BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.

Rulemaking 14-08-013 (Filed August 14, 2014

And Related Matters

Application 15-07-002 Application 15-07-003 Application 15-07-005 Application 15-07-007 Application 15-07-008

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON ADMINISTRATIVE LAW JUDGE'S RULING INVITING COMMENTS ON ROADMAP STAFF PROPOSAL

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The California Energy Storage Alliance ("CESA")¹ hereby submits these comments pursuant to the Rules of Practice and Procedure of the California Public Utilities

¹ 1 Energy Systems Inc., Abengoa, Advanced Microgrid Solutions, AES Energy Storage, Aquion Energy, ARES North America, Brookfield, Chargepoint, Clean Energy Systems, CODA Energy, Consolidated Edison Development, Inc., Cumulus Energy Storage, Customized Energy Solutions, Demand Energy, Duke Energy, Dynapower Company, LLC, Eagle Crest Energy Company, East Penn Manufacturing Company, Ecoult, ELSYS Inc., Energy Storage Systems, Inc., Enersys, EnerVault Corporation, Enphase ENERGY, EV Grid, Flextronics, GE Energy Storage, Green Charge Networks, Greensmith Energy, Gridtential Energy, Inc., Hitachi Chemical Co., Ice Energy, IMERGY Power Systems, Innovation Core SEI, Inc. (A Sumitomo Electric Company), Invenergy LLC, K&L Gates, LG Chem Power, Inc., LightSail Energy, Lockheed Martin Advanced Energy Storage LLC, LS Power Development, LLC, Manatt, Phelps & Phillips, LLP, Mitsubishi Corporation (Americas), Mobile Solar, NEC Energy Solutions, Inc., NextEra Energy Resources, NRG Solar LLC, OutBack Power Technologies, Panasonic, Parker Hannifin Corporation, Powertree Services Inc., Primus Power Corporation, Princeton Power Systems, Recurrent Energy, Renewable Energy Systems Americas Inc., Rosendin Electric, S&C Electric Company, Saft America Inc., Sharp Electronics Corporation, Skylar Capital Management, SolarCity, Sony Corporation of America, Sovereign Energy, STEM, SunEdison, SunPower, Toshiba International Corporation, Trimark Associates, Inc., Tri-Technic, Wellhead Electric. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. (http://storagealliance.org).

Commission ("Commission") in response to the *Administrative Law Judge's Ruling Inviting Comments on Roadmap Staff Proposal*, issued November 16, 2015 ("ALJ's Ruling").

I. INTRODUCTION.

CESA commends the Commission's Energy Division Staff for developing the Distribution Resources Plan Roadmap Straw Proposal ("Roadmap") as a very detailed and comprehensive procedural timeline to discuss and review key foundational issues related to the Location Net Benefit Analysis ("LNBA"), Integrated Capacity Analysis ("ICA"), and Distribution Resources Plan ("DRP") pilot project design and implementation. CESA believes that the planned workshops will serve as an important forum for stakeholders to assess LNBA and ICA methodologies, explore incorporation of ICA results into DRP pilot projects and other proceedings, and provide significant input into DRP pilot project design and implementation, among a host of other key issues. CESA also supports how the Roadmap ensures coordination with all related planning and distributed energy resource ("DER") proceedings. The DRP applications published in July 2015 represent a major step towards more open and transparent electric distribution system planning, while the Roadmap outlines the path forward in demonstrating the benefits and feasibility of DERs.

Overall, CESA supports the Roadmap but suggests several areas of further clarification and improvement. In these comments, CESA seeks further clarification of the coordination among R.11-09-011² (and any successor proceeding), R.15-03-011 (the Energy Storage

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² Order Instituting Rulemaking on the Commission's Own Motion to improve distribution level interconnection rules and regulations for certain classes of electric generators and electric storage resources, filed September 22, 2011.

rulemaking)³ and active initiatives at the California Independent System Operator ("CAISO"). CESA strongly advises against positioning R.14-08-013, and related applications, as a "catchall" forum that displaces other issue-specific proceedings, recommends that non-utilities also have an opportunity to provide substantial input and ideas on DRP pilot project design and implementation, and seeks further details on a clear path forward beyond 2017 to optimally transition DRP pilot projects to a "plug and play" system. With these improvements, CESA believes that the Roadmap can be improved to fully realize the benefits of actionable distribution system planning that simultaneously ensures safe, reliable, and affordable electric service.

II. THE ROADMAP PROVIDES KEY CLARIFICATIONS FOR DISTRIBUTION RESOURCE PLAN AND INTEGRATED DISTIBUTED ENERGY RESOURCE COORDINATION.

CESA supports the clarifications provided in the Roadmap between this proceeding and the Integrated Distributed Energy Resource ("IDER") proceeding.⁴ In previous rounds of comments, parties appeared unable to clearly differentiate the intent, scope, and timing between the two proceedings. For example, in comments submitted in response to the proposed scope, several parties suggested that R.14-10-003 should await determinations from this proceeding.⁵ In its Reply Comments submitted on September 8, 2015, CESA expressed support for the two proceedings to occur in parallel since the outcomes of the DRP proceeding, such as the LNBA values, represent just one input to the IDER framework, which is expected to consider non-locational values related to DERs.

