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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-3

**C1-SANTA CLARA LLC'S
RESPONSE TO COMMISSION'S
RECONSIDERATION OF ITS RULING
ON THE MOTION TO REMAND TO
COMMITTEE**

INTRODUCTION

C1-Santa Clara LLC (C1) hereby files this response to the Commission's reconsideration of its ruling to remand the Sequoia Backup Generating Facility (SBGF)¹ back to Committee made at the September 9, 2020 Commission Business Meeting (Remand Ruling). This Response is made pursuant to the Notice of Hearing to Reconsider the Motion to Remand.² C1 thanks the Commission for providing an opportunity to file this response and for noticing a hearing to reconsider its ruling on the motion to remand. C1 respectfully requests that the Commission vacate the order to remand the Sequoia Data Center (SDC) proceeding to Committee and immediately proceed during the same Business Meeting to adopting the Proposed Decision prepared by the Committee³.

¹ The SBGF is the backup generating facility for the Sequoia Data Center. For purposes of this Opposition, the term "SDC" includes both the SDC and the SBGF.

² TN 234821 as modified by TN 234898 and TN 235020.

³ TN 234416, Committee Proposed Decision for the Sequoia Data Center SPPE, hereinafter referred to as the "Proposed Decision."

C1 appreciates the California Air Resources Board's (CARB) promptly providing written information by the agreed upon date of October 15, 2020, especially in light of the importance of resuming the schedule for this needed project. CARB's oral comments at the September 9, 2020 Commission Business Meeting⁴ and its written information docketed on October 15, 2020⁵, however do not provide sufficient accurate or new evidence justifying a reopening of the evidentiary record. The provided information does not rise to the level of new analyses, and is simply last-minute argument critiquing the Proposed Decision and Initial Study/Mitigated Negative Declaration (IS/MND). As described more fully below:

- All of CARB's contentions (emergency operation modeling, appropriate thresholds of significance and offsets, alternative technologies, and Best Available Control Technology (BACT)) mirror the issues raised by Intervenor Sarvey and therefore were already adequately considered and evaluated by the Commission Staff and the Committee in the Proposed Decision and IS/MND.
- CARB's assertion, that data center emergency generators will be deployed more frequently for load shedding and Public Safety Power Shutoff (PSPS) events than the types of emergencies analyzed in the Proposed Decision and IS/MND, is an incorrect and unreasonable assumption, for which CARB provides no analysis or support.
- CARB improperly conflates two California Environmental Quality Act (CEQA)⁶ concepts: the requirement to evaluate foreseeable actions with the prohibition of conducting such analysis using speculative assumptions and methods.
- CARB provided no analysis demonstrating that the SDC would result in a significant, unmitigated environmental impact authorizing the Commission to impose an alternative technology pursuant to CEQA.
- CARB provided no analysis to support that any of its proposed alternative technologies are feasible and can meet the SDC objectives.
- Overall no analyses were provided, as promised, to replace the analyses CARB criticizes.
- CARB's comments do not reflect the fact that the SDC was deliberately sited on a previously disturbed site where demolition had occurred; in an area where there are no sensitive receptors that are close to the site; in an area that is zoned for industrial use; and adjacent to an airport. C1 has selected this brownfield site for the SDC to reduce potential impacts to the surrounding community.

⁴ TN 234840, Excerpt from September 9, 2020 Business Meeting, Item 13.

⁵ TN 235271, CARB's additional written comments filed on October 15, 2020.

⁶ Public Resources Code Section 21000 et. seq.

CARB'S COMMENTS AND FAIR PROCESS

The primary basis for the Commission's Remand Ruling was the oral comments from Mr. Craig Segall of CARB made at the September 9, 2020 Commission Business Meeting. Mr. Segall promised to provide additional analyses critical to this proceeding.

We believe we can do so expeditiously as a team and CARB can also provide analyses in the records for this proceeding this fall.⁷

I am comfortable saying that CARB could file fairly detailed analyses to that effect within a month or two if needed on this question.⁸

Mr. Segall's promise of additional analyses prompted the Commission to remand the proceeding back to the Committee. CARB filed additional written information on October 15, 2020, but such information does not contain the promised analyses. CARB's additional filing is an unsubstantiated critique of the Staff approach for the IS/MND.

CARB could and should have provided this critique during the public comment period on the IS/MND, at evidentiary hearings, or in writing prior to the September 9, 2020 Commission Business Meeting. If CARB had participated at the appropriate time, as it currently is in the Great Oaks South SPPE Proceeding, the parties could have discussed these items and Staff could have addressed them directly in the IS/MND and/or its Response to Comments on the IS/MND, without all of the unnecessary delay. If CARB was still unsatisfied, the parties could have adjudicated any remaining disagreements, if applicable, at evidentiary hearing.

Instead of working through the numerous opportunities offered by the CEC process employed for the SDC, CARB is requesting the SDC project be delayed so that it can "catch up" with the work that CEC Staff, the Bay Area Air Quality Management District (BAAQMD), and applicant have done in this and prior data center SPPE proceedings undertaken since 2017. CARB failed to participate in any aspect of the SDC proceeding even though it was notified of the proceeding in January 2020⁹, and was working with

⁷ TN 234840, Excerpt from September 9, 2020 Business Meeting, Item 13, page 20, lines 20-21.

