BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future.	Rulemaking 21-06-017 (Filed June 24, 2021)

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON THE ORDER INSTITUTING RULEMAKING TO MODERNIZE THE ELECTRIC GRID FOR A HIGH DISTRIBUTED ENERGY RESOURCES FUTURE

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the California Energy Storage Alliance ("CESA") hereby submits these comments on the *Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future* ("OIR"), issued by the Joint Commissioners on June 24, 2021.

I. INTRODUCTION.

Significant progress was made in the predecessor Distributed Resource Planning ("DRP") and Integrated Distributed Energy Resources ("IDER") proceedings to advance the investor-owned utilities' ("IOUs") distribution grids to better manage two-way energy flows and facilitate a growing penetration of distributed energy resources ("DERs"). Undoubtedly, the development of the Competitive Solicitation Framework ("CSF") and the Distribution Investment Deferral Framework ("DIDF") increased transparency into the IOUs' annual distribution planning processes ("DPPs") and created opportunities for DERs to provide ratepayer benefit through the provision of distribution grid services. Similarly, the adoption of a Grid Modernization Framework led to the required development of IOU Grid Modernization Plans ("GMPs") on key infrastructural investments needed to support planning, forecasting, monitoring, and operationalization of DERs,

even as the fruits of these investments have yet to fully bear and be realized. Finally, key tools and methodologies have been developed in Rulemaking ("R.") 14-08-013 and R.14-10-003, such as the Integrated Capacity Analysis ("ICA") and Locational Net Benefits Analysis ("LNBA"), which have, respectively, provided greater visibility and insight into available hosting capacity in support of DER siting and provided means to value the locational value of DERs sited in specific locations. This Commission leadership and progress over the past seven years should be lauded.

Yet, CESA believes that the state is still a ways away from a plug-and-play distribution grid and from fully utilizing the value of DER deployments and investments. To date, the DIDF has yielded limited DER procurements to defer traditional distribution grid investments, aside from some in-front-of-the-meter ("IFOM") energy storage systems. To CESA's knowledge, participation in these solicitations has waned and the Request for Offers ("RFO") structure has not been able to scale DER procurement and services, even though, to the Commission's credit, new pilots are planned for launch in the 2021-2022 DIDF cycle to leverage alternative sourcing mechanisms, including the Partnership Pilot and Standard Offer Contract ("SOC") Pilot. While the ICA values are starting to be incorporated into certain interconnection studies and are useful for directional interconnection siting guidance, the ICA tool has also been fraught with some implementation challenges and is currently limited in its applicability.

In this context, CESA welcomes the issuance of this new OIR as not only a DRP/IDER successor to address carryover issues but also to tackle a broader range of issues and use cases and to seek answers and clarity around the bigger-picture vision for a high-DER distribution grid. In tandem with the draft 2021 DER Action Plan, CESA is cautiously optimistic that the Commission is turning the page on unleashing the full potential of DERs while being able to manage the distribution grid safely, reliably, and at lower cost to ratepayers. CESA thus looks forward to active

participation in this proceeding and offers our comments herein on the proposed scope and schedule included in the OIR.

II. BACKGROUND & INTEREST IN PROCEEDING.

CESA is a 501c(6) membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy development, education, outreach, and research. With over 95 companies represented in the energy storage ecosystem, CESA has a direct interest in the proceeding in shaping the policies, procedures, and rules that prepare and modernize the distribution electric grid for DERs such as energy storage. CESA also has been an active participant in predecessor and related rulemakings, such as the proceedings for Distribution Resources Plans ("DRP") (R.14-08-013), Integrated Distributed Energy Resources ("IDER") (R.14-10-003), Self-Generation Incentive Program (R.20-05-012, R.12-11-005), Resource Adequacy (R.19-11-009), Microgrids and Resiliency (R.19-09-009), and Reliable Electric Service in Extreme Weather (R.20-11-003).

III. PRELIMINARY SCOPING MEMO.

CESA is generally supportive of the OIR and the Preliminary Scoping Memo, particularly the broader focus of this OIR to include resiliency, community engagement, and optimization of transportation electrification ("TE") investments, beyond the narrower scope of issues considered in R.14-08-013 and R.14-10-003. Importantly, CESA is encouraged by the inclusion of TE investment optimization in this proceeding to consider strategies and approaches by which TE investments can be accommodated via DER deployment and co-optimization or by which TE investments operate as the DER itself – *e.g.*, either as bi-directional "mobile" energy storage

resources ("V2X") or as managed EV charging ("V1G") resources.[1] Furthermore, longer-term reforms to optimally structure the distribution grid and to accommodate, integrate, compensate, and operationalize DERs are appropriate considerations in this proceeding. At this time, CESA has no position on whether the distribution system operator ("DSO") model is what should be pursued but agrees with the Commission that structural reforms should be explored to utility business models, grid architecture and infrastructure, and the DPP at large. Despite directional support for the OIR and the Preliminary Scoping Memo, CESA offers certain comments and modifications to the proposed scope and schedule below.

