



ORA

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July 19, 2018

CPUC Energy Division
Attention: Tariff Unit, Room 4005
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Subject: PUBLIC ORA Protest of Pacific Gas and Electric Company's (PG&E) Advice Letter 5322-E, Energy Storage Contracts Resulting from PG&E's Local Sub-Area Request for Offers Per Resolution E-4909

INTRODUCTION

Pursuant to General Order (GO) 96-B, Rule 7.4, the Office of Ratepayer Advocates (ORA) hereby protests Pacific Gas and Electric Company's (PG&E) Advice Letter 5322-E (AL 5322), *Energy Storage Contracts Resulting from PG&E's Local Sub-Area Request for Offers Per Resolution E-4909*, submitted June 29, 2018. PG&E submits AL 5322 pursuant to California Public Utilities Commission (Commission) Resolution E-4909, *Authorizing PG&E to procure energy storage or preferred resources to address local deficiencies and ensure local reliability*, issued January 12, 2018. ORA recommends that the Commission deny PG&E's request because it fails to meet the requirements of Resolution E-4909.

SUMMARY OF REQUEST

PG&E seeks Commission approval for four energy storage projects, totaling 567.5 megawatts (MW) at a notional cost of [REDACTED],¹ resulting from PG&E's Local Sub-Area Energy Storage Request for Offers (LSA ES RFO). The results of PG&E's LSA ES RFO are specific to the South Bay-Moss Landing sub-area. PG&E did not execute any contracts for the Pease and Bogue local sub-area deficiencies. The energy storage projects that are the subject of this advice letter are as follows:

¹ AL 5322, Appendix F1 [Confidential], Exhibits A-9, B-7, C-7, D-7 [total cumulative notional value of the four energy storage projects.]

ORA Table 1: PG&E LSA ES RFO Energy Storage Projects²

Project Name	Technology	Online Date	Term (Years)	Discharge Duration (Hours)	Size (MW)	Local Sub-Area	Notional Costs (\$M)
Vistra Moss Landing Energy Storage	Lithium-ion Batteries	12/01/2020	20	4	300	South Bay – Moss Landing	██████
Hummingbird Energy Storage	Lithium-ion Batteries	12/01/2020	15	4	75	South Bay – Moss Landing	██████
mNOC AERS Energy Storage	Lithium-ion Batteries	10/01/2019	10	4	10	South Bay – Moss Landing	██████
Moss Landing Energy Storage	Lithium-ion Batteries	12/31/2020	20	4	182.5	South Bay – Moss Landing	██████

SUMMARY OF ORA POSITIONS

The Commission should deny PG&E’s request for approval of the four LSA ES RFO energy storage projects for the following reasons:

1. The California Independent System Operator (CAISO) determined that new and planned transmission solutions identified in its 2017-2018 Transmission Plan address the specific need that led to the reliability must-run (RMR) designation for the Metcalf Energy Center (Metcalf) in the South Bay-Moss Landing area.
2. PG&E’s AL-5322 confirms that new and planned transmission solutions “eliminate the specific deficiency that led the CAISO to an RMR designation of Metcalf.”³
3. PG&E’s AL 5322 confirms that the four energy storage projects are not needed to ensure the Metcalf RMR designation will not be renewed for any year from 2019 through 2022.
4. PG&E failed to demonstrate that it coordinated with the CAISO to ensure that the four energy storage projects partially or wholly obviate the need for the Metcalf RMR.
5. PG&E failed to demonstrate that the CAISO agrees that the four energy storage projects partially or wholly eliminate the need for the Metcalf RMR.

² AL 5322, p. 1.

³ AL 5322, p. 13.

6. PG&E failed to demonstrate that it conducted a cost-effectiveness analysis to show the cost of the four energy storage projects is reasonable compared to the cost of the Metcalf RMR, and other energy storage solicitations.
7. PG&E's claim that the four energy storage projects may help alleviate a risk of backstop procurement after 2022 is not a procurement issue that the Resolution either contemplated or approved.