³ 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, filed March 26, 2015.

⁴ Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Demand Side Resource Programs, R.14-10-003, filed October 2, 2014.

⁵ See, Proposed Decision Adopting an Expanded Scope, a Definition, and a Goal for the Integration of Demand Side Resources, issued August 13, 2015.

CESA is pleased to see that its view of DRP-IDER coordination is supported in the Roadmap. The parallel progression of these two very closely related proceedings should be reinforced and made more explicit in the Scoping Memo for this proceeding and the revised Scoping Memo for R.14-10-003.

There are two potential areas of improvement in the Roadmap. First, the Roadmap should frontload all pilot activity earlier in its procedural timeline. Wherever possible, the design and implementation of the DRP pilot projects should be accelerated (Demo A and B) and initiated earlier (Demo C, D, and E). CESA supports emphasis on the DRP pilots to demonstrate the LNBA and ICA in action, but also stresses the importance of advancing the DRP pilot projects toward sustainable DER planning and integration in coordination with the frameworks developed in this proceeding. Along those same lines, CESA's second recommendation is for the Roadmap to clarify that additional joint workshops with stakeholders in both proceedings be held to establish permanent DER sourcing mechanisms for 2017 and beyond. The DRPs should transition away from the demonstration project phase and advance to a sustainable compensation structure that dynamically reflects location-specific grid and system based on the ICAs and corresponding LNBA values. The Commission should continue to stress the importance of creating a "plug and play" infrastructure that is actionable for DER providers as the end goal for both proceedings.

III. MORE CLARITY IS NEEDED ON COORDINATION BETWEEN THE DRP AND R.11-09-011.

Interconnection constitutes a major issue in ensuring the success of the DRPs. Without an expedited and streamlined interconnection process that facilitates true "plug and play," the ICAs are still not actionable. Due to delays in the interconnection application and review process, grid conditions may change and third-party projects will likely have cost overruns.

Therefore, the subject of interconnection is the bridge between this proceeding and R.14-10-003 that may otherwise lead to a disconnect between locational system needs and sourcing mechanisms if interconnection processes are not expedited and streamlined. When locational values are high, according to the LNBA, it suggests that system impacts are being mitigated or improved, which should reduce system impact concerns by the Utilities when reviewing interconnecting load and generation.

Discussion of streamlining interconnection processes related to the DRPs should be more clearly defined in the Roadmap and considered earlier in the timeline. Currently, these issues are scheduled to be discussed in "Joint Workshop 6" to be held sometime between May and December of 2016. The question of how to incorporate ICAs into interconnection rules and tariffs, however, should be discussed hand-in-hand with Workshops 3 and 4 in February 2016 when the implementation of ICA and LNBA will be discussed. The benefits of ICA and LNBA will not be realized until DERs are actually interconnected to the distribution system. As a result, interconnection issues should be discussed earlier during the DR pilot project design and implementation phases in the Roadmap timeline.

In addition, this proceeding should be coordinated with and provide direction and a scope of work for the Smart Inverter Working Group ("SIWG"). Smart inverters have the potential to address many of the location-specific system and grid needs identified in the DRPs. The SIWG is entering Phase 3 in its proceeding to discuss advanced technical functionality and communication protocols of smart inverters, but has yet to discuss how smart inverters will actually be procured. These issues are scheduled to be discussed in Joint Workshops 6, 7, and 8 sometime between May and December of 2016, but it should discussed earlier in Joint Workshops 3, 4, and 5 when sourcing of optimal DER portfolios are discussed in April 2016.

Furthermore, clarity could also be provided earlier in defining assumptions for smart inverters in ICA development and approval in January and February of 2016.

IV. MORE CLARITY IS NEEDED ON COORDINATION BETWEEN THIS PROCEEDING AND THE CAISO'S ESDER AND DERP INITIATIVES.

The Roadmap presently lacks forums to coordinate with relevant initiatives underway at the California Independent System Operator ("CAISO"), especially those related to DER aggregation that warrants consideration with the DRP procedural timeline. System needs identified by the application of ICA and LNBA tools should be addressed optimally in certain circumstances by portfolios of DERs rather a single-source DER. The Energy Storage & Distributed Energy Resources ("ESDER") Initiative and the Distributed Energy Resources Provider ("DERP") Initiative at the CAISO are tackling key questions related to metering, operational parameters, and settlements for DER aggregation. Aggregation issues, however, are presently covered inadequately in the Roadmap except for a very brief mention of the topic in the proposed discussions on barriers to DER deployment.

These issues may be more appropriately addressed in R.14-10-003 because aggregation involves the sourcing of geographically diverse DERs in response to price and dispatch signals, but there are still ties to the DRP when considering optimal portfolios to meet ICA-identified system needs. Therefore, CESA recommends that CAISO stakeholders be invited as indispensable participants in Joint Workshops 3, 4, and 5 in April 2016 when sourcing of optimal portfolios will be discussed.