A. Despite not being scoped to set targets, this OIR should coordinate and align with DER targets, goals, needs, and priorities identified and/or established outside of this proceeding.

The OIR explains that this proceeding "neither seeks to set policy on the overall number of DERs nor does it seek to increase or decrease the desired level of DERs," instead focused on accommodating a high DER future and capturing as much value from DERs.[2] CESA generally agrees but recommends that this proceeding recognize and/or incorporate DER targets, goals, or needs identified elsewhere. For example, to achieve the state's transportation electrification ("TE") and zero-emission vehicle ("ZEV") goals, this proceeding should strive to create frameworks, policies, and mechanisms by which these goals can be achieved reliably and at lower cost, and inversely, to not create barriers or impediments to achieving these broader goals.[3] In addition, as the Integrated Resource Planning ("IRP") and Senate Bill ("SB") 100 capacity expansion models improve their

[1] In the TE world, these solutions have been collectively referred to as automated load management ("ALM"). *See also* OIR at 15 and 20-21.

[2] OIR at 10.

[3] This appears to be recognized with respect to TE goals. *See* OIR at 9. This could be broadened to all DER technology types as well.

optimization of DER deployment and selection and identify system-wide need, these system-wide portfolios should also inform the Commission's efforts herein. Similarly, this OIR should closely coordinate and align with key priorities, targets, and initiatives developed and adopted in the Environmental and Social Justice Action Plan[4] and the final DER Action Plan 2.0.

B. Performance-based regulation and/or alignment of utility financial incentives should be explored in this proceeding as part of longer-term reforms.

In many places across the OIR, Preliminary Scoping Memo, and supporting documents in the Appendix, the Commission touches on issues related to IOU business models and financial incentives, noting how a high-DER future could reduce the IOUs' rates of return when current cost recovery and investment structures are premised on large traditional capital investments and approved through long and complicated regulatory processes.[5] In support of this consideration, the OIR also includes a citation to recent performance-based ratemaking ("PBR") adopted by the Hawaii Public Utilities Commission ("HPUC"). In addition to this question of financial motivation, the OIR also highlights potential alternative approaches related to whether certain DER considerations should be incorporated into standard practices of planning.[6]

As the Commission embarks on these bigger-picture questions around reforms to the DPP and exploration of the Distribution System Operator ("DSO") model, CESA recommends that this proceeding also include Staff Proposals and/or technical consultant assessments and recommendations around performance-based incentives to support the

[4] OIR at 11.

[5] OIR at 11-12 and Appendix B at 86.

[6] OIR at 21.

goals and purpose of this proceeding. Most likely, a broader reform toward PBR may extend beyond the scope of the issues within this proceeding alone, but the Commission could evaluate more incremental performance-based incentive structures to align the IOUs' financial motivations to support greater and accelerated levels of DER adoption and utilization, such as through earnings opportunities for supporting accelerated DER interconnection or for choosing DERs as non-wires alternatives, rather than viewing DERs as competitors or existential threats due to decreased kWh sales and/or substitution of DERs for traditional capital investments.

C. A separate track should be established to address near-term issues and solutions.

While generally supportive of the grouping of issues and topics across the three proposed tracks, CESA recommends a separate track to be established to handle near-term policy and implementation issues. As currently proposed, with the Track 1 and 2 Proposed Decisions planned for 2024 and the Track 3 Proposed Decision planned for Q4 2023,[7] CESA is concerned that some of the near-term policy and implementation issues will be unresolved for a long period of time if grouped with the "bigger-picture" and more infrastructure-related issues (*e.g.*, DSO model, DPP reform, grid modernization) in these respective tracks. Such foundational reforms, distribution infrastructure/architecture, and business/operational model questions are undoubtedly important considerations in this proceeding, but without some adjustments to the scoping and tracking of issues and the scheduling of the resolution of issues, there is a major risk that key policies and solutions will not be adopted and be in place to support near-term DER deployment and operationalization in line with customer, community, and grid needs. Though the proposed

[7] OIR at 27-29.

schedule presumably does not preclude interim decisions to address near-term issues, a separate track for these issues will provide greater certainty on their resolution and allow for an efficient scheduling and tracking of issues. Especially as some of the Track 1-3 issues involve technical consultant studies and Staff Proposals, a focus on near-term issues during the period in which these studies are conducted and are being prepared represents an efficient means to address near-term issues while making progress toward longer-term issues. CESA elaborates on our four-track proposal in our response to Question 1.

