

**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

**REPLY COMMENTS OF THE CLIMATE CENTER  
ON THE ORDER INSTITUTING RULEMAKING  
TO MODERNIZE THE ELECTRIC GRID  
FOR A HIGH DISTRIBUTED ENERGY RESOURCES FUTURE**

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The Climate Center thanks and commends the Commission for convening this proceeding to consider how to prepare for a High Distributed Energy Resources Future (“High DER Future”). The questions posed in the Order Instituting Rulemaking (OIR) and their ultimate resolution in the form of effective regulations and policies will have a profound effect on the rate and quality with which California achieves its urgent goals for decarbonization, resilience and environmental and social justice.

The Climate Center is a California 501(c)(3) nonprofit organization founded in 2001 with a mission to deliver rapid greenhouse gas reductions at scale, starting in California, and is an active party in this proceeding. In these reply comments The Climate Center responds to several of the opening comments filed by other parties, and comments on the CPUC and CEC Staff presentations and stakeholder discussion at the September 22, 2021 workshop.

**I. Introduction**

The opening comments by parties in this proceeding exhibit a striking contrast between those who see the high DER future as an opportunity to advance investor-owned utility (IOU) investment in rate-based assets and further solidify IOU control over California’s electricity future versus those who seek to create a diverse participatory electric distribution system and enable a more democratic, bottom-up energy transition shaped by the needs and preferences of local communities. At issue is whether the proliferation of distributed energy resources (DER) will be viewed as a problem which the IOUs must be paid billions of dollars to solve by “integrating” them into the legacy centrally planned, owned and operated monopoly electricity system, or as the key to a more sustainable and just energy future which can be enabled by opening up the distribution system to

diverse participants, with distribution system operators (DSOs) in a public service role as network providers.

The crucial dilemma facing the Commission in this proceeding is whether to pursue a course of incremental changes that expand the for-profit monopoly scope into evolving technologies where competition and innovation might otherwise flourish, or to pursue a more fundamental reconsideration and redefinition of the role of the IOU distribution monopolies to better serve the needs of all California communities in the face of a volatile, dangerously disrupted climate and potentially even more inequitable energy future. Based on the OIR itself and the opening comments, this proceeding could go in either direction,<sup>1</sup> so it is definitively up to the Commission to choose its course.

The Climate Center recognizes that these are momentous questions with far-reaching consequences, and we do not expect them to be answered in the forthcoming scoping ruling. Rather, we urge the Commission to focus the scoping ruling on establishing a process that will ensure thorough, objective exploration of the alternatives. The process must ensure that the voices of all affected stakeholders are heard and duly considered, that the scopes of the various inquiries and reports do not assume away or avoid difficult but important questions, that the various consultant reports address all critical questions objectively and independently of parties whose interests are at stake, and that the sequence of topics is structured logically. The inclusiveness and transparency of the process must ensure that the Commission's ultimate decisions will be well-informed and can effectively address the urgent energy-related goals of the state and needs of all its communities. With these considerations in mind The Climate Center offers the following reply comments.

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<sup>1</sup> See PCF opening comments (p 1): "The "High DER" proceeding can transform distributed energy resources (DER) into a valuable tool for ratepayers to access a wider range of clean energy resources. Alternatively, the proceeding could result in an infrastructure-building and wealth-creating bonanza for utility shareholders."

## **II. Comments Applicable to All Tracks**

### **A. Inclusion of under-represented voices and communities**

The need to conduct a genuinely inclusive stakeholder process, including meaningful participation by disadvantaged and marginalized communities, was a salient topic in many of the opening comments<sup>2</sup> and at the September 22 workshop. Participation in Commission proceedings is costly in many ways. The multiplicity of procedural siloes favors those entities with deep financial and staff resources, and the discussions typically require a level of both substantive and procedural knowledge that is out of reach of most of the communities who are also the most seriously impacted by the disruptions of electric service that deployment of DERs can mitigate.<sup>3</sup>

The crucial topics at issue in this OIR require that the Commission conduct a more extensive and innovative approach to community engagement that it has in the past. To this end The Climate Center urges the Commission to take the actions recommended in the Joint Reply Comments on Engaging Environmental and Social Justice and Other Vulnerable Communities, being filed today in this proceeding. Specifically:

- The Commission should start its community outreach early in the proceeding by holding widely publicized workshops inviting all interested EJ advocates, CBOs, and others to present their recommendations for how the Commission can get meaningful input from affected communities and to share a solid understanding of what the potential of a high DER grid can mean in terms of local needs and benefits for communities. The Commission should consider offering multiple workshops across the state, including the Central Valley, Inland Southern California, the East Bay, South Central Los Angeles, the San Gabriel Valley, etc. to capture regional barriers and opportunities and to foster participation by a wide range of communities. Commission staff should provide a draft outline of a community engagement plan for comments during the workshop. The workshop should focus on listening, with

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<sup>2</sup> See opening comments of: 350 Bay Area (p 6); Center for Biological Diversity (pp 8-9); CforAT (pp 1-2); CSE (p 4); Cal Advocates (p 15); Synergistic Solutions (p 3); Vote Solar (pp 4-5); UCAN (p 4).

<sup>3</sup> Vote Solar opening comments (p 7).

Commission staff further refining the community engagement plan based on workshop findings.

- Following the workshops, the Commission should refine its plan to enhance community engagement in this proceeding, based on the learnings at the workshop, including specifying phases in the proceeding where additional community outreach would be appropriate on specific topics. The CPUC should designate specific staff to implement the plan and serve as points of contact with community representatives. The plan should describe how the goals and actions contained in the ESJ Action Plan will be incorporated into this proceeding.
- The Commission should consult the DAC Advisory Group in developing the community engagement plan.
- The Commission should allocate financial resources in this proceeding to support participation in the proceeding by vulnerable communities, funding community-based organizations through a mechanism which is simpler and more accessible than CPUC intervenor compensation. This funding should be made available to compensate CBO participants in the initial workshops as recommended above as well as subsequent related proceeding participation. In particular, the Commission should pay qualified CBOs for participation on the Distribution Planning Advisory Groups for each utility in the Distribution Investment Deferral Framework process.

## **B. Localization of electric service is key to resilience and equity**

Several parties have pointed out the cost and resilience benefits of using local electricity resources to serve local load. For example, LGSEC's opening comments state (p 4): "A guiding principle to modernize the grid while minimizing ratepayer costs should be to maximize transmission and distribution efficiencies by diminishing the physical distance between where load is generated, and where it is consumed." Synergistic Solutions states (p 2): "The distance between generation and use of energy directly relates to its relative degree of resiliency, complexity, and cost. The longer the distance, the more transmission/distribution infrastructure is needed for delivery, which increases costs of delivery and creates opportunity for disruption."

Contrast those observations with this from SCE's opening comments (p 6): "... even with a significant adoption of DERs, SCE believes that the most cost-effective way to achieve the state's goals is through a significant increase in the amount of renewable, central generation resources."

The Climate Center suggests two factors to explain the divergence of these views. First, SCE's reference to "the state's goals" does not include the local resilience and equity benefits of local resources. SCE (p 6): "... it will be important to ensure that DSO-related objectives align with the state's goal of transitioning to a clean power system while maximizing customer benefits and minimizing customer cost." Transitioning to a clean power system is a crucial state goal, but it's not the only goal. The Climate Center submits that resilience (i.e., ability to have ongoing electric service for essential local functions when grid service fails) and energy equity goals are equal in importance to decarbonizing the power system, and meeting them requires a regulatory framework that enables local communities and authorities to design and build local power resources.

Second, there are two different concepts of "cost" at play, one based on the legacy 20<sup>th</sup> century centralized operational and market paradigm, and another based on the laws of physics. Under the legacy paradigm all energy injected into the grid is deemed delivered to the bulk power system, and all load net of on-site production is deemed served by the bulk power system. For most of the history of electricity that was consistent with the physics because virtually all supply resources were connected to the bulk system. But with DER, the physics says that energy injected into the grid goes to serve the nearest load and appears to the bulk system only as a reduction in net load at the transmission-distribution interfaces.

The result is a discrepancy between cost calculated under the legacy paradigm, which includes use of the distribution and transmission systems to provide a lengthy round trip between where the energy is produced and where it is consumed, versus the physical cost of moving the energy from source to load using only the relevant local distribution circuits. The point is that adherence to the legacy conventions of assessing costs in contradiction to the laws of physics systematically under-values DERs by loading on

charges associated with infrastructure that local energy transactions do not use.<sup>4</sup> In other words, SCE's assertion that central generation is more cost-effective than DERs is an artifact of a legacy cost allocation paradigm that is inappropriate for a high-DER future system.