Based on these reasons, AL 5322 does not comply with the specific conditions set forth in Resolution E-4909-E that authorized PG&E to conduct and request approval of energy storage and preferred resources to address local deficiencies and ensure local reliability in the South Bay-Moss Landing sub-area. Therefore, the Commission should deny PG&E's request for approval of the four energy storage projects.

OBJECTIVE OF RESOLUTION 4909-E

The Commission issued Resolution 4909-E after a series of events that began with Calpine Corporation's (Calpine) November 28, 2016 letter notifying the CAISO of Calpine's stated intent to terminate Participating Generator Agreements for four of its energy centers (Feather River, Yuba City, King City, and Wolfskill Energy Centers);⁴ and, Calpine's subsequent June 2, 2017 letter informing the CAISO of its assessment of "whether to make Metcalf [Energy Center] unavailable for CAISO dispatch effective January 1, 2018."⁵

Following its study of the Calpine Energy Centers to assess the impact of their removal on local reliability, the CAISO concluded that: (1) the Yuba City Energy Center is needed for the Pease sub-area, (2) the Feather River Energy Center is needed for the Bogue sub-area; and (3) the Metcalf Energy Center is needed for the South Bay-Moss Landing sub-area. As such, the CAISO designated these Energy Centers as RMR.⁶

In January 2018, the Commission adopted Resolution 4909-E in response to CAISO's decision to designate Calpine's Feather River, Metcalf, and Yuba City Energy Centers as RMR. The Commission stated that:

[It] is concerned about impacts to ratepayers if the RMR contracts are executed and if they are extended . . . [T]hese [RMR] contracts were developed outside of the normal resource adequacy process and the CAISO's Capacity Procurement Mechanism (CPM) was not initiated.

. . .

⁴ <http://www.caiso.com/Documents/DecisiononRequestforReliabilityMust-RunDesignations-Attachment-Mar2017.pdf>.

⁵ http://www.caiso.com/Documents/CalpineLetter_CAISO_MetcalfEnergyCenterRetirementAssessment PDF.

⁶ Resolution 4909-E, p. 2.

Lack of competition, with in this instance these RMR contracts, can lead to market distortions and unjust rates for power. It is because of this concern that the Commission is exercising its procurement authority with this Resolution to authorize PG&E to conduct a limited solicitation for resources that can effectively fill the local deficiencies and address issues identified by the CAISO.⁷

Resolution 4909-E authorized PG&E to hold one or more competitive solicitations for preferred resources or energy storage to partially or wholly eliminate the need for, or extension of, one or more of the RMR contracts.⁸ The preferred resources or energy storage must be online and operational on or before a date early enough to ensure one or more of the RMR contracts will not need to be renewed for any year from 2019 through 2022.⁹

STANDARD OF REVIEW

Resolution 4909-E set forth specific conditions that govern PG&E's authority to procure energy storage or preferred resources to address local deficiencies and ensure reliability in the three specific sub-areas. These specific conditions, in relevant part, are:

- Ordering Paragraph 4: “PG&E is required to take into account the known cost and on-line dates of any new or planned transmission solutions that reduce or eliminate the need for RMR contracts or their extension, when it selects resources for procurement in this solicitation.”¹⁰
- Ordering Paragraph 5: “Resources procured pursuant to this solicitation must be on-line and operational on or before a date sufficient to ensure that one or more of the RMR contracts for the three plants – Metcalf Energy Center, Feather River Energy Center, and Yuba City Energy Center – will not be renewed for any year from 2019 through 2022, if feasible and represent a reasonable cost savings to ratepayers.”¹¹
- Ordering Paragraph 6: “Resources procured pursuant to this solicitation must be located within the relevant sub-area(s) and be interconnected at location(s) that will mitigate local capacity and

⁷ Resolution 4909-E, pp. 4-5.

⁸ Resolution 4909-E, p. 20.

⁹ Resolution 4909-E, p. 20.

¹⁰ Resolution 4909-E, p. 20.