⁸ Ibid., page 24, lines 21-24.

⁹ Exhibit 200, Staff's Proposed IS/MND, Appendix C, page 13; CARB was notified of the IS/MND via the State Clearing House in January 2020 but failed to file comments.

the BAAQMD as early as March 2020¹⁰. CARB's justification for waiting until the September 9, 2020 Business Meeting to raise its concerns was articulated by Mr. Segall.

Recent events underscore the need for analyses to ensure that backup generators are as clean as possible. ***The backup power system are being called upon more frequently due to public safety power shutoffs and for load managements to avoid blackouts.***¹¹ (Emphasis added)

Mr. Segall is basing the late timing of CARB's participation in this proceeding on the recent Heat Storm and Extreme Heat Event addressed in the latest Governor's Proclamations issued on August 16, 2020 and September 3, 2020¹² and on PSPS events conducted by Pacific Gas & Electric (PG&E). Mr. Segall claims that these events caused data centers to shed load and engage emergency generation, but provided no facts on how such events occurred or why such events are different than the types of emergencies already adequately evaluated by Staff in IS/MND and considered by the Committee in its Proposed Decision. Mr. Segall further speculates that these specific events will be more frequent but provided no support for this speculation at the September 9 Commission Business Meeting or in the additional information filed on October 15, 2020. CARB did not provide any basis for these assumptions in its additional information filed on October 15, 2020.

As discussed below, each of CARB's contentions mirror those of Intervenor Sarvey and were thoroughly adjudicated in this proceeding. Therefore, nothing in CARB's oral testimony or subsequently filed written information is new or unique that would warrant reconsideration of the Proposed Decision or remanding the SDC project back to Committee. Without new analyses, to do so would be arbitrary and capricious, would reward late participation, and be fundamentally unfair to C1 and Staff, who appropriately followed the Commission process for over a year. As discussed below, CARB's reasoning for being allowed to participate and delay the SDC project – more emergency operation due to PSPS and load shedding – is not a reasonable assumption and not supported by any of the materials provided by CARB.

Lastly, CARB's comments are not specific to the SDC project; they are general in nature and apply to the way the Commission analyzes data centers. CARB recently

¹⁰ TN 235271, CARB's additional comments, page 1.

¹¹ TN 234840, Excerpt from September 9, 2020 Business Meeting, Item 13, page 19, lines 21-25.

¹² A copy of the Governor's Proclamations are included as Attachment 1.

participated in a Status Conference for the Great Oaks South Backup Generating Facility (GOSBGF) and stated it will provide similar input to what it will be submitting for the SDC.¹³ CARB's input would be timely in the GOSBGF. Staff has proposed a workshop with CARB on November 17, 2020 where CARB, Staff and Applicant experts would be the most appropriate way to understand and deal with CARB's broad technical concerns. This approach would allow Staff to appropriately evaluate the technical concerns and address them in Staff's CEQA analysis for GOSBGF and other new data center applications.

CARB has not shown why the SDC at this late stage must be delayed at this point to address its general concerns. The initial Remand Ruling hinders the immediate opportunity to put to work a large construction force and create hundreds of jobs to construct this essential facility during the economic turndown. The Remand Ruling is unfairly punitive to C1, considering the last-minute participation of CARB regarding SDC and that there are other proceedings in which CARB is appropriately participating at the correct analytical phase of the proceedings.

REBUTTAL OF CARB'S SPECIFIC CONTENTIONS

I. Neither CARB's assertions at the September 9, 2020 Business Meeting nor the material it filed on October 15, 2020 provides sufficient evidence to reopen the evidentiary record to modify the Proposed Decision and, therefore, the remand to the Committee is not warranted.

The reason for the Commission to remand the SDC to the Committee would be to reopen the evidentiary record. The Commission should apply a rigorous standard for reopening the evidentiary record in a siting proceeding and should carefully evaluate CARB's assertions at the September 9, 2020 Business Meeting and its written comments as to whether they meet the standards required for new evidence.

Section 1212 (b) (E) (2) of the Commission Regulations¹⁴ states in part:

Parties may move to exclude information from the hearing record on the

¹³ TN 234905 9/23/20 RT 13-16. In addition CARB's written comments filed in this proceeding reference project information about the GOSBGF (previously approved, City of San Jose) as it appears CARB may be filing the same comments in the GOSBGF.

¹⁴ Title 20, Division 2 of the California Code of Regulations (CCR), hereinafter referred to as the Commission Regulations.

ground that it ***is not relevant, is duplicative of information already in the record, or on another basis***. If the presiding member grants such a motion, the information shall be excluded from the hearing record. While the hearing need not be conducted according to technical rules relating to evidence and witnesses, questions of relevance and the inclusion of information into the hearing record shall be decided by the presiding member ***after considering fairness to the parties, hearing efficiency, and adequacy of the record***.