The Climate Center recognizes that recovering the costs of the transmission and distribution systems is a crucial matter that cannot be dismissed, but we need to create better approaches to infrastructure cost recovery that do not violate the physical reality of electricity flows and suppress otherwise beneficial DER growth. In this regard LGSEC offers useful information on the United Kingdom (UK) approach, which should be more fully examined in track 1:

“... the United Kingdom determined that the best way to foster distributed energy was to create a new supply license to operate over public wires distribution networks by modifying existing supply licenses to enable local distributed or decentralized energy providers to generate, distribute and supply electricity directly to consumers over public wires distribution networks without the need to participate in the centralized electricity market.” (LGSEC, p 6)

“A related issue is calculating costs associated with the centralized electricity supply and benefits of decentralized energy on distribution networks. In the UK, consumers are charged for consumption of centralized electricity in the form of a Distribution Use of System (DUoS) fee; decentralized energy is rewarded with a credit in the form of a negative DUoS fee. The reason for the credit is that decentralized energy avoids, reduces or delays the growth of transmission and sub-transmission networks, avoiding associated energy losses and high capital costs.” (LGSEC, p 7)

In addition to the substantive relevance of LGSEC's observations on the UK rules, these observations illustrate the importance in this proceeding of examining the approaches other jurisdictions are taking to evolve into a high-DER future electricity system, a topic we expand on further below.

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<sup>4</sup> See also Clean Coalition opening comments (pp 4-6).

### **C. All interested parties should have opportunities to present proposals**

As noted in the introduction above, the issues this proceeding will investigate, especially those in Track 1 regarding roles and responsibilities of the IOU distribution utilities, are not only technical and analytical issues but also involve the financial interests of the major actors in California's electricity industry. It is therefore critical, when the process allows parties to present proposals in any form in any of the tracks, that the Commission allow all interested parties the same opportunities to present proposals.<sup>5</sup>

PG&E has asked for special standing in the proceeding: "Therefore, PG&E requests *additional* opportunities for the utilities in this OIR to develop reports and proposals, drawing on their unparalleled experience in balancing the priorities of safety, reliability, affordability and clean energy for all customers."<sup>6</sup> [Italics added.]

The Climate Center requests that the Commission safeguard the objectivity of this proceeding by not granting privileged status to specific parties in the form of "additional" opportunities to present proposals for consideration.

## **III. Track 1: Distribution System Operator Roles and Responsibilities**

### **A. The Commission should adopt the Track 1 timetable contained in "Revised Schedule #2" at the September 22 workshop.**

The Climate Center appreciates the inclusion of its Track 1 process proposal in the Energy Division's September 22 workshop, as the Track 1 portion of "Revised Schedule #2." Our proposal features a logical four-step stakeholder process for arriving at the essential functions that need to be performed in a high-DER electricity system to meet the specified goals of the system, and the assignment of those functions as roles and responsibilities to the actors who comprise the system. UCAN's opening comments also recommended the same four-step structure.<sup>7</sup>

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<sup>5</sup> See also 350 Bay Area opening comments, p 6.

<sup>6</sup> PG&E opening comments, pp 1-2.

<sup>7</sup> UCAN opening comments, pp 18-19.



During the September 22 workshop, and in the opening comments, there were different opinions about the priority of Track 1 relative to the other tracks. The Climate Center agrees with the many parties who stated that the Track 1 investigations should be prioritized because they are foundational to so many aspects of the transition to a high-DER future.<sup>8</sup>

Some parties view Track 1 as dealing with long-term issues that will have no near-term benefits, will divert attention from low-hanging fruit that could provide quick rewards, and may even slow DER growth in the near term.<sup>9</sup> The last concern was also raised in the DNV-GL DSO study (p 85) that accompanied the OIR. Unfortunately, the desire for near-term results often leads to a dismissal or deferral of matters of long-term import; e.g., “we’re too busy to plan.” It’s also very common, however, that deferral of longer-term considerations tends to reinforce the status quo because it generally offers the most familiar and comfortable means to address near-term issues. As a result, longer-term planning for a transition of the magnitude of the High-DER Future ends up being sacrificed for the expediency of a continual series of incremental short-term fixes.

The Climate Center believes that the magnitude of the high-DER transition in the context of extremely volatile climate disruption demands that we begin as soon as possible the investigations teed up for Track 1. The value of starting this effort sooner rather than later should not be judged by the quick results it yields or doesn’t yield, but by the improved quality of our near-term decisions when we begin to visualize the qualities and features of the future we want to get to. The roads on a roadmap go everywhere, but only once you identify your destination with greater clarity can you evaluate which roads are best to take.

