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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to consider policy and implementation refinements to the Energy Storage Procurement Framework and Design Program (D.13-10-040, D.14-10-045) and related Action Plan of the California Energy Storage Roadmap.

Rulemaking 15-03-011  
(Filed March 26, 2015)

**ASSIGNED COMMISSIONER AND ASSIGNED ADMINISTRATIVE LAW JUDGE'S SCOPING MEMO AND RULING SEEKING PARTY COMMENTS**

**Overview**

Pursuant to Rule 7.3(a)<sup>1</sup> of the California Public Utilities Commission's Rules of Practice and Procedure, and following the prehearing conference held on May 20, 2015, this Scoping Memo affirms the preliminary categorization of this proceeding as "quasi-legislative," sets forth the scope and procedural schedule for the proceeding, and names Carla J. Peterman as the Presiding Officer. Parties can appeal this ruling only as to the category of this proceeding under the procedures in Rule 7.6. Parties must mail paper copies of all filings to the Assigned Commissioner and assigned Administrative Law Judge (ALJ).

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<sup>1</sup> Unless otherwise stated, all references to a "Rule" or to "Rules" are to the Commission's Rules of Practice and Procedure.

Electronic copies of certificates of service and service lists are sufficient; paper copies should not be mailed.

## **1. Background and Guiding Principles**

### **1.1. Background**

On March 26, 2015, the California Public Utilities Commission (Commission or CPUC) filed an Order Instituting Rulemaking (OIR) to address the enactment and ongoing implementation of Assembly Bill 2514<sup>2</sup> and to continue to refine policies and program details as required or recommended by Decisions (D.) 13-10-040 and D.14-10-045, which established the Energy Storage Procurement (ESP) Framework and Program and approved the utilities' applications in implementing the Program. In the OIR, the Commission also proposed the consideration of recommendations included in the California Energy Storage Roadmap (ESR), an interagency guidance document that was jointly developed by the California Independent System Operator (CAISO), the California Energy Commission (CEC), and the CPUC. This Rulemaking is the successor to Rulemaking (R).10-12-007.

This Rulemaking has been divided into two tracks. Track 1 was narrowly scoped to consider issues that required resolution prior to the commencement of the investor-owned utilities' 2016 energy procurement solicitations and the January 1, 2016, required Tier 2 Advice Letter compliance filings of Electric Service Providers (ESP) and Community Choice Aggregators (CCA). Track 2 will consider additional issues for the continued development and refinement of

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<sup>2</sup> Stats 2010, ch. 469.

the ESP Framework and Design Program, as those issues cannot be sufficiently addressed prior to the commencement of the 2016 procurement solicitations.

In D.13-10-040,<sup>3</sup> the Commission adopted an ESP target of 1,325 megawatts (MW), allocated to each of the investor-owned utilities (IOUs), in four biennial solicitations through 2020 (non-IOU load-serving entities have targets based on 1% of annual peak load by 2020). That decision provided a basis for cost/benefit analysis in several use cases, adopted caps for procurement of storage in various grid domains (Transmission, Distribution and Customer), and allowed for some flexibility across the Transmission and Distribution grid domains, but not into and out of the Customer grid domain. In addition, the decision allowed each IOU to utilize their proprietary protocols for assessing and selecting winning energy storage bids, but required the IOUs to develop a consistent evaluation protocol (CEP) for reporting/benchmarking and facilitating a consistent comparison across utilities, bids, and use-cases. D.13-10-040 directed a comprehensive evaluation of the Energy Storage Framework and Design Program no later than 2016, and once every three years thereafter.

In D.14-10-045, the Commission evaluated and approved the IOUs' energy storage plans for the 2014 biennial period, with some modifications. In addition, D.14-10-045 approved eligible energy storage technologies and adopted the Power Charge Indifference Adjustment (PCIA) mechanism to allow recovery of above-market costs associated with departing load for market/"bundled" energy storage projects, but denied a request for an extension of the PCIA mechanism for market/"bundled" energy storage contracts beyond 10 years. Finally, the

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<sup>3</sup> This accounting of D.13-10-040 and D.14-10-045 is meant to be illustrative and not exhaustive. Please see each respective decision for a complete list of policies and programs adopted.