¹¹ Resolution 4909-E, p. 20 (emphasis added).

voltage issues sufficient to reduce or eliminate the need for RMR contracts for the aforementioned plants.”¹²

- Ordering Paragraph 7: “Resources procured in this solicitation should be at a reasonable cost to ratepayers, taking into consideration the cost and value to PG&E, previous solicitations in which PG&E has awarded contracts to similar resources, the cost of the specific RMR contracts, with adjustments for contract terms such as contract length and expedited delivery date.”¹³
- Ordering Paragraph 8: “Any portfolio of resources selected and contracted with, including consideration of any new or planned transmission solutions that will reduce or eliminate the sub-area deficiencies, must be of sufficient capacity and attributes to alleviate the deficiencies identified.”¹⁴
- Ordering Paragraph 9: “PG&E is required to coordinate with the CAISO to ensure that the resources procured in this solicitation partially or wholly obviate the need for, or extension of, RMR contracts at question in this Resolution.”¹⁵
- Ordering Paragraph 10: “PG&E is required to indicate when seeking approval of the contracts whether the CAISO agrees that the resources procured in this solicitation partially or wholly eliminate the need for, or extension of, one or more of the RMR contracts at question in this Resolution.”¹⁶

DISCUSSION

1. PG&E’s Proposed Energy Storage Contracts Are Not Necessary to Address Local Deficiencies and Ensure Local Reliability

Resolution 4909-E ordered PG&E to “take into account the known cost and on-line dates of any new or planned transmission solution that reduce or eliminate the need for the [Metcalf] RMR contract.”¹⁷ Resolution 4909-E’s order is based on two specific reasons: (1) it determined a mix of resources will likely be necessary and “transmission solutions are often used to alleviate local

¹² Resolution 4909-E, p. 20.

¹³ Resolution 4909-E, p. 20.

¹⁴ Resolution 4909-E, p. 20.

¹⁵ Resolution 4909-E, p. 20.

¹⁶ Resolution 4909-E, p. 20.

¹⁷ Resolution 4909-E, Ordering Paragraph 4, p. 20.

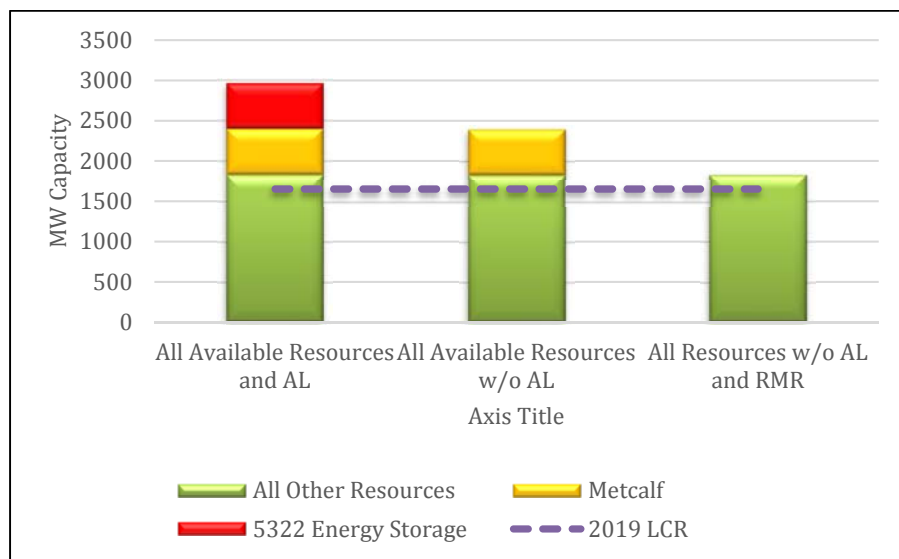
area deficiencies;”¹⁸ and (2) consideration of transmission solutions “will allow for expanded range of alternatives and, in so doing, will better enable PG&E to bring only cost-effective procurement to the Commission.”¹⁹

In AL 5322, PG&E confirms that the new and planned transmission solutions located in the South Bay-Moss Landing sub-areas, as identified in the CAISO’s 2017-2018 Transmission Plan, will eliminate the deficiencies in the South Bay-Moss Landing sub-area that prompted the Metcalf RMR. Specifically, PG&E states:

[T]he transmission solutions CAISO approved as part of the 2017-2018 TPP for the South Bay-Moss Landing sub-area, combined with the most recent load forecast, resulted in the reduction of the LCR [Local Capacity Requirement] need by 568 MWs for 2019, and thus eliminate the specific deficiency that led the CAISO to an RMR designation for Metcalf. This was also confirmed through PG&E’s coordination with the CAISO, as required by the Resolution.²⁰

The new transmission upgrades in South Bay-Moss Landing will sufficiently reduce the LCR of the local sub-area so that the Metcalf RMR is not required to meet reliability needs. Specifically, the LCR of the sub-area after transmission upgrades will be 1,653 MW. Without the Metcalf RMR, there is a total of 1,825 MW of qualifying capacity available to meet the South Bay-Moss Landing reliability need in 2019. ORA Figure-1 shows that the Metcalf RMR is no longer necessary after the new and planned transmission projects are online:

ORA Figure 1: South Bay-Moss Landing Local Sub-Area Capacity Scenarios



¹⁸ Resolution 4909-E, p. 12.

¹⁹ Resolution 4909-E, p. 12.

²⁰ AL 5322, p. 13 (emphasis added) [citation omitted].

Further, Appendix J to AL 5322 provides a letter from the CAISO that verifies that the need in the South Bay-Moss Landing sub-area is alleviated through the new and planned transmission upgrades. In the May 21, 2018 letter, the CAISO states:

Since the CPUC issued the Resolution, the [CA]ISO finalized its 2017-2018 Transmission Plan, which identified mitigation either already underway or approved in the plan to address the specific needs that led to the reliability must-run designations. These mitigations consist of transmission upgrades which are expected to be in place for 2019 in the South Bay-Moss Landing area . . .²¹

The new and planned transmission upgrades identified in the CAISO's 2017-2018 Transmission Plan thus obviate the need for RMR contracts in the South Bay-Moss Landing sub-area from 2019 to 2022, which is the exact timeframe contemplated in Resolution 4909-E.²² The four transmission upgrades that will reduce the LCR need in the South Bay-Moss Landing sub-area were approved by the CAISO Board of Governors on March 22, 2018, at a total estimated cost of \$14 million.²³ These transmission upgrades satisfy the objective of Resolution 4909 without the need for PG&E to spend [REDACTED] on the four energy storage projects. The four energy storage projects are not necessary to address local deficiencies and ensure local reliability in the sub-areas specified in Resolution 4909-E.

2. PG&E Fails to Demonstrate it Coordinated with CAISO and Obtained Agreement that the Solicited Energy Storage Projects would meet Reliability Needs

The Commission ordered PG&E to “coordinate with the CAISO to ensure that the resources procured in this solicitation partially or wholly obviate the need for, or extension of, RMR contracts at question in this Resolution.”²⁴ PG&E, however, provides no evidence in AL 5322 to show that it coordinated with CAISO to ensure the specific four energy storage projects obviate, in part or in full, the need for the Metcalf RMR. Instead, PG&E's coordination with the CAISO appears to only confirm that the new and planned transmission upgrades identified in the 2017-2018 Transmission Plan would eliminate the deficiency that led to the Metcalf RMR designation.²⁵ Therefore, PG&E failed to comply with Ordering Paragraph 9 of Resolution 4909-E, which required PG&E to coordinate with the CAISO to ensure the four energy storage projects are capable of partially or wholly obviating the need for the Metcalf RMR, if that need existed.

The Commission also ordered PG&E to “indicate... whether the CAISO agrees that the resources procured in this solicitation partially or wholly eliminate the need for, or extension of,

²¹ AL 5322, Appendix J (May 21, 2018 letter from Keith Casey of the CAISO to Fong Wan of PG&E).

²² Resolution 4909-E, Ordering Paragraph 5, p. 20.