Section 1212 (c) (1) of the Commission Regulations requires the decision to be based on evidence in the hearing record.

Decisions in adjudicative proceedings ***shall be based on the evidence in the hearing record***, explain the basis for the decision, and shall include but need not be limited to all legally-required findings of fact and conclusions of law. (Emphasis Added).

Section 1212 (c) (2) of the Commission Regulations states:

A finding may be based on ***any evidence in the hearing record***, if the evidence is the sort of information on which responsible persons are accustomed to relying on in the conduct of serious affairs. ***Such evidence does not include, among other things, speculation, argument, conjecture, and unsupported conclusions or opinions***. The committee or commission shall give appropriate weight to information in the record as allowed by law. (Emphasis Added)

Therefore, using the above cited regulatory guidance, the Commission should reconsider its Remand Ruling using the following analytical steps.

1. The Commission should first determine whether CARB's oral and written information and assertions meet the Commission Regulation definition of evidence. If they do not constitute evidence, they can be accepted into the record as public comment but cannot be relied upon to support a finding.
2. To determine whether CARB's oral and written information and assertions are evidence, the Commission should determine whether they are speculation, argument, conjecture, or unsupported conclusions and opinions.

3. If the Commission determines some of the comments are evidence, the Commission should consider whether they are duplicative or irrelevant to SDC proceeding.
4. Lastly, the Commission should consider the fairness to the parties, the efficiency of the hearing and the adequacy of the record as it now exists.

As detailed in the sections below, all of CARB's assertions are:

- ***Duplicative as they were raised by Intervenor Sarvey and thoroughly adjudicated in the proceeding.***
- ***Speculation, argument, conjecture, and unsupported conclusions or opinions, and are therefore Section 1212 (c) (2) prohibits its use as evidence or the basis of any finding in the decision; and***
- ***Irrelevant to the proceeding.***
-

The Commission allowed CARB additional time by delaying the SDC proceeding for the sole purpose of allowing it to provide analysis that could be used as evidence, yet CARB's information does not constitute evidence and is duplicative. It would be fundamentally unfair to C1 and to Staff to allow reopening of the evidentiary record for the purposes of granting CARB additional time to develop evidence when it has already been provided six week, it had actual knowledge of the SDC proceeding, and it failed to participate in any part of the process until the last minute. Therefore, nothing in CARB's oral or written comments require or warrant reopening the evidentiary record and remanding the SDC to the Committee and the Commission should reject any request for additional time for CARB to develop analyses.

II. The extreme heat events identified in the Governor's Proclamations did not cause the wholesale deployment of emergency generators to run voluntarily and only approximately 12 MW of data centers were forced to run due to actual involuntary curtailment.

It is important to note that it is an extremely infrequent event for the Governor to suspend permits, regulations and/or laws prohibiting or restricting the use of emergency backup generators. Existing law only allows an owner to operate the emergency backup

generators for testing and maintenance or during an actual emergency. An emergency is defined as an unforeseeable (to the owner) loss of utility power to the owner's facility¹⁵. Therefore, in order for an owner to be allowed to voluntarily shed utility load and operate the facility using emergency backup generators, the laws or permit conditions restricting such use had to be suspended. Before the August event, the last time this occurred was during the energy crisis in 2001.

On August 17, 2020, after the first extreme heat event, Governor Newsom sent a letter to the Commission, the California Public Utilities Commission (CPUC), and the California Independent System Operator (CAISO), collectively the "energy agencies", requesting an explanation of the disruption to electrical energy supply, among other things¹⁶. On August 19, 2020, the energy agencies responded to the Governor, identifying "that capacity shortfalls played a major role in the CAISO's ability to maintain reliable service on the grid"¹⁷. The energy agencies stated that in response to the capacity shortfalls, "the CEC coordinated with data center customers of Silicon Valley Power to move **approximately 100 MW of load to backup generation facilities onsite**" (emphasis added).

CARB's assertion that these events would lead to air quality and public health impacts from emissions from generator deployment relies on the incorrect assumption that a large amount of backup generator deployment actually occurred during the recent extreme heat events. It has been estimated that approximately 500 MW of emergency backup generation for data centers exists in the Silicon Valley Power (SVP) service area. To put the event of August 17, 2020 in perspective, the 100 MW of voluntary load shedding from data centers identified by the energy agencies¹⁸ represents approximately 20 percent of the total load capacity - not the whole scale deployment of generation assumed by CARB. The only involuntary curtailment occurred when CAISO ordered SVP to curtail up to 13 MW for 30 minutes on August 14, 2020¹⁹. See Exhibit 4, attached hereto. Of the 13 MW, 12 MW was curtailment of data centers.²⁰ In addition, according to BAAQMD's Diesel Free by '33 program²¹, BAAQMD estimates that there are approximately 7600 stationary diesel engines in the Bay Area. If we assumed that

¹⁵ 13 CCR Section 2453(m)(4)(E)(i)

¹⁶ A copy of the Governor's August 17, 2020 correspondence is provided herein as Attachment 2.

¹⁷ A copy of the energy agencies collective response to the Governor dated August 19, 2020 is provided herein as Attachment 3.