Commission approved the proposed IOUs' CEP, with modifications, and directed that these protocols be used in December 2014 requirements and bid materials.

In December 2014, the CAISO, the CPUC and the CEC, in cooperation with interested parties, published "Advancing and Maximizing the Value of Energy Storage Technology: A California Roadmap" (Storage Roadmap) to address ongoing challenges associated with continued expansion of energy storage in California. The Storage Roadmap identified needed actions, set priorities, and defined the responsibilities of each organization to address the challenges. Several of the items identified in the Storage Roadmap will be considered in this proceeding.

## **1.2. Guiding Principles**

This rulemaking, consistent with AB 2514 and Commission-adopted energy storage policy will continue to adhere to the following guiding principles, set forth in D.14-10-045:

1. The optimization of the grid, including peak reduction, contribution to reliability needs, or deferment of transmission and distribution upgrade investments;
2. The integration of renewable energy; and
3. The reduction of greenhouse gas emissions to 80 percent below 1990 levels by 2050.

## **2. Scope of the Proceeding**

As provided in the OIR, numerous parties filed opening comments on the preliminary scope, categorization, and need for hearing on or before May 4, 2015, creating a broad record to inform the initial discussion at the prehearing conference (PHC).

This proceeding has been divided into two tracks. The first track considered issues that required resolution prior to commencement of the IOUs' 2016 energy procurement solicitations and the January 1, 2016 Tier 2 Advice Letter compliance filings of the ESPs and CCAs. As such, Track 1 was narrowly scoped. Track 2 will consider additional issues for the continued development and refinement of the ESP Framework and Design Program, as those issues cannot be sufficiently addressed prior to the commencement of the 2016 procurement solicitations. This revised Scoping Ruling for Track 2 issues refines the questions based on current knowledge of the issues, and sets a schedule for the remainder of the proceeding.

## **2.1. Track 2**

The scope of Track 2 of this proceeding is set forth below:

### **Revision of Energy Storage Procurement Targets**

As stated earlier, the Commission adopted in D.13-10-040<sup>4</sup> an ESP target of 1,325 megawatts (MW) in four biennial solicitations through 2020 (non-IOU load serving entities have targets based on 1% peak load by 2020). Taking into account performance in the initial round of energy procurement solicitations and the various energy-related statewide goals, the Commission may revisit ESP targets for the 2018 and 2020 solicitations and possibly beyond 2020. Specifically, the Commission seeks party input on the following questions:

- a. Should the Commission increase or revise the adopted ESP targets for IOUs and/or ESPs/CCAs applicable for the 2018 and 2020 solicitations? What factors should the

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<sup>4</sup> This accounting of Decisions (D.)13-10-040 and D.14-10-045 is meant to be illustrative and not exhaustive. Please see each respective decision for a complete list of policies and programs adopted.

- Commission consider in increasing or revising the adopted ESP targets?
- b. Considering the directive in *Senate Bill 350 (De Leon, 2015)* to develop an Integrated Resource Planning Process, should the Commission adopt ESP targets beyond 2020 at this time? If so, what factors should the Commission consider in adopting future targets, and what is an appropriate target?
  - c. If increased targets are adopted for ESPs/CCAs, what implications are there for PCIA/cost recovery, and how should the Commission balance the storage targets against the level of non-by-passable charges imposed upon ESPs/CCAs?

## **2.2. Eligibility (Phase 2)**

In Track 2, the Commission will consider new or evolving circumstances that pertain to previously excluded energy storage technologies. In particular, the Commission would like input on the following question:

- a. What new information and/or evolving circumstances exist such that the Commission should revisit previously excluded energy storage technologies, such as controlled electric vehicle charging or pumped storage projects greater than 50 MW? The Commission will not consider comments that simply restate positions previously offered and addressed in D.14-10-045.