²³ AL 5322, Appendix K. See also: CAISO 2017-2018 Transmission Plan, March 22, 2018, p. 264
126http://www.caiso.com/Documents/BoardApproved-2017-2018_Transmission_Plan.pdf

²⁴ Resolution 4909-E, Ordering Paragraph 9, p. 20.

²⁵ AL 5322, Appendix J.

one or more of the RMR contracts at question in this Resolution 4909-E.”²⁶ PG&E, however, fails to provide a declaration or any other documentation showing that the CAISO agrees that the four energy storage contracts are capable of partially or wholly eliminating the need for the Metcalf RMR. Instead, PG&E attaches a letter from the CAISO that only confirms that the new and planned transmission upgrades address the specific needs that led to the Metcalf RMR. The CAISO letter does not provide an analysis and confirmation that the four energy storage projects are capable of partially or wholly obviating the need for the Metcalf RMR, if that need existed. Instead, the letter states:

[The CAISO] look[s] forward to working with PG&E in the future to validate the effectiveness of the resources ultimately procured, taking into account the location and volume of resources given the characteristics necessary to meet local capacity needs and the changes to those characteristics as more preferred resources are relied upon.²⁷

Ordering Paragraph 10 of Resolution 4909-E, which requires PG&E to indicate whether the CAISO agrees that the proposed procurement eliminates the need for any of the four RMR contracts, contemplates more than an agreement to work together in the future to validate the resources after they are procured. Validating that the characteristics of the proposed resources are sufficient to meet local capacity needs should take place before the actual procurement to ensure that ratepayers would in fact benefit from the full value of the resources. Procuring the four energy storage contracts without the CAISO’s confirmation that they meet a reliability need creates unnecessary risks for ratepayers. In fact, the CAISO letter does not even mention the four energy storage contracts that are the subject of AL 5322.

Therefore, PG&E failed to comply with Ordering Paragraph 10 of the Resolution 4909-E requiring PG&E to show that the CAISO agrees that the four energy storage projects are capable of partially or wholly obviating the need for the Metcalf RMR, if that need existed.

Energy storage systems have discharge limitations –in this case, 4-hour discharge durations. Also, battery energy storage systems, such as these four projects, do not generate electricity, they consume it. Thus, these four energy storage projects rely upon external resources to charge. These characteristics may prove incompatible with reliability standards if energy storage must be relied upon for more than four hours. Moreover, it is unclear that the constrained South Bay-Moss Landing sub-area can effectively recharge the 567.5 MW of energy storage capacity on high-demand days. The four energy storage projects would constitute 21% of the total available resources in the South Bay-Moss Landing sub-area by 2023; the local area would still have limits on transmission with the rest of the grid and, consequently, the local generation resources may be needed to charge the 567.5 MW of energy storage capacity.²⁸ For these reasons, it is essential

²⁶ Resolution 4909-E, Ordering Paragraph 10, p. 20.

²⁷ AL 5322, Appendix J.

²⁸ The proposed projects total 567.5 MW in size. CAISO projects the South Bay-Moss Landing area will have 2,142.6 MW of available resources in 2023, not including the proposed projects. See CAISO’s 2023 Local Capacity Technical Analysis, Appendix A, available at: <http://www.caiso.com/Documents/Final2023Long-TermLocalCapacityTechnicalReport.pdf>

that PG&E coordinate with the CAISO to determine whether the proposed resources would be effective in reducing or eliminating any LCR needs. As such, the Commission ordered PG&E to coordinate and seek affirmation from the CAISO:

The Commission does intend for the procurement to be effective in reducing or eliminating the local area deficiencies issues that led to the RMR contracts which are pending at FERC [Federal Energy Regulatory Commission] and the subject of concern in this Resolution. We thus concur with parties' request to further clarify that PG&E is ordered to coordinate with the CAISO on its proposed portfolio and its effectiveness in reducing or eliminating the deficiencies, and adopt PG&E's suggested additions to the Findings and Orders of this Resolution with modifications.²⁹

Nowhere in AL 5322 does PG&E provide internal analysis, or analysis and confirmation from the CAISO that the four energy storage projects can satisfy the LCR needs of the South Bay-Moss Landing sub-area, if such a need exists. Therefore, PG&E failed to comply with Resolution 4909-E's requirement that PG&E coordinate and secure affirmation from the CAISO that the four energy storage projects are capable of partially or wholly eliminating the need for the Metcalf RMR, if the need existed.