¹⁸ Attachment 3, page 4.

¹⁹ A copy of an email confirming CAISO Order for SVP to Curtail 13 MW on August 14, 2020 for 30 minutes is provided herein as Attachment 4.

²⁰ Personal Communication with Kevin Kolnowski, Chief Operating Officer of Silicon Valley Power.

²¹ Exhibit 23, page 4.

the average size of generator was 0.5 MW, the Bay Area would represent a potential capacity of approximately 3800 MW, of which only 100 MW, only 2.6 percent, is known to have been voluntarily deployed during the August 14th event.

It is also extremely important to note that the data centers that provided the 100 MW of capacity, ***voluntarily elected to participate in the load shedding program at great risk to customers solely because the Commission requested they do so.*** Other than the handful of generators (12 MW) that operated on August 14, 2020 due to CAISO's order to SVP forcing curtailment, none of the emergency generators would have been deployed in SVP's service territory were it not for the request of the Commission. This voluntary deployment arranged by the Commission allowed SVP's resources to be used elsewhere to minimize rolling blackouts in areas where there was a capacity shortfall. As the Proposed Decision concluded, SVP operates a very reliable system and had sufficient capacity to avoid curtailment from either of the two extreme heat events covered by the Governor's Proclamations. In addition, the uncontested evidentiary record contains sworn testimony at the evidentiary hearing from SVP that during ***all prior PSPS events to date, not a single backup generator was deployed*** within SVP's service territory.²²

CARB has assumed that the extreme heat events and PSPS events caused and would continue to cause widespread deployment of emergency backup generators. This is not a reasonable assumption and CARB did not support this assumption with any analysis. CARB did not provide a probability analysis demonstrating that the extreme heat events and the subsequent Governor's Proclamation would occur again. CARB did not provide any evidence of which generators operated, at what loads, and for how long, and whether they did so voluntarily or because the data centers were curtailed. CARB did no analysis of why the electricity grid had a capacity shortage and the likelihood such capacity shortages could and would likely be resolved. CARB did not provide any analysis to rebut the evidence in the record that to date none of the data centers in SVP's service territory had to involuntarily switch to emergency generators due to a PSPS event. Further, CARB fails to explain to the Commission how it would generate such an analysis in the future.

Therefore, the contention that future extreme heat events and PSPS events would cause any data center emergency generator within SVP's service territory to operate is ***speculation, argument, conjecture, and unsupported conclusions or opinions, and are therefore Section 1212 (c) (2) prohibits its use as evidence or the basis of***

²² TN 233421 6/5/20 RT 50:9-11

any finding in the decision. Since this contention cannot be used as evidence, it is not sufficient to support a motion to reopen the evidentiary record or to affirm the initial Remand Ruling.

III. Emergency operations of all types are very infrequent within SVP's service territory and modeling of emergency operations requires speculative assumptions.

CARB improperly conflates two CEQA concepts: the requirement to evaluate foreseeable actions with the prohibition of conducting such analysis using speculative assumptions and methods. CARB is correct that if an action or consequence is foreseeable CEQA requires the environmental analysis to evaluate it. For the SDC (and all data centers with emergency backup generators), emergency operations are foreseeable and must be evaluated. However, CEQA prohibits conducting analyses using speculative assumptions and methods. The IS/MND and the Proposed Decision treated emergency operations of the generators as foreseeable and evaluated whether they would cause significant impacts. That evaluation involved a careful study of the SVP electric system and its reliability²³. The Staff conducted a thorough analysis of technical components of SVP's system²⁴, evaluated the history of outages²⁵ and the upgrades and projects SVP undertook to remedy potential reliability issues²⁶. Staff used information about the system to conduct a probability analysis of the likelihood of emergency conditions that could lead to operation of emergency generators.²⁷ The Staff concluded that, although it was possible for generators to be deployed during an emergency outage, such generation was extremely unlikely and infrequent²⁸. That analysis is adequate, appropriate, and legally sufficient under CEQA. The analysis is based on historical evidence to support that emergencies have been and continue to be infrequent and of short duration, which in turn supports the conclusion that any such operations would be unlikely to expose receptors to substantial concentrations of criteria air pollutants²⁹.

²³ Appendix A to the Proposed Decision, Staff's IS/MND, Appendix B.

²⁴ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-27-32.

²⁵ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-28-31, Appendix B.

²⁶ Appendix A to the Proposed Decision, Staff's IS/MND, Appendix B.

²⁷ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-30-31.

²⁸ Ibid.

²⁹ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-27-33.

Intervenor Sarvey contended that Staff should engage in air quality modeling analysis of emergency operations³⁰. CARB has reiterated that exact contention in its written comments and similar to Intervenor Sarvey offers no such analysis or specific direction on how to conduct such analysis without speculation. The reason that Staff and the Commission did not conduct an air quality modeling assessment for emergency operations is that, although operation was foreseeable, the analysis involved speculative assumptions and methodology making the result of the analysis speculative and not meaningful³¹. In fact Staff described doing an air quality modeling analysis for emergency operations for the Laurelwood Data Center Project and found specifically because of the speculative assumptions, the modeling effort yielded no meaningful data.³² This issue was thoroughly adjudicated with written and oral testimony at evidentiary hearing subject to extensive cross-examination³³. This issue constitutes the bulk of the evidentiary record. The Proposed Decision is based on the evidence in the record and concludes that modeling of emergency operations requires numerous speculative assumptions.