Based on the parties’ comments on this topic, especially the September 22 discussion, The Climate Center recommends that the Commission structure Track 1 to complete a series of workshops on steps one to three of the four-step process by Q3-2022, with an interim consultant or staff report summarizing the workshop discussions and findings in October, and an *en banc* before the end of 2022 to discuss the findings to date. These

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<sup>8</sup> See the opening comments of: 350 Bay Area (p 6); Sunrun (p 3); UCAN (pp 7-11).

<sup>9</sup> See the opening comments of CESA (pp 7-8)

first three steps deal with clarifying the greater state goals the High-DER Future Grid must support, the attributes and performance characteristics the future grid must exhibit to achieve those goals, and at a more technical level, the main functions that must be performed by responsible and accountable actors to reach successful outcomes.

Most importantly, these three steps stop short of assigning roles and responsibilities to specific actors, which is step four of our proposed process and which we expect will be more controversial as it involves the business models of the main players in the system. But since the OIR has already expressed the intention to investigate these issues, the Commission and the stakeholders will have a solid foundation for taking up step four at the start of 2023 as a result of completing steps one to three, documenting the findings and discussing them publicly in an *en banc* by the end of 2022.

With the process just described it may be possible to get to a Track 1 proposed decision by the end of 2023 as we recommended in our opening comments, but The Climate Center acknowledges that might be a bridge too far. Most important, we believe, is to complete the 2022 activities as described above.

**B. The Commission should not pre-emptively assume IOU functional roles and responsibilities that should be questions for the Track 1 investigation.**

The Commission's proposed investigation into Distribution System Operator (DSO) models and investor-owned distribution utility (IOU) roles and responsibilities must not adopt assumptions, either explicit or implicit, that pre-empt questions the investigation should explore. The Climate Center agrees with PG&E's statement that "DSO Scoping Items Should Not ... Presume Outcomes."<sup>10</sup> That said, PG&E and the other IOUs urge the Commission to severely curtail the scope of the Track 1 investigation by making strong *ex ante* assumptions about distribution IOU roles and responsibilities that should be questions for Track 1 to investigate.

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<sup>10</sup> PG&E Opening Comments, p 7.

PG&E:<sup>11</sup> “1. DSO Scoping Items Should be Reframed to Focus on How the Utility as the Distribution Planner, Owner, and Operator Can Facilitate and Support a High DER Future.”

SCE:<sup>12</sup> “Proposed DSO models include a large number of functions and capabilities for a future DSO, yet the vast majority of these functions are already activities that IOUs perform today, or capabilities that IOUs have piloted (to greater or lesser extent.). Therefore, the *first objective should be to identify those capabilities that will be necessary for the grid of the future and are incremental to the functions that IOUs perform today.*” [Italics added.]

SDG&E:<sup>13</sup> “As an owner of distribution assets, SDG&E will always be responsible for the planning and operation of that infrastructure.”

Although questioning the IOUs’ ownership of their distribution systems would likely be outside the scope of this proceeding, the Commission should not preclude consideration of whether the IOUs are the most appropriate operators and planners of the high-DER distribution system in its Track 1 investigation, as the IOUs are urging the Commission to do.

There have been substantial arguments advanced by noted industry experts that distribution system planning and operation should be structurally independent of the IOUs’ distribution asset ownership, what’s often referred to as the “Independent DSO” (IDSO) model. For example, Jon Wellinghoff and co-authors state:

“As an impartial entity, the IDSO would be able to overcome inherent conflict of interests that utilities face with greater deployment of DER, such as distributed solar, demand response, energy storage, microgrids, and advanced communications. These demand-side technologies – when appropriately planned and coordinated by the distribution grid operator – provide a multitude of grid benefits, including (among many other things) additional energy and capacity resources. Because the use of DER may reduce the need for grid expansion and

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<sup>11</sup> Id. p 5.

<sup>12</sup> SCE Opening Comments, p 5.

