

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation pursuant to Senate Bill 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region.

Investigation 17-02-002 (Filed February 9, 2017)

# REPLY COMMENTS OF CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES ON ADMINISTRATIVE LAW JUDGE'S RULING REGADING MARCH 30, 2021 PHASE 3 WORKSHOP AND REQUEST FOR COMMENTS

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# For: CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES

April 27, 2021

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Center for Energy Efficiency and Renewable Technologies (CEERT) respectfully submits these Reply Comments on the Administrative Law Judge's (ALJ's) Ruling Regarding March 30, 2021, Phase 3 Workshop and Request for Comments (ALJ's Ruling), issued on March 29, 2021, in Investigation (I.) 17-02-002 (Aliso Canyon). On April 12, 2021, the ALJ granted requested relief to extend the filing date for Opening Comments until April 20, 2021, and these Reply Comments to be filed on April 27, 2021. These Reply Comments are timely filed and served pursuant to the Commission's Rules of Practice and Procedure and the ALJ's Rulings.

# I. WORKSTREAM #1 COMMENTS

In its Opening Comments, CEERT recommended that Consultants document both the complete ten year historic record of Los Angeles City Gate price, receipt point utilization, Aliso Canyon injections/withdrawals, and SP 15 electricity spot price plus how Consultants mapped that record to reach the conclusion that the Southern California Gas system could be balanced in normal operation without the use of Aliso Canyon. Opening Comments of other parties also make it clear that Consultants need to document how their "resource gap" analysis is responsive

to the questions posed by parties following the November 2020, Workshop #1, questions raised in this comment round, as well as the Phase 2 Modeling Report.

However, regardless, it is obvious that a significant reduction in both summer peak electric generation gas demand and winter peak gas space heating demand are required to allow the closure of Aliso Canyon to, at a minimum, deal with contingencies related to disruptions in upstream gas supply. While several parties have questioned assumptions Consultants used to arrive at the "resource gap" to either increase flowing supply or reduce demand enough to allow the closure of Aliso Canyon, no party provided an alternate calculation for that "determination of need." This is the most critical task for Phase 3. Even if the answer is expressed as a range, or carries some level of uncertainty to be covered by other mechanisms such as curtailment of "non-essential" load, the Commission simply must adopt quantitative criteria that will allow the closure of Aliso Canyon. CEERT believes that process begins with better documentation of the Consultants' Workstream #1 conclusion.

It seems intuitively obvious that the answer will involve mandatory curtailment of demand to meet extreme conditions – as has been the case throughout the history of natural gas in California. Increasing gas supply or investing in alternative electric infrastructure to meet energy demand with less gas supply in an extremely rare but consequential contingency is simply not cost effective. Perhaps more importantly, it is unlikely to provide enough certainty to prevent a catastrophic loss of system pressure during an event such as the Texas supply freeze off of last February. This is the point that Southern California Edison (SCE) makes when it states that use of 95% receipt point utilization is not appropriate for contingency analysis.<sup>1</sup> Indicated Shippers makes the same point.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Opening Comments of SCE, at pp. 9-10.

<sup>&</sup>lt;sup>2</sup> Opening Comments of Indicated Shippers, at p. 4.

Southern California Generation Coalition (SCGC) was the only party to explicitly mention curtailment options in Opening Comments with its discussion of Rule 23.<sup>3</sup> CEERT agrees with SCGC but proposes examination of potential changes to Rule 23 that would reorder the curtailment priority of industrial demand at least for enhanced oil recovery and petroleum refining as well as electricity generation. Protect Our Communities Foundation (PCF) made this point indirectly when it noted that Consultants used an "uncurtailed" electric generation demand of roughly three times the minimum generation required for electric grid reliability in its analysis.<sup>4</sup>

CEERT also believes, as stated in its Opening Comments, that exploration of a reserve sharing arrangement with the two other "downstream" gas systems, Pacific Gas and Electric Company and Costa Azul, both of which have "surplus" storage, is an appropriate mechanism to deal with the uncertainty of the resource gap determination of need in Workstream #1.