When the Backup Generators operate in the event of a power outage to the Data Center, they will emit criteria air pollutants. Staff typically evaluates the impact of criteria pollutant emissions using modeling, but in the case of emergency operations, found that the numerous assumptions that must be made in order to conduct such a modeling analysis render the results of any such analysis speculative. These assumptions include the frequency of operation of the Backup Generators; the length of time the Backup Generators would operate; the load at the time of the outage and thus the number of Backup Generators that must be run; the location of the specific generators that would run; and the meteorological and background air quality conditions during the operation of the Backup Generators.¹⁵⁸ The IS/PMND further indicated that modeling results can be highly sensitive to even minor adjustments such as the number and combination of standby generators that would operate and the locations of their stacks.¹⁵⁹

³⁰ Exhibit 303, pages 5-9.

³¹ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-27-28; 6/5/20 RT 130-134 Testimony of Jacqueline Record; 145-149, Testimony of Brewster Birdsall.

³² 6/5/20 RT 133; 169-170

³³ 6/5/20 RT 130-134; 145-149; 166-177

Additionally, the Committee recognized that emergency operations were highly unlikely within the SVP service territory.

In the IS/PMND, Staff also pointed out that emergency operations are highly unlikely, testifying that the risk of an outage at any data center within the SVP service territory has historically been 1.6 percent per year.¹⁶⁰ The IS/PMND noted that the historical data indicates that any future outage would likely be of short duration, and thus that potential ambient air quality impacts would similarly be short-term.¹⁶¹ The IS/PMND then concluded that the number of assumptions that would need to be made to evaluate the impacts associated with operation of the Backup Generators render the results too speculative to be meaningful and concluded that such an analysis is not required under CEQA.¹⁶²

Ultimately, after hearing challenges by Intervenor Sarvey to Staff's analysis and rationale at evidentiary hearing and in briefing (exactly the same challenges contained in the CARB written comments), the Proposed Decision correctly concluded:

In sum, we find there is evidence supporting the IS/PMND conclusion that the Backup Generators would operate very infrequently, if at all, for emergency operations. This fact, in conjunction with the number of assumptions that would need to be made to estimate air quality impacts due to emergency operations, renders quantification of those impacts too speculative to be meaningful and is therefore not required by CEQA.¹⁸⁰

CARB provided no analysis in its comments that it can accurately select the assumptions necessary for a modeling effort that would provide any basis for determining impacts any more accurately than Staff, internal and external experts or C1's experts because each of the assumptions would involve considerable speculation. CARB did not conduct an air quality modeling analysis demonstrating that it could be performed without such speculation or that it would lead to meaningful results despite the Commission providing time for such an analysis.

The Proposed Decision is evidence that the Commission thoroughly considered emergency operations and CARB's oral and written comments do not answer the fundamental question of how to conduct air quality modeling without prohibited speculation. CARB's critique of the IS/MND ignore the fact that Staff has worked with

BAAQMD since 2017 and surveyed California air districts throughout the State of California specifically on the subject of modeling intermittent and emergency operations and determined that no air district engages or requires such modeling.³⁴ Staff considered guidance from USEPA which acknowledged the speculative challenges of modeling air emissions from intermittent sources such as emergency generators which supports USEPA's position that air agencies may discount emissions from intermittent operations for federal air compliance determinations³⁵. Staff has also worked diligently with SVP completing a thorough assessment of the reliability of its system and has analyzed its long history of few emergency power outages. The only stakeholder that did not participate in any of the prior data center projects, including the SDC, was CARB, despite Commission Staff requesting its participation. The assessment of potential impacts associated with emergency operations may be new to CARB but is not new or novel to Commission Staff.

CARB's request to work with stakeholders can be accomplished easily by its timely participation in the data center projects that are before the Commission earlier in the process and have not yet concluded evidentiary hearings. Vacation of the Remand Ruling would not prejudice CARB in any way from participating fully in those proceedings that are still ripe.

The contention that emergency operations require air quality modeling was thoroughly adjudicated and CARB failed to provide any analysis or evidence that is not duplicative of the exhaustive record in this proceeding. Therefore, CARB has not provided evidence to support reopening of the evidentiary record for this project or to affirm the Remand Ruling.

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

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

³⁴ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-31-32.

³⁵ Appendix A to the Proposed Decision, Staff's IS/MND, page 5.3-32.

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

While each of the above conditions may be foreseeable, in combination the probability of reoccurrence is exceedingly low. CARB makes the unreasonable assumption that the energy agencies will do nothing to correct the capacity shortage and plan for these extreme weather events. This is neither plausible nor realistic. Within two days of the August 14, 2020 event, the energy agencies committed to study the causes of the event and take swift action to develop recommendations and implement remedies. It is unreasonable to assume that the energy agencies will not follow through with action.