## **3. Multiple-Use Applications**

Multiple-use applications are defined in the ESR as those that provide multiple services to different entities or jurisdictions.<sup>5</sup> The CAISO is currently engaging with stakeholders to enable wholesale market-level participation of behind the meter (BTM) energy storage assets interconnected to the distribution

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<sup>5</sup> Energy Storage Roadmap at 14.

grid, commonly referred to as the Energy Storage and Distributed Energy Resources (ESDER) stakeholder initiative.<sup>6</sup> Multi-use configuration may also include in-front-of-the-meter (IFOM) storage assets. In coordination with efforts underway at CAISO, the Commission seeks input on the following questions:

- a. What are the energy storage configurations or use-cases that currently exist, or may exist in the future, that provide multiple services at the transmission and/or distribution level (e.g., provide both retail or distribution services and participate in the CAISO wholesale market)? Which of these configurations/use-cases are most likely to occur and should be considered first? Please identify specific regulatory issues under the CPUC's jurisdiction that need to be resolved to enable these multiple-use applications. Explain the "procedural home" where the regulatory issues identified should be resolved.
- b. What cost-recovery issues arise from the identified multiple-use applications? How should the Commission address these? Are there any double-counting issues, such as double payments, overlapping value streams, or redundant compensation, and wholesale/retail energy charges that arise with multiple-use applications and that should be addressed by the Commission?
- c. Are existing interconnection requirements adequate to enable configurations/use cases involving behind-the-meter or in-front- of-the-meter energy storage to both provide retail and/or distribution services and participate in the CAISO wholesale market? If not, what is the applicable interconnection process that needs to be modified (i.e., Rule 21 or the Wholesale Distribution Access Tariff), and what specific modifications are needed to interconnect and enable multiple uses?

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<sup>6</sup>[http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyStorage\\_AgregatedDistributedEnergyResources.aspx](http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyStorage_AgregatedDistributedEnergyResources.aspx)

- d. What jurisdictional metering and sub-metering requirements are relevant to BTM and IFOM multi-use configurations? Are existing metering and sub-metering requirements adequate to enable configurations/use cases involving BTM energy storage to both provide retail and distribution services and participate in the CAISO wholesale market? If not, what specific modifications are needed to metering and sub-metering requirements to enable multiple-use applications?
- e. Explain how dispatch coordination and prioritization should work for resources that have agreed to provide services to more than one entity (e.g. a contract to provide distribution asset deferral and resource adequacy capacity)? How should settlement be handled?
- f. Should the Commission hold one or more joint workshop(s) with the CAISO to address any of the topics outlined above?

#### **4. Station Power**

The treatment of station power in the context of energy storage may not be as straightforward as is the case for conventional generating assets. The Commission seeks input on the following questions:

- a. What rules or guidelines are needed to distinguish station power from wholesale charging energy taken in by distribution connected storage assets participating in wholesale markets?
- b. Are there any rules or guidelines required outside of those developed by the CAISO?
- c. What are the rate implications for station power in the context of energy storage?
- d. What other issues must the Commission consider in regards to station power and energy storage projects?

## **5. Community Storage**

Community Storage is typically associated with a cluster of customer load, whether residential, campus-like complexes, or commercial development.

Battery capacity may be combined to serve the load in aggregate, or may be dispersed through a residential or commercial development, and may serve the following functions:

- Providing storage capacity for excess output from small-scale renewable energy sources;
- Providing smoothing and power quality regulation for intermittent resources;
- Providing back-up power capability during outages.

In the Energy Storage Phase 2 Interim Staff Report, developed in R.10-12-007, Commission staff identified community storage connected to the distribution grid as a possible use case.<sup>7</sup> To further the discussion, the Commission seeks input on the following questions:

- a. What is the status of existing distribution-level community storage pilot programs and/or any future deployments/projects?
- b. What, if any, are the current barriers to developing distribution-level community storage?
- c. What policy options, if any, should be pursued to further address the barriers identified?

