition of Exemption PD-3 only if the Commission believes that the State's energy policies will require reliance on private backup generating facilities to balance the electrical grid. C1 believes this is unrealistic and ignores actions already taken by the energy agencies. It is also important to note that this condition was offered in September 2020 to avoid the enormous delay C1 has suffered in this proceeding, without effect. C1 has no plans to participate in the CPUC demand response program. C1 has configured its generators to only provide emergency backup generation during times of utility curtailment.