

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding  
Policies, Procedures and Rules for the  
California Solar Initiative, the Self-Generation  
Incentive Program and Other Distributed  
Generation Issues.

Rulemaking 12-11-005  
(Filed November 8, 2012)

**THE OFFICE OF RATEPAYER ADVOCATES'  
OPENING COMMENTS ON ASSIGNED COMMISSIONER'S RULING  
REGARDING THE INTERCONNECTION OF ENERGY STORAGE SYSTEMS  
PAIRED WITH RENEWABLE GENERATORS  
ELIGIBLE FOR NET ENERGY METERING**

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## I. INTRODUCTION

Pursuant to the October 17, 2013 “Assigned Commissioner’s Ruling Regarding the Interconnection of Energy Storage Systems Paired with Renewable Generators Eligible for Net Energy Metering” (Ruling),<sup>1</sup> the Office of Ratepayer Advocates (ORA) submits these opening comments. The Ruling proposes to extend certain interconnection-related exemptions that are currently applicable to renewable electrical generation systems taking service under net energy metering (NEM), to storage technologies that may be considered an addition or enhancement to those systems.<sup>2</sup> The investor owned utilities (IOUs) would report on the “lost revenues” resulting from this new policy by June 30, 2015, and the Commission may choose to extend or amend the policy by December 31, 2015.

ORA respects the Ruling’s stated intent to provide some certainty for the distributed storage market (i.e., customers and vendors of “integrated” and “directly connected” energy storage systems), while also establishing specific requirements to ensure such systems support rather than work against the original intent of the NEM statute, which was to support the development of customer-side *renewable* electrical facilities. As the Commission considers how to address other barriers to energy storage development, ORA looks forward to efforts that promote or encourage customer-side energy storage applications that provide system or local area benefits, such that storage enables the achievement of important energy policy goals including grid reliability and deferral or avoidance of transmission and distribution investments.<sup>3</sup>

In these opening comments, ORA supports the policy objective of maintaining NEM integrity; recommends that the Commission consolidate the proposed reporting requirements with those

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<sup>1</sup> R.12-11-005 Assigned Commissioner’s Ruling Regarding the Interconnection of Energy Storage Systems Paired With Renewable Generators Eligible for Net Energy Metering, <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M078/K591/78591800.PDF>, issued October 17, 2013 (“R.12-11-005 October 17, 2013 Ruling”).

<sup>2</sup> The Ruling explains that this is consistent with the California Energy Commission (CEC)’s April 30, 2013 edition of the Renewables Portfolio Standard Eligibility Commission Guidebook (Guidebook), which includes a new section on energy storage technologies that clarifies the conditions under which a storage device may be considered an addition or enhancement to a renewable electrical generation facility per Public Resources Code 25741(a)(1). R.12-11-005 October 17, 2013 Ruling, p. 1.

<sup>3</sup> R.10-12-007 Administrative Law Judge’s Ruling Entering Interim Staff Report Into Record and Seeking Comments, Attachment A “Energy Storage Phase 2 Interim Staff Report,” <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M042/K157/42157799.PDF>, filed January 18, 2013, Section 3.4.3 Demand-Side (Customer-Sited) Energy Storage; and Decision (D.) 13-10-040 Adopting Energy Storage Procurement Framework and Design Program, Attachment A <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M079/K533/79533378.PDF>

reporting requirements outlined in Resolution E-4610; and seeks clarification regarding the sizing requirements applicable to “integrated” and “directly connected” energy storage systems.

## **II. DISCUSSION**

### **A. The Commission should maintain NEM integrity.**

In April 2013, the CEC revised its Renewables Portfolio Standard (RPS) Guidebook to define “integrated” and “directly connected” storage systems as “additions or enhancements to a renewable electrical generation facility.” ORA interprets this to mean that such systems are eligible for the same exemptions from standby charges and most interconnection fees as net energy metering (NEM) systems. The Ruling notes that the CEC’s revision “has led to confusion among the electric utilities” and therefore proposes “to provide market certainty for storage vendors” by extending interconnection-related exemptions to “integrated” and “directly connected” energy storage systems until, at a minimum, December 31, 2015.<sup>4</sup> The Ruling further proposes specific metering and safety requirements in order to ensure NEM integrity and safe interconnection and operation, respectively.

ORA supports the Commission’s objective of preserving NEM integrity by ensuring that eligible customer-generators do not use “integrated” and “directly connected” energy storage systems to store off-peak grid energy and then export on-peak kilowatt-hour credits in excess of what their *renewable* generating facility produces. The specific metering requirements and exceptions appear reasonable, but the Commission should consider any alternative proposals, or the use of alternative technologies, that would achieve the same policy objective (i.e., maintaining NEM integrity). For instance, if smart meters can be used to prevent the wholesale-retail gaming described in the Ruling, and at a lower cost than the proposed net generation output meter (NGOM), ORA would support the use of existing infrastructure to preserve NEM integrity.