## **6. Evaluation of the Energy Storage Framework**

The OIR contemplated tasking the Commission's Energy Division with developing the Evaluation Plan for the ESP Framework and Design Program (Evaluation Plan) for 2016. For the purposes of this rulemaking, the framework

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<sup>7</sup> <http://www.cpuc.ca.gov/NR/rdonlyres/4E519F6F-82CE-4428-86F2-5F8791DA248B/0/StaffPhase2InterimReport.pdf>

and budget have been previously determined in D.13-10-040 (see Section 4.14, Program Evaluation).<sup>8</sup> No formal comment by parties is required for Energy Division to begin designing and implementing a plan for 2016. However, as discussed in the section on development of the record below, parties will have an opportunity to informally work with Energy Division staff as it undertakes the 2016 Storage Evaluation process. The results will be incorporated into the record of this or a successor Rulemaking.

The Commission has included the Evaluation Plan for 2016 in Track 2 as a placeholder to discuss the need for revision of the process in years beyond 2016, including revision of the budget, should that become necessary.

## **7. Development of the Record**

The record in this proceeding will be developed primarily through party comment and workshops. As set forth in the schedule and ruling below, in Track 2 we will consider party comments and, where appropriate, will use comments as a starting point for developing workshop agendas. Workshops will be held to allow parties and Energy Division staff to informally discuss many of the issues included in the scope of this proceeding. The assigned ALJ, the assigned Commissioner, or her staff may also attend workshops. Discretion will be left to Energy Division as to whether the appropriate output of each workshop is a workshop report (to be authored by Energy Division or parties, as designated by Energy Division), staff proposal, whitepaper, etc. Parties will have an opportunity to provide comment on any workshop outputs incorporated into the record.

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<sup>8</sup> D.13-10-040 at 66-67.

## **8. Evidentiary Hearings**

In the OIR, the Commission anticipated that the issues in this proceeding could be resolved through a combination of workshops and filed comments, and initially determined that hearings would not be necessary. In comments on the OIR, Marin Clean Energy articulated that hearings may be needed as issues of material facts may arise. We decline to formally schedule hearings at this time.

If, after submission of comments and the completion of workshops, any party contends that evidentiary hearings are still needed in Track 2 of this proceeding to address any issues within the scope of this case, such party shall, no later than the dates outlined in the schedule below, file a motion requesting evidentiary hearings. The motion shall:

- a. Identify each area of relevant factual inquiry that has not been addressed;
- b. Identify each material contested issue of fact on which hearings should be held (explaining, as necessary, why the issue is material); and
- c. State why a hearing is legally required.

These requests shall also contain requests for briefing, if any, along with an explanation of what issues the party believes are appropriate for briefing and why. If any party formally requests evidentiary hearings and/or briefing as specified here, we will consider that request and inform parties of whether such hearings or briefing will be scheduled, and, if so, the dates for those activities.

## **9. Schedule**

Track 2 of this proceeding will stand submitted upon written ruling of the ALJ. We anticipate this proceeding to conclude as set forth below. However, the assigned Commissioner or ALJ may modify the schedule as required to promote the efficient and fair resolution of the matter.

Pursuant to the authorization conferred by Pub. Util. Code § 1701.5(b), Tracks 1 and 2 of this proceeding were extended for 24 months beyond the June 12, 2015 Scoping Memo.

## Track 2

Date	Item
January 5, 2016	Ruling refining scope and setting Track 2 schedule
January 29, 2016	Opening comments on Track 2 Issues
February 12, 2016	Reply Comments on Track 2 Issues
March 2016 (tentative)	Multiple-Use Application Workshop, possibly a joint workshop with CAISO
April 2016	Workshop reports due
April 2016	Opening comments on workshop reports
May 2016	Reply comments on workshop reports
Third or Fourth Quarter 2016	Proposed Decision
Fourth Quarter 2016 (tentative)	2016 Report on Evaluation of Energy Storage Framework incorporated into the record

For any workshops scheduled in this proceeding, a notice will be posted on the Commission's Daily Calendar to inform the public that an advisor or decision-maker may be present at the workshop. Parties shall check the Daily Calendar regularly for such notices.