### II. WORKSTREAM #2 COMMENTS

In its Opening Comments, CEERT noted that most of the portfolio options Consultants proposed for an alternative examination to meet the resource gap determination of need involve execution of broad State decarbonization policy to reduce natural gas consumption as mandated in legislation such as SB 100. The journey to achieving this overarching State policy, assuming that not only annual average gas consumption but peak gas demand in the Los Angeles Basin is reduced, will, at some point, allow the closure of Aliso Canyon. This means that Consultants' task in Workstream #2 is not to examine the cost/benefits of this overarching policy, but to quantify the impact of specific policies on the resource gap determination of need from

<sup>&</sup>lt;sup>3</sup> Opening Comments of SCGC, at p. 3.

<sup>&</sup>lt;sup>4</sup> Opening Comments of PCF, at p. 5.

Workstream #1. Public Advocates Office (PAO),<sup>5</sup> and TURN<sup>6</sup> state that the Consultants proposed cost/benefit analysis is too simplistic. SCE notes that the appropriate process is to simply add the closure of Aliso Canyon as a factor in the "cost/benefit calculator."<sup>7</sup>

Consultants proposed scope for Workstream #2 is as follows:

Conduct long-run economic analysis to determine which of the investment options is most beneficial and/or least expensive from the ratepayers' perspective.<sup>8</sup>

This is simply flat wrong. The entire economy wide California energy policy for the next 25 years is not being conducted simply to allow the closure of Aliso Canyon. Rather, the expectation is that some subset of that policy will cause a reduction in demand for natural gas in the Los Angles Basin that is sufficient to allow the closure of Aliso Canyon as determined by Consultants in Workstream #1. Southern California Gas Company (SCG) gives Consultants an impossible hurdle for Workstream #2 when it states:

Each proposed investment alternative to Aliso Canyon should provide an equivalent level of reliable energy deliverability that Aliso Canyon currently provides, and all costs incurred should be included.<sup>9</sup>

SCG makes no mention of the broad purpose and benefits of those investment alternatives. SCG goes on to say that its standard includes items such as "capital and operating cost of wind and solar generation resources, transmission and distribution upgrades to integrate these resources into the electric grid, capital and operation costs of sufficient battery storage and demand response, and, each such investment portfolio must ensure that the PLEXOS analysis meets the California Independent System Operator 0.1 day per year loss of load expectation reliability

<sup>&</sup>lt;sup>5</sup> Opening Comments of PAO, at pp. 3-5.

<sup>&</sup>lt;sup>6</sup> Opening Comments of TURN.

<sup>&</sup>lt;sup>7</sup> Opening Comments of SCE, at p. 8.

<sup>&</sup>lt;sup>8</sup> March 30 Presentation, at Slide 4.

<sup>&</sup>lt;sup>9</sup> Opening Comments of SCG, at p. 14.

criterion for all years.<sup>10</sup>" Further, that the analysis must be WECC wide in scope. SCG is essentially asking Consultants to design and provide a cost/benefit analysis of a complete electric Integrated Resource Plan for every utility in the WECC footprint plus a California Air Resources Board Scoping Plan for achieving the goals of SB 100.

The exception to this statement about cost/benefit analysis is the "Gas Transmission" portfolio proposed by Consultants. CEERT agrees with the numerous parties including PCF,<sup>11</sup> Indicated Shippers,<sup>12</sup> and Sierra Club<sup>13</sup> who state that expanding gas transmission infrastructure should not be considered a viable option given state policy to dramatically reduce natural gas consumption. CEERT does believe that it would be a useful exercise to calculate the cost to "restore the SCG Northern Zone plus additional increase to the Southern Zone, if necessary"<sup>14</sup> if, for no other reason, than to give a sense of the "avoided cost" of this investment in gas infrastructure.

A virtual consensus of parties believes that the "Demand Reduction" portfolio proposed by Consultants needs a fundamental overhaul. Sierra Club states "the gas demand reduction measures that [Consultants] plan to study are gas efficiency programs that are incremental and counterproductive because they lock-in [new gas demand and] more emissions."<sup>15</sup> SCE states that electric energy efficiency measures such as building insulation need to be considered.<sup>16</sup> What virtually all parties agree on is that building electrification is not only an appropriate

<sup>&</sup>lt;sup>10</sup> Opening Comments of SCG, at pp. 15-16.

<sup>&</sup>lt;sup>11</sup> Opening Comments of PCF, at p. 7.

<sup>&</sup>lt;sup>12</sup> Opening Comments of Indicated Shippers, at p. 3.

<sup>&</sup>lt;sup>13</sup> Opening Comments of Sierra Club, at p. 1.

<sup>&</sup>lt;sup>14</sup> March 30 Presentation, at Slide 7.