D. Responses to Questions on Preliminary Scoping Memo

Question 1: How should the proceeding schedule and tracks be managed? Should the tracks be reorganized, and if so, how? Comments may include whether to amend the issues presented in the OIR and how to prioritize the issues to be resolved; how to procedurally address these issues; and a proposed schedule for resolving the issues that may extend beyond 36 months. Please also address to what extent the tracks should be run in parallel or sequentially, taking into consideration stakeholder capacity to participate in multiple tracks at once.

To avoid delay on important near-term fixes and refinements, CESA recommends Track 1 be modified to be categorized as "Carryover Issues and Near-Term Issues" and then shifting the scoping of issues as follows:

- **Track 2: Distribution System Operator Roles and Responsibilities (proposed as Track 1 in the OIR and Preliminary Scoping Memo):** Most of the questions regarding DSO roles and responsibilities involve reforms to utility business model[8] and grid architecture and infrastructure needs that cannot be addressed as near-term fixes. As such, the process to engage technical consultants, identify key investments that are needed, weigh costs and benefits, and establish a long-term vision for DER deployment and operationalization is appropriate and should be separated from other issues that touch on near-term fixes. As DNV GL noted in its report, any major changes, such as a move towards DSO implementation, would create significant uncertainty and potentially stifle DER growth in

[8] *See, e.g.*, OIR at 13-14.

the short term.[9] Altogether, CESA believes that near-term progress on DER adoption and operationalization should not slowed by DSO policy considerations and implementation.

- **Track 3: Fundamental Reforms to Distribution Planning Process (proposed as Track 2 in the OIR and Preliminary Scoping Memo but proposed as Track 3 by CESA with modified framing and grouping of issues):** Many issues related to the DPP that can be addressed within the existing DIDF are proposed for inclusion in CESA's proposed Track 1 instead, whereas other changes to the DPP to move beyond the current DIDF focus may be appropriately scoped here as it involves fundamental reforms to the status quo. Generally, questions around changing the utility standard practice of distribution planning, or modifications to legacy processes (*e.g.*, General Order ["GO"] 131-D infrastructure processes) appear to be substantial reforms and point to utility business model issues that warrant deeper review and cannot be addressed as near-term fixes to frameworks and policies in place.

- **Track 4: Smart Inverter Operationalization, Grid Modernization, and GRC Alignment (proposed as Track 3 in the OIR and Preliminary Scoping Memo):** CESA does not propose modifications to the group of issues under this track. At this time, CESA views the issues of smart inverter operationalization as still requiring additional policy development, such as developing compensation mechanisms for services rendered. Grid modernization investments and frameworks and coordination involved also require more extensive development such that these issues may not be appropriate for Track 1 as near-term issues.

In CESA's view, the proposed changes above support a more natural alignment and grouping of similar and related issues. With this recategorization and shifting of issues across CESA's proposed four tracks, CESA recommends the following questions be included in Track 1, with nearer-term resolution via a Proposed Decision by late Q2 or early Q3 2022:

Question	**Preliminary Scoping Memo**	**Rationale for Inclusion in CESA's Proposed Track 1**
What policies could the Commission adopt quickly to enable aggregators to increase	Track 1 Question 5	By the nature of this question, the range of solutions considered in response naturally fits in with CESA's proposed Track 1. DER aggregations have significant

[9] OIR Appendix B at 85.

the scope of services they provide the distribution grid?		underutilized potential today, where the adoption of solutions should not be held up with the consideration of more substantial reforms, such as those involving DSO roles and responsibilities. In addressing quick fixes, the Commission should also consider future-proof solutions that could fit more seamlessly with changes adopted related to DSO models, grid modernization, and other DPP reforms.
Should IOU distribution planning consultation processes for local agencies and stakeholders be expanded and formalized in a DPP guidelines document that requires IOUs to increase collaboration including the presentation of distribution upgrade plans to a wider audience to help ensure community energy needs and planned developments are fully integrated into IOU planning?	Track 2 Questions 2 and 2c-e	Questions regarding improved community engagement and integration of community input in a DPP can be readily addressed in the near term as part of the DIDF and other existing distribution planning efforts, such as Wildfire Mitigation Plans ("WMPs") and microgrid resiliency efforts. CESA does not view such considerations to involve major reforms or a change to business operations. Especially as community-scale solutions and resiliency needs are being urgently called for at this time, integration of community engagement in the existing DPP should be addressed as a near-term fix in our proposed Track 1. This issue could also be a sub-question within the Track 2-4 issues as well, but near-term solutions should also be pursued.
How should the DPP/DIDF processes improve to support widespread TE?	Track 2 Questions 4 and 4g-j	CESA believes that the tools are in place to support TE investment optimization, such as by leveraging existing distribution forecasting methods, integrating vehicle-grid integration ("VGI") within the current DIDF process, and coordinating with R.18-12-006 to deliver distribution value via mechanisms such as automated load management ("ALM").
What additional types of planned investments should be considered for deferral (*e.g.*, DERs installed instead of replacing aging	Track 2 Question 5	Additional distribution grid services and value beyond the four that have been recognized by the Commission[10] can readily be developed and implemented by leveraging the existing DIDF. Once the