V. 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.

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

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 voluntarily 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.

Even if the Commission assumes, as CARB incorrectly speculates, that the events identified in the Governor's Proclamations will be more frequent, the fact that the SDC will not participate assures that it will not voluntarily contribute to any potential speculative environmental impact that may be assumed.

VI. The Proposed Decision used BAAQMD published thresholds of significance and CARB's comments discount the fact that the SDC will offset its NOx emissions at a ratio of 1.15:1.

CARB suggests multiple thresholds that could be used to determine significance for air quality in its written comments, but does not provide information on why these would be appropriate significance thresholds. Furthermore, Staff chose significance thresholds that are consistent with - or stricter than - the thresholds adopted by BAAQMD in its published CEQA Guidelines.³⁶ The Commission has used BAAQMD's CEQA significance thresholds many times in previous decisions related to data centers and power plants. This is the most common approach used by CEQA lead agencies from around the Bay Area. CARB provides no rationale for ignoring the CEQA significance thresholds adopted by the air quality agency that oversees station sources for the region. Further, Intervenor Sarvey challenged the use of the BAAQMD CEQA Guidelines and the thresholds of significance which were thoroughly adjudicated at

³⁶ Exhibit 25.

evidentiary hearing.³⁷ Therefore, CARB's comments are duplicative and are not sufficient evidence to reopen the evidentiary hearing or affirm the Remand Ruling.

Lastly, CARB discounts the NOx offsets that the SDC has purchased to satisfy BAAQMD permitting requirements were approved by BAAQMD and listed in the local offset bank. These offsets were determined by BAAQMD to represent real, enforceable, and permanent emission reductions that were "surplus" to (i.e., went beyond) any existing regulatory requirements. As with any air permit offset program, BAAQMD's program meets the Clean Air Act requirement to achieve a "net air quality benefit." BAAQMD achieves this by requiring facilities such as the SDC to purchase offsets at a 1.15:1 ratio. In other words, SDC purchased 15% more NOx offsets than it would be allowed to emit, achieving an overall reduction in NOx emissions³⁸. Staff also noted that the SDC would fully offset the emissions assuming it performed maintenance and testing of up to 50 hours per engine per year, even though this is significantly below the projected hours of 10 hours per engine per year³⁹. Therefore, SDC is offsetting significantly more NOx emissions than it plans to create. These excess offsets would be more than enough to offset emissions that may occur during extremely infrequent and unpredictable emergencies and therefore adequately mitigate potential NO2 impacts.

VII. The Proposed Decision Does Not Require an Alternatives Analysis

CARB alleges that the recent capacity shortfall events or its prediction of an NO2 impact during emergency operation should cause the Commission to conduct an alternative analysis under CEQA. First, as discussed above, CARB provided no analysis to support its contention that emergency operation of generators would cause a significant impact. CARB fails to even prescribe how to conduct such an analysis. Second, CARB ignores the fact that the SDC is offsetting its NOx emissions at a ratio of 1.15:1, which would mitigate such predicted impact. And lastly, CEQA is clear that an environmental document describes alternatives to a proposed project that would **avoid or substantially lessen any significant environmental impacts of the project**.⁴⁰ This

³⁷ Exhibit 305; 6/5/20 RT 143-145.

³⁸ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-11.

³⁹ Appendix A to the Proposed Decision, Staff's IS/MND, pages 5.3-19; 5.3-18; Exhibit 5, page 14, Response to Data Request 16.

⁴⁰ Pub. Resources Code § 21002; 14 Cal. Code Regs. § 15126.6.

point of law was also pointed out to the Commission at the September 9, 2020 Commission Business Meeting by the Hearing Officer.⁴¹

As demonstrated in the Proposed Decision, the SDC would not result in any significant environmental impacts such that alternatives should be evaluated. CARB did not produce any analysis to suggest otherwise. It did no modeling of its own and provided no guidance on which assumptions upon which modeling should be based. CARB's inability to provide such modeling or assumptions, even with the Commission provided it time to do so, is further proof that such a modeling exercise is speculative.

CARB appears to be attempting to create an impact in order to engage in a discussion of alternatives to emergency backup generators. Holding an individual project hostage is not the place to have a broader policy discussion about the use of alternative backup generating technologies; such discussions should take place in the appropriate broad policy forums provided by the energy agencies. CARB and other agencies should be encouraged to participate in the Integrated Energy Policy Report proceedings and load forecasting forums at the Commission, and the Resource Adequacy procurement proceedings at the CPUC. The best way to ensure emergency backup generation is not deployed, no matter what technology is used, is to support an extremely reliable and robust energy system with enough capacity to weather future heat events.

In addition, CARB does not compare any of its proposed alternative generation technology to any of the SDC project objectives which were outlined in Exhibit 1, Chapter 5 of the SPPE Application filed in 2019. There is simply no discussion of how such technologies could meet the reliability demands of C1's clients, who will entrust their servers and valuable data to the care of the SDC. CARB assumes that if a different technology exists, it must be used.