<sup>&</sup>lt;sup>15</sup> Opening Comments of Sierra Club, at p. 1.

<sup>&</sup>lt;sup>16</sup> Opening Comments of SCE, at p. 5.

measure for study,<sup>17</sup> but a fundamental determinate of peak winter gas demand that defines the resource gap determination of need from Workstream #1. CEERT agrees with the California Independent System Operator (CAISO)<sup>18</sup> and SCE<sup>19</sup> that the California Energy Commission (CEC), who is the lead agency for building energy matters, is the appropriate place to make an analysis of future building electrification. CEERT notes that this Friday, April 30, the CEC will be holding a hearing on the future of building electrification including a range of scenarios for the speed and depth of the program.<sup>20</sup>

Consultants' statement that building electrification will only result in a corresponding increase in Basin gas demand for electricity production is fundamentally wrong. First, the thermodynamic efficiency of electric heat pumps is approximately a factor of four higher than the gas furnaces, boilers, and water heaters they replace. Second, the inevitable result of state policy for electric generation as expressed in the multiple existing and in progress Integrated Resource Plans (IRPs) of in Basin electric utilities will be to quickly and significantly reduce and ultimately eliminate gas fired generation from the Los Angeles Basin. Third, these same IRPs contemplate that significant investments will be made in non-fossil generation inside the Los Angeles Basin that directly reduce the LCR need for gas generation. Fourth, even if, in the final analysis, the incremental electricity is produced by incremental gas generation, there is no reason to believe that the electricity must come from in Basin gas generation.

Finally, Consultants simply ignore gas demand reductions from other industrial uses such as enhanced oil recovery or petroleum refining that are part and parcel of State energy policy.

<sup>&</sup>lt;sup>17</sup> See, e.g., Opening Comments of Issam Najm, at p. 2; Opening Comments of CAISO, at p. 2; Opening Comments of SCE, at p. 2; and Opening Comments of Sierra Club, at p. 1.

<sup>&</sup>lt;sup>18</sup> Opening Comments of CAISO, at p. 2.

<sup>&</sup>lt;sup>19</sup> Opening Comments of SCE, at pp. 5-7.

<sup>&</sup>lt;sup>20</sup> California Energy Commission, Commissioner Workshop: Draft Building Decarbonization Assessment, April 30, 2021.

CEERT agrees with the CAISO<sup>21</sup> and SCE<sup>22</sup> that Consultants' "Electric Transmission" portfolio needs a completely revised focus. CEERT repeats its Opening Comments on this matter that the focus, if any, needs to be on transmission investments that reduce Local Capacity Requirements (LCR) through new DC connections that terminate in the Los Angeles Basin such as the proposed offshore wind or the LADWP Victorville/Century line, or directly reduce LCR needs through reinforcing the AC network with projects such as the SCE Mesa Loop In project or the LADWP package to allow the retirement of all of its in Basin gas generation. Choosing between two alternatives to increase transfer capacity from either Arizona (Ten West) or Nevada (Silverado) across the Colorado River is essentially irrelevant to the issue of closure of Aliso Canyon.

Workstream #2 is not a giant "cost/benefit modeling exercise" to decide which California decarbonization path is the most cost effective from a ratepayer perspective, but an accounting exercise that documents what adopted State energy policy programs will provide in the way of reduced demand for natural gas in the Los Angeles Basin in what timeframe. This information can then be used to help prioritize and accelerate execution of those programs with the objective of allowing closure of Aliso Canyon. At the same time, the Commission would be remiss to only look at Aliso Canyon when the older and much smaller but more urbanized Playa del Rey storage facility continues in operation.

### VI. CONCLUSION

CEERT appreciates the opportunity to submit these Reply Comments. CEERT believes that Workstream #1 was not "completed" early this year, and that task must be documented and

<sup>&</sup>lt;sup>21</sup> Opening Comments of CAISO, at pp. 5-6.

<sup>&</sup>lt;sup>22</sup> Opening Comments of SCE, at pp. 11-12.

adopted by the Commission as the appropriate target for Workstream #2 before any modeling commences. Workstream #2 modeling is not a cost/benefit analysis of broad state energy policy, but a quantification of how and when adopted State energy policy will, in combination with more efficient utilization of all of the State's gas storage facilities plus a revised curtailment priority to deal with extreme events, will allow the closure of Aliso Canyon and/or Playa del Rey.

Respectfully submitted,

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