## 10. Motions for Party Status

Requests for party status may be made by motion, in accordance with Rule 1.4. Parties should note that the maintenance of party status requires active participation in the proceeding, e.g. submitting formal filings, participating in workshops, etc. The assigned ALJ may remove party status if a party is not actively participating in the proceeding. Parties removed from party status will be placed in the Information Only category.

## **11. Filing, Service and Service List**

All formally filed documents in this proceeding must be filed with the Commission's Docket Office and served on the service list for this proceeding. Parties who provide an e-mail address for the official service list may serve documents by e-mail in accordance with Rule 1.10 (and must nevertheless serve a paper copy of all documents (excluding certificates of service and associated service lists) on the assigned Commissioner and assigned ALJ, pursuant to Rule 1.10(e)), and are deemed to consent to e-mail service by other parties. If no e-mail address was provided, service should be made by United States mail.

Parties are encouraged to electronically file pleadings pursuant to Rule 1.13(b) as it speeds their processing and allows them to be posted on the Commission's website. More information about electronic filing is available at [www.cpuc.ca.gov/puc/efiling](http://www.cpuc.ca.gov/puc/efiling).

Any person interested in participating in this proceeding who is unfamiliar with the Commission's procedures or who has questions about the electronic filing procedures should contact the Commission's Public Advisor at 866-849-8390 or 415-703-2074 or 866-836-7825 (TTY), or send an e-mail to [public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov).

## **12. Categorization, *Ex Parte* Rules, and Designation of Presiding Officer**

Pursuant to Rule 7.1(d), the Commission preliminarily categorized this proceeding to be quasi-legislative, as that term is defined in Rule 1.3(d). The Track 1 Scoping Memo confirmed that the category for this proceeding is quasi-legislative.

Pursuant to Rule 8.3(a), *ex parte* communications in a quasi-legislative proceeding are allowed without restriction or reporting requirement.

Pursuant to Rule 13.2(c), Carla J. Peterman is the assigned Presiding Officer in this proceeding should hearings be required.

### **13. Assignment of Proceeding**

Carla J. Peterman is the assigned Commissioner, and Julie M. Halligan is the assigned ALJ in this proceeding.

### **14. Intervenor Compensation**

Any party that expects to request intervenor compensation for its participation in this rulemaking must file its notice of intent to claim intervenor compensation in accordance with Rule 17.1 and Pub Util. Code §§ 1801-1812.

Parties intending to seek an award of intervenor compensation must maintain daily record keeping for all hours charged and a sufficient description for each time of entry. Sufficient means more detail than just “review correspondence” or “research” or “attend meeting.” In addition, intervenors must classify time by issues. When submitting requests for compensation, the hourly data should be presented in an Excel spreadsheet.

### **15. Ruling Seeking Party Comment on Track 2 Issues**

Parties are requested to file and serve comments on the Track 2 questions listed below. Opening comments shall be due on January 29, 2016. Reply comments are due on February 12, 2016.

#### **1. Revision of Energy Storage Procurement Targets**

- a. Should the Commission increase the adopted ESP targets applicable for the 2018 and 2020 solicitations? The Commission would also consider revision of targets for IOUs and LSEs/CCAs. What factors would the Commission consider in increasing the adopted ESP?
- b. Considering the directive in Senate Bill 350 (De Leon, 2015) to develop an Integrated Resource Planning Process, should the Commission adopt ESP targets beyond 2020 at this time? If so, what factors should the Commission