3. PG&E Fails to Demonstrate that the Four Energy Storage Projects are Cost-Effective

The Commission ordered PG&E to show that it procured the four energy storage projects "at a reasonable cost to ratepayers, taking into consideration the cost and value to PG&E, previous solicitations in which PG&E has awarded contracts to similar resources, the cost of the specific RMR contracts, with adjustments for contract terms such as contract length and expedited delivery date."³⁰ Since the LCR need for the Metcalf RMR contract will be obviated from 2019 through 2022 due to new and planned transmission upgrades, the four energy storage projects are unnecessary. It is neither just nor reasonable to require ratepayers to spend [REDACTED] for resources that are not needed.

PG&E claims that the four energy storage projects represent "a positive market value to PG&E's portfolio."³¹ However, whether the four energy storage contracts add value to PG&E's overall portfolio is not relevant to Resolution 4909-E's specific requirement that the four energy storage projects be at a reasonable cost to ratepayers when weighted against specific factors identified in Ordering Paragraphs 5 and 7 of Resolution 4909-E. For example, PG&E did not provide analysis or explain how the cost of the four energy storage projects are reasonable taking into consideration the cost of the Metcalf RMR contract. In other words, PG&E did not identify how

²⁹ Resolution 4909, p. 11(emphasis added).

³⁰ Resolution 4909-E, Ordering Paragraph 7, p. 20.

³¹ Advice Letter 5322-E, p. 22.

the four energy storage contracts resulted in cost savings relative to the Metcalf RMR contract itself.

Further, PG&E did not compare the four energy storage contracts to previous energy storage solicitations. In D.13-10-040, the Commission ordered PG&E to conduct biennial energy storage solicitations as part of the Energy Storage Program. PG&E conducted its 2014 solicitation on December 1, 2014. PG&E conducted its 2016 energy storage solicitation on December 1, 2016. As such, nothing prevented PG&E from complying with Resolution 4909-E's direction to compare the costs of the LSA ES RFO to PG&E's 2014 and 2016 Energy Storage Program solicitations. Therefore, PG&E failed to demonstrate that the four contracts would represent a reasonable cost to ratepayers, as required by Ordering Paragraph 7 of Resolution 4909.

Finally, the Commission explicitly ordered PG&E to "take into account the known cost and on-line dates of any new or planned transmission solutions . . .when it selects resources for procurement in this solicitation."³² Yet PG&E also did not demonstrate that it considered the cost of the new and planned transmission upgrades that obviate the need for the Metcalf RMR in the years 2019 through 2022. In all, PG&E did not provide any evidence to show that it considered any of the cost conditions identified in Resolution 4909-E. Therefore, PG&E failed to meet its obligation to show a reasonable cost to ratepayers for the four energy storage projects.

4. PG&E Seeks Approval for Procurement which is Outside the Scope of Resolution 4909-E

PG&E improperly attempts to support its procurement of the four energy storage projects by stating it may need resources in 2023.³³ However, the Resolution 4909-E procurement authorization is explicitly confined to the years 2019 to 2022. Specifically, Resolution 4909-E states:

Resources procured pursuant to this solicitation must be on-line and operational on or before a date sufficient to ensure that one or more of the RMR contracts for the three plants – Metcalf Energy Center, Feather River Energy Center, and Yuba City Energy Center – will not be renewed for any years from 2019 through 2022, if feasible and represent a reasonable cost saving to ratepayers.³⁴

Furthermore, Resolution 4909-E is specific to the Metcalf, Feather River, and Yuba City RMR contracts, and to addressing specific reliability needs in the South Bay-Moss Landing, Pease, and Bogue local sub-areas. The potential need that PG&E identifies in 2023 is associated with a broad examination of resource availability in the Greater Bay Area Local Reliability Area (LRA). Examination, analysis, and potential procurement of resources concerning the Greater Bay Area LRA need are not within the scope of Resolution 4909-E. Instead, the Commission

³² Resolution 4909-E, Ordering Paragraph 5, p. 20.