Lastly, Intervenor Sarvey argued that the same alternative technologies identified by CARB in its written comments (natural gas engines, fuel cells and Tier 4 engines) existed and should be used instead of the emergency generators proposed by SDC.⁴² The Committee considered these alternatives and the Proposed Decision at Footnote 237 states:

Because we have determined that the Project does not have significant impacts, we need not consider the alternatives to the Backup Generators

⁴¹ TN 234840, Excerpt from September 9, 2020 Business Meeting, Item 13, pages 17-18.

⁴² Exhibit 300, pages 16-17

proposed by Mr. Sarvey. See *W. M. Barr & Co., Inc., v. South Coast Air Quality Management District* (2012) 207 Cal.App.4th 406, 434-35.

CARB's written information simply proves that other generation technologies exist, but adds nothing new to the alternatives raised by Intervenor Sarvey, and therefore is duplicative. CARB provided no legal authority that the Commission could legally require use of these alternatives in the absence of significant unmitigated impacts.

Therefore, CARB's failure to support its speculation that emergency operations cause an impact with analysis or evidence makes the information it provided on alternative technologies irrelevant to the proceeding. Irrelevant information should not be the basis for reopening the evidentiary record nor affirming the Remand Ruling.

VIII. CARB's assertion that the SDC should be using "cleaner" generation technology ignores the fact that the SDC would not result in significant impacts to the environment, and that it is employing technology determined to be BACT by the BAAQMD.

BACT is a determination that is conducted by Air Districts during their permit application evaluation process. BACT is not a number, nor a specific technology; it is an analysis that is conducted to determine whether a particular technology proposed, after an analysis prescribed in an Air District's guidance, complies with such guidance. CARB suggests that BACT is not met by SDC because cleaner technology exists. This is incorrect and misinterprets BAAQMD's BACT rule, which is implemented for stationary sources by the regional air district. At evidentiary hearing for the SDC, the BAAQMD District representative who evaluated the BACT analysis in the SDC air permit application filed in December 2019 testified during cross-examination by Intervenor Sarvey that the SDC proposed Tier 2 emergency generators complied with BACT and, in addition, were using Diesel Particulate Filters, which go beyond BACT requirements for this project and further reduce emissions.⁴³

As described above, alternative technologies are not required by CEQA because the current technology proposed does not result in significant air quality or public health related environmental impacts. Additionally, since the proposed technology has been determined by BAAQMD, the sole agency with authority to conduct the analysis, to

⁴³ 6/5/20 RT 84-85, Testimony of Caryn Quist, BAAQMD Permit Engineer.

meet BACT, no alternative technologies are required to be analyzed by the Commission. CARB acknowledges in its written comments that the local air district makes the legal BACT determination pursuant to its rules⁴⁴ and acknowledges that the use of proposed emergency generators for the SDC is consistent with the current BAAQMD BACT guideline for emergency diesel generators.⁴⁵ CARB's only complaint is that it believes the BAAQMD's rule is out of date and BAAQMD should revise it.⁴⁶ The SDC complies with the current rule and the CEC SDC SPPE proceeding is not the forum to attempt to revise BAAQMD's rules. It is unreasonable to expect and applicant to comply with a future rule revision that is not even proposed by the BAAQMD. CARB's unsubstantiated and incorrect opinion relating to what it believes BACT should be in a future revision to BAAQMD's rules and guidance is simply irrelevant to the proceeding and therefore should not be a basis to reopen the evidentiary record or affirm the Remand Ruling.

CONCLUSION

The Commission should vacate its Remand Ruling because CARB failed to supply further analysis sufficient to require reopening of the record. CARB's additional information is a rehashing of the issues the Committee already adjudicated. CARB has not provided anything new and failed to conduct any of the air quality analysis it contends the Commission Staff should have performed.

CARB is participating in other data center proceedings before the Commission at the appropriate time and can participate in other more general proceedings as described above. The SDC proceeding, in contrast, is not the right proceeding to address CARB's broad concerns.

The SDC is critically needed now to help drive innovation and serve essential service and will immediately create 125 to 300 construction jobs and provide dozens of full-time jobs. The Project has been sited in a location minimizing its effects on the surrounding community, and was poised to immediately receive its approval from the City of Santa Clara on September 16, 2020⁴⁷. C1 respectfully requests the Remand Ruling be

⁴⁴ TN 235271, page 14

⁴⁵ Ibid.

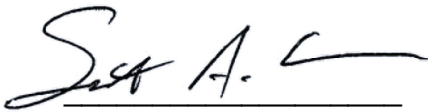
⁴⁶ Ibid.

⁴⁷ The City of Santa Clara pulled consideration of the SDC from its September 16, 2020 agenda solely because of the Commission's Remand Ruling.

vacated and the Commission adopt the Proposed Decision in the same Business Meeting so that SDC can move forward to obtain approvals from the City of Santa Clara and begin construction without further delay.

Dated: October 30, 2020

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Scott A. Galati", written over a horizontal line.