The Ruling further asks whether certain exceptions to the proposed metering requirements should be established. As described, these exceptions seem reasonable to the extent they support or are consistent with the policy objective of maintaining NEM integrity. Specifically, regarding the second proposed exception, if a size threshold can be determined, below which all parties can agree that the risk to NEM integrity is *de minimis*, ORA would support relieving such projects of excessive metering requirements. ORA looks forward to reviewing the comments of parties who offer greater technical expertise in this area.

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<sup>4</sup> R.12-11-005 October 17, 2013 Ruling, p. 5.

Regarding the proposed safety requirements, the technical screens within the Rule 21 review process should sufficiently ensure that such systems are interconnected safely. If the IOUs propose different requirements, any such proposals should be supported with concrete reference to the specific applicable safety standards.

**B. The Commission should clarify the proposed reporting requirements regarding “lost revenues.”**

The Ruling would require the IOUs to report on the “lost revenues” resulting from the Commission’s determination to exempt “integrated” and “directly connected” energy storage systems from interconnection fees. Technically, the IOUs will not “lose” revenues; to the extent they do not collect revenues directly from interconnection applicants, they would instead recover those costs from other ratepayers. Given that clarification, ORA recommends that the Commission simply specify that interconnection costs for “integrated” and “directly connected” energy storage systems shall be included in the report that the Commission directed the IOUs to file pursuant to Resolution E-4610 Ordering Paragraph 4.<sup>5</sup>

**C. The sizing limit for eligible storage devices should be consistent with SGIP requirements.**

ORA seeks clarification regarding the sizing requirements applicable to “integrated” and “directly connected” energy storage systems, specifically that systems with a rated capacity of five kilowatts (5 kW) or less are exempt from the system sizing requirements outlined in Section 4.4.3 of the SGIP Handbook.<sup>6</sup> It appears from the most recent SGIP Quarterly Report that the only residential storage systems that could possibly take advantage of the proposed exemptions (from standby charges and interconnection fees) have a rated capacity of 5 kW.<sup>7</sup> Assuming that the proposed metering and

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<sup>5</sup> Resolution E-4610 Commission determination authorizing investor owned utilities to implement net energy metering (NEM) aggregation pursuant to Senate Bill 594 (Wolk, 2012), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K158/77158265.PDF>, Ordering Paragraph 4.

<sup>6</sup> 2013 Self-Generation Incentive Program Handbook, published February 1, 2013, [http://www.cpuc.ca.gov/NR/rdonlyres/0DDABA86-9DF1-41C7-AD08-FF5B255155FA/0/2013\\_SGIP\\_Handbook\\_v1.pdf](http://www.cpuc.ca.gov/NR/rdonlyres/0DDABA86-9DF1-41C7-AD08-FF5B255155FA/0/2013_SGIP_Handbook_v1.pdf), Section 4.4 System Size Parameters.

<sup>7</sup> Quarterly Statewide Report, Updated October 1, 2013, <https://energycenter.org/sites/default/files/docs/nav/buildings/businesses/sgip/docs/Quarterly%20Statewide%20Report%20Q3%202013.xlsx>. Specifically, filtering this file to show only residential “A.E.S.” equipment types paired with eligible renewable resources shows that all but one of these systems have a rated capacity of 5 kW; one application showed a rated capacity of 10 kW; on October 31, 2013 ORA received an email from Southern California Gas Company confirming that this was in fact a typo and the project was certified at 5 kW.

safety requirements sufficiently address concerns regarding NEM integrity and safety (respectively), ORA suggests that the SGIP sizing requirements be applied consistently to “integrated” and “directly connected” systems subject to this Ruling.

### III. CONCLUSION

ORA supports removing barriers to the adoption of technologies and resources that provide needed services for the California electric power system in the most cost-effective manner possible. ORA looks forward to further work that promotes or encourages customer-side energy storage applications that provide system and local area benefits, such that storage enables the achievement of important energy goals including grid reliability and deferral or avoidance of transmission and distribution investments.

In these opening comments ORA supports the policy objective of maintaining NEM integrity; recommends that the Commission consolidate the proposed reporting requirements with those reporting requirements outlined in Resolution E-4610; and seeks clarification regarding the sizing requirements applicable to “integrated” and “directly connected” energy storage systems.

Respectfully submitted,

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