[10] D.16-12-036 at 7-8.

infrastructure or DERs installed such that loads can be lowered to extend the life of existing infrastructure)?		service or value is defined and tied to specific planned investments, the DIDF is in place to readily address this question with the current planning processes and procurement approaches (*e.g.*, solicitations, programs, potentially tariffs). Questions about DPP reforms and DSO model may impact utility business incentives and/or procurement and operationalization approaches, but the Commission should not hold up the opportunity to realize other service benefits or value streams from DERs until the resolution of these bigger-picture issues.
How should ICA data and calculations be improved to enhance accuracy and usefulness for DER planning and interconnection (especially with respect to TE)?	Track 2 Questions 7 and 7k-m	Extensive time, effort, and investment dollars went into developing the ICA tools, such that the Commission should strive to refine and enhance these existing tools to the greatest extent possible in the near term. Regardless of DPP reforms or DSO model, the ICA tool will be used for DER planning and interconnection and potentially across many different use cases (*e.g.*, TE, Load ICA).[11]
What carryover issues from DRP and/or IDER (not already addressed in the scoping questions) should be continued in this OIR?	Track 2 Questions 8 and 8n-o	By the nature of this question, the range of solutions considered in response naturally fits in with CESA's proposed Track 1. The Commission staff have already undergone the process to potentially refine and evaluate BTM tariff pilots and have proposed regional pilots in a recent Staff Proposal. Consideration of these refined or additional pilots should not be held up in longer-term DPP reform discussions. Other sourcing mechanisms and compensation structures should also be considered here. Furthermore, multiple-use application ("MUA") issues can be addressed by refining a framework that has already been

[11] *See, e.g.*, ICA Proposals submitted by parties on May 28, 2021, such as:
CESA: https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M386/K579/386579710.PDF
Interstate Renewable Energy Council ("IREC"):
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M386/K579/386579599.PDF
Advanced Energy Economy ("AEE"):
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M386/K579/386579720.PDF

		adopted by the Commission via D.18-01-003.

In sum, CESA's proposed Track 1 issues involve near-term fixes and solutions to barriers and issues identified to the *status quo* policies and frameworks that are in place and have been adopted by the Commission, along with *existing* tools developed by the IOUs. Whereas many questions in the Preliminary Scoping Memo allude to more substantial changes to the vision of the DER-centric and DER-heavy distribution grid as well as utility business model, near-term and feasible changes should not be delayed given the state is currently facing near-term wildfire and Public Safety Power Shutoff ("PSPS") resiliency needs and shortfalls in system resource capacity in the face of extreme weather events. As a bridge to some of the foundational questions posed in the Preliminary Scoping Memo, the Commission should establish a separate Track 1 to address barriers that accelerate DER adoption and enable their full utilization for customer and grid benefit.

<u>Question 2</u>: Should the Commission address Track 1 (DSO) issues with a consultant-led process that includes a white paper followed by workshops and culminates in a third-party consultant report of recommendations? If not, how should Track 1 issues be addressed?

CESA is generally supportive of the proposed process in addressing DSO issues. As a substantial reform and vision of the distribution grid, the additional technical expertise would be beneficial, combined with the opportunities to discuss report findings and recommendations in workshops and comments to solicit stakeholder input.

<u>Question 3</u>: Should the Commission address Track 2 (DPP) issues through a series of consultant technical reports supplemented by workshops and followed by staff proposals? If not, how should Track 2 issues be addressed?

Yes, this would likely be a long-term evolution, but performance-based incentives will be important to future of high DERs, where utility business model will need to move away from one focused on infrastructure investments.

Question 4: **Should the Commission address Track 3 (smart inverter operationalization, grid modernization, and GRC alignment) issues in two separate work streams: 1) a smart inverter working group and working group report followed by a staff proposal and workshop, and 2) a staff-led proposal and workshop on grid modernization and GRC alignment? If not, how should Track 3 issues be addressed?**

Yes, CESA is generally supportive of the dual-track approach to address the two issues. There are clear links between the two issues, so close coordination should be pursued throughout the dual work stream process.

IV. CATEGORIZATION, HEARINGS, AND SCHEDULE.

CESA supports the categorization of this proceeding and agrees with the preliminary determination to find no need for evidentiary hearings. Our views on proposed modifications to the preliminary schedule are addressed in our response to Question 1 above.

V. NOTICES.

Services of all notices and communications in this proceeding should be directed to the following CESA representative:

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VI. CONCLUSION.

CESA appreciates the opportunity to submit these comments on the OIR and looks forward to working with the Commission and other stakeholders in this proceeding.

Respectfully submitted,

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Date: August 16, 2021