³³ AL 5322, pp. 13-14.

³⁴ Resolution 4909-E, Ordering Paragraph 5, p. 20.

and stakeholders will have the opportunity to conduct a thorough review and analysis of the 2023 LCR need in either the Resource Adequacy or Integrated Resource Planning proceedings, or both. If the Commission determines that PG&E needs new resources in 2023, PG&E should seek procurement authorization as part of its Integrated Resource Plans. There, the Commission will also have sufficient time to analyze any portfolio of resources to determine whether it meets the state's goal of reducing greenhouse-gas (GHG) emissions. The four energy storage projects are located in a transmission constrained area. PG&E provides no analysis to demonstrate that these battery energy storage projects will charge from renewable energy resources and not the gas-fired generation located in and around the South Bay-Moss Landing subarea. Thus, AL 5322 does not include sufficient information to effectively assess whether or not the four energy storage projects decrease GHG emissions.

PROCEDURAL ALTERNATIVE

For the reasons just stated, PG&E failed to meet the specific conditions established in Resolution 4909-E and, therefore, PG&E has not met its burden to affirmatively show that its request to spend and recover approximately [REDACTED] for the four energy storage projects identified in AL 5233 is just and reasonable. The Commission should deny PG&E's request.

However, to the extent the Commission determines that it needs additional time and information to consider PG&E's request, the Commission should reconsider ORA and the Community Choice Aggregators' request that the results of PG&E's LSA ES RFO should be considered in a formal proceeding, rather than the informal advice letter process. GO 96-B states that advice letters should not implicate important policy questions or be controversial.³⁵ Matters that are controversial and/or raise important policy questions are to be addressed in formal proceedings.³⁶

For example, in D.16-01-032, the Commission determined that the advice letter process is not compatible with issues that require "greater due process protections for all parties as well as greater opportunities for public involvement."³⁷ There, the Commission concluded:

We also decline to approve PG&E's request to submit energy storage contracts through a Tier 3 Advice Letter instead of applications. General Order [9]6-B, Section 5.1, *Matters Appropriate to Advice Letters*, states that "the advice letter process provides a quick and simplified review of the types of utility requests that are expected neither to be controversial nor to raise important policy questions."³⁸

Though the Commission should summarily deny PG&E's request for approval of the four energy storage projects because they are not needed to eliminate the Metcalf RMR for any of the

³⁵ See, GO 96-B, General Rule 5.1.

³⁶ See, GO 96-B, General Rule 5.2.

³⁷ D.16-01-032, p. 15.

³⁸ D.16-01-032, p. 15.

authorized years, as the CAISO confirms,³⁹ if the Commission determines additional consideration is needed, that consideration should take place in a formal proceeding.⁴⁰ The four energy storage projects raise important and contentious questions regarding their reliability and cost impacts. Any further consideration, if necessary, should happen in a formal proceeding.

CONCLUSION

ORA requests that the Commission adopt ORA's recommendations as included herein.

Please contact Patrick Cunningham at Patrick.Cunningham@cpuc.ca.gov or (415) 703-1993 with any questions regarding these comments.

Sincerely,

/s/ JULIE HALLIGAN

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cc: Edward Randolph, Director, Energy Division
Energy Division Tariff Unit
Erik Jacobson, Director, PG&E Regulatory Relations
Service List R.15-03-011 and R.17-09-020

³⁹ AL 5322, Appendix J (May 21, 2018 letter from Keith Casey of the CAISO to Fong Wan of PG&E).

⁴⁰ ORA disagreed with PG&E regarding the confidentiality of the total cost of the four contracts. However, because this is an advice letter rather than an application, there is no process for ORA to contest PG&E's determination that the total cost of the four contracts should be made public, similar to the treatment of six San Diego Gas & Electric Company contracts in D.18-05-024.