- consider in adopting future targets, and what is an appropriate target?
- c. If increased targets are adopted for ESPs/CCAs, what implications are there for PCIA/cost recovery, and how should the Commission balance the storage targets against the level of non-by-passable charges imposed upon ESPs/CCAs?
- 2. Eligibility (Phase 2)**
- a. What new information and/or evolving circumstances exist such that the Commission should revisit previously excluded energy storage technologies, such as controlled electric vehicle charging or pumped storage projects greater than 50 MW? The Commission will not consider comments that simply restate positions previously offered and addressed in D.14-10-045.
- 3. Multiple-Use Applications**
- a. What are the energy storage configurations or use-cases that currently exist, or may exist in the future, that provide multiple services at the transmission and/or distribution level (e.g., provide both retail or distribution services and participate in the CAISO wholesale market)? Which of these configurations/use-cases are most likely to occur and should be considered first? Please identify specific regulatory issues under the CPUC's jurisdiction that need to be resolved to enable these multiple-use applications. Explain the "procedural home" where the regulatory issues identified should be resolved.
  - b. What cost-recovery issues arise from the identified multiple-use applications? How should the Commission address these? Are there any double-counting issues, such as double payments, overlapping value streams, or redundant compensation, and wholesale/retail energy charges that arise with multiple-use applications and that should be addressed by the Commission?

- c. Are existing interconnection requirements adequate to enable configurations/use cases involving behind-the-meter or in-front-of-the-meter energy storage to both provide retail and/or distribution services and participate in the CAISO wholesale market? If not, what is the applicable interconnection process that needs to be modified (i.e., Rule 21 or the Wholesale Distribution Access Tariff), and what specific modifications are needed to interconnect and enable multiple uses?
- d. What jurisdictional metering and sub-metering requirements are relevant to behind-the-meter and in-front of-the-meter multi-use configurations? Are existing metering and sub-metering requirements adequate to enable configurations/use cases involving behind-the-meter energy storage to both provide retail and distribution services and participate in the CAISO wholesale market? If not, what specific modifications are needed to metering and sub-metering requirements to enable multiple-use applications?
- e. Explain how dispatch coordination and prioritization should work for resources that have agreed to provide services to more than one entity (e.g. a contract to provide distribution asset deferral and resource adequacy capacity)? How should settlement be handled?
- f. Should the Commission hold one or more joint workshop(s) with the CAISO to address any of the topics outlined above?

#### **4. Station Power**

- a. What rules or guidelines are needed to distinguish station power from wholesale charging energy taken in by distribution connected storage assets participating in wholesale markets?
- b. Are there any rules or guidelines required outside of those developed by the CAISO?
- c. What are the rate implications for station power in the context of energy storage?

- d. What other issues must the Commission consider in regards to station power and energy storage projects?

## **5. Community Storage**

- a. What is the status of existing distribution-level community storage pilot programs and/or any future deployments/projects?
- b. What, if any, are the current barriers to developing distribution-level community storage?
- c. What policy options, if any, should be pursued to further address the barriers identified?

**IT IS RULED** that:

1. Rulemaking 15-03-011 is categorized as quasi-legislative.
2. Evidentiary hearings are not needed at this time. A final resolution on the need for hearings will be made at a later date.
3. Carla J. Peterman is the designated presiding officer in this proceeding.
4. Pursuant to Pub. Util. Code § 1701.5(b), this proceeding will conclude within 24 months from the date of the June 12, 2015 Scoping Memo.
5. The scope of Track 2 of this proceeding is set forth in Section 3 of the body of this Scoping Memo.
6. To the extent parties wish to request evidentiary hearings, such requests shall be made according to the guidelines set forth in Section 5.
7. The schedule for Track 2 of this proceeding is set forth in Section 6 of this Scoping Ruling.
8. The assigned Administrative Law Judge may make revisions or provide further direction regarding the scope of this proceeding and the manner in which issues shall be addressed, as may be necessary for full and complete development of the record.

9. The assigned Administrative Law Judge may modify the schedule adopted herein as necessary for the reasonable and efficient conduct of this proceeding.

10. Parties shall file and serve formal documents as set forth in Section 9.

11. Parties are requested to file and serve comments on the questions set forth in Section 13. Opening and reply comments shall be filed and served on January 29, 2016 and February 12, 2016, respectively.

Dated January 5, 2016, at San Francisco, California.

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/s/ CARLA J. PETERMAN  
Carla J. Peterman  
Assigned Commissioner

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/s/ JULIE M. HALLIGAN  
Julie M. Halligan  
Administrative Law Judge