V. <u>THIS PROCEEDING SHOULD NOT FUNCTION AS A CATCH-ALL</u> PROCEEDING THAT DISPLACES OTHER ISSUE-SPECIFIC PROCEEDINGS.

While coordination of other DER- and planning-related proceedings are important as indicated in the Roadmap, CESA cautions against this proceeding becoming a "catch-all"

proceeding that displaces other issue-specific proceedings. There are indeed overlaps between this proceeding and the other proceedings highlighted in the Roadmap, such as the Long-term Procurement Plan (R.13-12-010), Energy Storage (R.15-03-011), and Demand Response (R.13-09-011), but the scope of this proceeding is already so large that many important specific issues may be lost or overlooked.

For example, while improved interconnection processes are important to the DRPs, not all interconnection issues can be covered in this proceeding. Specifically related to energy storage interconnection, there are issues, such as mobile inverter standards for interconnection or the resolution of the definition of and metering rules for "station power," that are major outstanding issues and are likely to fall outside the scope of this proceeding. The fact that certain DER interconnection issues will be addressed in this proceeding should not foreclose the opportunity to discuss and resolve other specific interconnection issues elsewhere. In the same vein, CESA therefore supports commencement of successor rulemaking once R.11-09-011 is closed in the near future to address a number of outstanding energy storage and other DER-related interconnection issues that will not be addressed in R.14-08-013, rather than pushing to have these unaddressed issues to be scoped into this proceeding.

The focus of R.14-08-013 should be on determining how to incorporate ICAs and LNBA values into other proceedings. The Roadmap already suggests that the DER forecasting models from the DRPs can be integrated into other planning efforts, such as the Commission's LTPP, the CAISO's Transmission Planning Process ("TPP"), and the California Energy Commission's Integrated Energy Policy Report ("IEPR"). Likewise, the Roadmap proposes workshops to explore how the ICA and LNBA outputs could be incorporated into the frameworks and tariffs

being discussed in those proceedings. This should remain the focus of inter-proceeding coordination, rather than have this proceeding become a catch-all proceeding.

VI. THE ROADMAP SHOULD ALLOW FOR SUBSTANTIAL THIRD PARTY INPUT AND IDEAS TO BE SUBMITTED AND CONSIDERED FOR DEMOMONSTRATIONS C, D, AND E.

There is an opportunity to identify innovative demonstration projects that validate the benefits and feasibility of the ICA and LNBA by allowing third parties to submit input and ideas on the design and implementation of Demonstrations C, D, and E. Currently, only Utilities are allowed to submit proposals that demonstrate DER locational benefits (Demo C), demonstrate distribution operations at high penetrations of DERs (Demo D), and demonstrate a microgrid with DERs (Demo E). These proposals are scheduled to be reviewed during Workshop 5 and 6 in March 2016.

Third-party DER providers and developers, including many CESA members, are at the cutting-edge of deploying DER solutions in each of the enumerated scenarios. Many of these providers and developers have extensive experience in advanced configurations and energy management solutions that optimize customer-host and system benefits, which the Utilities may be unaware of. Therefore, in order to derive the most value from these DRP pilot projects, it will be beneficial to receive the most advanced and innovative ideas to demonstrate the benefits and feasibility of the ICA and LNBA and to assess the ability of third party-provided DERs to address a system need. The Roadmap should therefore reflect how the Utilities need to closely collaborate with non-Utility stakeholders on pilot project design and implementation as well as in discussing issues concerning asset ownership, metering, business models, and aggregation eligibility.

VII. <u>CLEAR PATH FORWARD NEEDS TO BE OUTLINED FOR TRANSITIONING</u> FROM DEMONSTRATION PROJECTS TO A PLUG-AND-PLAY SYSTEM.

As discussed above, the Commission should establish the creation of a "plug and play" infrastructure that is actionable for DER providers as the end goal for this proceeding. Therefore, a clear path forward needs to be outlined to advance beyond the DRP pilot projects proposed in the Roadmap, which presently does not establish a concrete procedural timeline for 2017 and beyond.

While it is difficult to establish a long-term schedule and plan for 2017 and beyond, having one would create a more likely path forward for successful demonstration projects to be scaled up, which CESA believes should be one of the end goals of this proceeding. Having placeholder workshops for 2017 and beyond to consider scaling of demonstration projects will set expectations for this proceeding and provide criteria for evaluating proposed pilot DRP projects. Furthermore, CESA is concerned with the consideration of "recurring DRP filings" in the DRP Roadmap for 2017 and beyond. The goal of this proceeding should be to advance the DRPs toward a "plug and play" actionable system needs map, rather than using the DRPs to create a more transparent but still "traditional" Utility procurement mechanism for DERs. Although it is difficult to develop a concrete procedural timeline far into the future as circumstances change, CESA believes it is important to have more procedural certainty for 2017 and beyond to set expectations for this proceeding.

VIII. <u>CONCLUSION</u>

CESA thanks the Commission for the opportunity to submit these comments and looks forward to working with the Commission and parties as this proceeding progresses.

Respectfully submitted,

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