Scott A. Galati
Counsel to C1-Santa Clara, LLC

EXHIBIT 1

Governor Newsom's Proclamations of State Emergency

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

PROCLAMATION OF A STATE OF EMERGENCY

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

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

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

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

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

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

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

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

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

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

IT IS HEREBY ORDERED THAT:

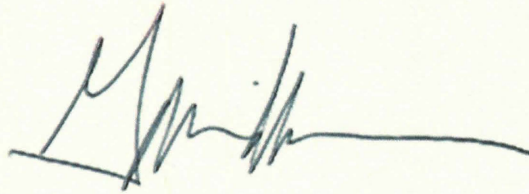
1. In preparing for and responding to the Extreme Heat Event, all agencies of state government use and employ state personnel, equipment, and facilities or perform any and all activities consistent with the direction of the Governor's Office of Emergency Services and the State Emergency Plan. Also, all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

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

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

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

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



GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

PROCLAMATION OF A STATE OF EMERGENCY

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

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

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

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

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

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

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

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

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

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

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

IT IS HEREBY ORDERED THAT:

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

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

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

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

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 3rd day of September 2020.

GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

EXHIBIT 2

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



OFFICE OF THE GOVERNOR

August 17, 2020

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Gavin Newsom', with a long horizontal line extending to the right.

Gavin Newsom
Governor of California

EXHIBIT 3

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



August 19, 2020

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

Dear Governor Newsom,

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

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

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

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

Near-Term Energy Demand Forecast

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

Table 1: Short Term Demand Forecasts

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

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

Lack of Advance Warnings for Supply Deficiencies

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

Causes of Recent Supply Deficiencies

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

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

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

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

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

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

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

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

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

Immediate Actions to Address this Week's Supply Deficiencies

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

Some specific examples of actions that were taken include:

Demand Side Conservation Actions

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

Supply Side Resources Actions¹

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

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

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

Conservation Messaging Actions

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

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

Going-Forward Actions to Ensure Reliability

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

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

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

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

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

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

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

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

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

Sincerely,



Marybel Batjer

President

California Public Utilities Commission



Stephen Berberich

President and Chief Executive Officer

California Independent System Operator



David Hochschild

Chair

California Energy Commission

EXHIBIT 4

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

From: [Michael Keate](#)
To: [Alan Kurotori](#); ["Alan Kurotori Cell"](#); [Albert Saenz](#); [Alex Chua](#); [Allan Agatep](#); [Ann Hatcher](#); [Arielle Romero Cell](#); [Arielle Romero Cox](#); [Arielle Romero's gmail](#); [Betty Sargent](#); [Billy Quach](#); [Brent Runyon](#); [Chris Karwick](#); [Damon Beck](#); [Darlene Gomez](#); [Dave Padilla](#); ["Dawid Coetzee"](#); [DeAnna Hilbrants](#); [DeAnna Hilbrants Cell](#); [DL CCO All Users](#); [DL FIN Contact Center All](#); [Edbert Nguyen](#); [Elizabeth Elliott](#); [Greg Garcia](#); ["Greg Garcia Cell"](#); [Gwen Goodman](#); ["Gwen Goodman Cell"](#); ["Gwen Goodman Gmail"](#); [Heather Heinbaugh](#); [Heather Heinbaugh Cell](#); [Irma Munoz](#); [Jay Sheth](#); [Jean-Paul Hill](#); [Jeevan Valath](#); [Jeff Ipsaro](#); ["Jeff Ipsaro Cell"](#); [Jim Tucker](#); ["Jim Tucker"](#); [John Roukema](#); [John Sanders](#); [Julia Black](#); ["Julia Black Cell"](#); [Kathleen Hughes](#); [Kathleen Hughes](#); ["Kathleen Hughes Gmail"](#); [Ken Winland](#); [Kevin Keating](#); ["Kevin Keating Cell"](#); [Kevin Kolnowski](#); [Kevin Kolnowski](#); [Lenka Wright](#); [Lenny Buttitta](#); [Manuel Pineda](#); [Manuel Pineda](#); [Mark Guerrero](#); [Mary Medeiros McEnroe](#); [Mary Medeiros McEnroe](#); [Michelle Egleisia](#); [Michael Keate](#); ["Mike Keate Gmail"](#); [Mike Vitarelli](#); [Naomi Dale](#); [Nilda Ramos](#); [Robert P. Cell](#); [Robert Pritchard](#); [Sachin Bajracharya](#); [Sandra Pacheco](#); [Shane Kubo](#); [Sharon Laughlin](#); [Shelton Honda](#); [Shreya Kodnadu](#); [Shreya Kodnadu cell](#); [Son Le](#); [Stephanie Entizne](#); [SVPReliability](#); [SVPSched](#); [Tajina Casey](#); [Tera Curren](#); [Tony Ochoa](#); ["Troubleshooter Cell"](#); [Veronica Bogan](#); [Voula Margelos](#); [Wendy Stone](#); ["Wendy Stone Cell"](#); ["Wendy stone Gmail"](#)
Subject: CAISO DIRECTED LOAD SHED AND RESTORED
Date: Friday, August 14, 2020 8:23:00 PM

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