<sup>13</sup> SDG&E Opening Comments, p 8.

utility investment, a grid operator that resides within a distribution arm of a utility will have strong incentives to favor the utility's assets rather encourage customer-owned DER."<sup>14</sup>

The OIR also explicitly recognizes this concern.<sup>15</sup> The Climate Center is not arguing that the IDSO as outlined by Wellinghoff et al is the right answer, only that the Commission should include in the Track 1 scope questions of optimal assignment of responsibility for distribution system operation and planning and consider the merits of the IDSO model.<sup>16</sup>

SDG&E argues for assuming away the IDSO model by making an analogy to the relationship between the transmission-owning utilities and the CAISO:

“As an owner of distribution assets, SDG&E will always be responsible for the planning and operation of that infrastructure. The same responsibility exists for SDG&E's transmission assets, in which SDG&E plans and operates jointly with the California Independent System Operator (“CAISO”). As such, it is hard to see why, or how, SDG&E's role should or could be redefined in the context of distribution.”<sup>17</sup>

SDG&E's analogy is not entirely correct. Although the transmission-owning utilities do have responsibility for maintaining and operating the physical transmission assets in coordination with CAISO, and they do have important roles in the CAISO's transmission planning process (TPP), the CAISO is responsible for providing non-discriminatory “Open Access” transmission service, which was the core innovation of FERC Orders 888 and 889 in the 1990s to enable competitive wholesale markets. To that end, the CAISO schedules access to and use of the transmission system under its operational control by means of the day-ahead and real-time spot markets, which are transparent

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<sup>14</sup> Wellinghoff et al, “The 51<sup>st</sup> State: Market Structures for a Smarter, More Efficient Grid” (2015, p 7): [https://sepa.force.com/CPBase\\_item?id=a12o000000TOYISAA5](https://sepa.force.com/CPBase_item?id=a12o000000TOYISAA5)

<sup>15</sup> OIR p 11-12: “The current cost recovery and investment structures for electric distribution systems focuses on large capital investments. A high-penetration DER structure could reduce overall IOU rates of return. For an IOU-administered DSO to be successful, performance incentives not tied to capital investments may be needed, or there may be a need for a third-party DSO administrator.”

<sup>16</sup> The DNV-GL report that accompanies the OIR also defines DSO in terms of an IDSO model, so we infer by the Commission's inclusion of this report with the OIR that it intends for Track 1 to include a full consideration of the IDSO model.

<sup>17</sup> SDG&E opening comments, p 8.

and non-discriminatory. Pursuant to the Energy Policy Act of 2005 and FERC Orders 890 and 1000 the CAISO conducts the TPP, in which transmission-owning utilities participate, but the CAISO formulates the final annual transmission plan for submission to its Board of Governors for approval. Finally, pursuant to FERC Order 2003 and subsequent revisions, the CAISO administers the procedures for new generating and storage resources to interconnect to the CAISO controlled grid (another function which the IOU distribution utilities perform today and should be subject to inquiry in Track 1). To ensure the objectivity, transparency and non-discrimination of these core “open-access” activities, the CAISO is structurally and financially independent of the transmission-owning utilities and all users of the transmission system it controls and all participants in its markets. CAISO is a not-for-profit corporation and derives its entire budget from regulated user charges for the services it provides.

The Climate Center has previously recommended to the Commission that the IOU distribution utilities be reformed to be “Open Access” DSOs<sup>18</sup> in a manner analogous to open-access transmission service as constituted in Federal law. We are not arguing today for that as an outcome of Track 1, but only that it be considered in scope for open stakeholder discussion and investigation by the consultant. One component of the open access DSO model is a compensation structure based on measured performance of the DSO’s functional responsibilities, i.e., some form of performance-based regulation (PBR), which the OIR explicitly recognizes (p 11) and many parties have argued must be included in the Track 1 investigation.<sup>19</sup>

The Open Access DSO could be an acceptable outcome of this proceeding for the IOU distribution utilities as well as for other stakeholders. If the Commission were to develop an effective open-access regulatory framework for the distribution system, and that framework addresses the incentive concerns that motivated Wellinghoff’s IDSO model,

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<sup>18</sup> See the Joint Response of the Center for Energy Efficiency and Renewable Technologies and The Climate Center in the Commission’s investigation into the plan for resolution of PG&E’s bankruptcy, I.19-09-016; see Appendix A, pp 3-4.

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K168/318168788.PDF>

The Climate Center had previously filed this proposal (under its former name, the Center for Climate Protection) in the Commission’s investigation into PG&E’s safety culture, I.15-08-019; see Attachment A, pp 6-7. <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M266/K859/266859190.PDF>

<sup>19</sup> See opening comments of: 350 Bay Area (p 11); CESA (pp 5-6); MRC (p 6).

it may be possible for the IOUs to retain the DSO functions they are seeking to hold onto, i.e., operation, planning and interconnection, but that should not be an *ex ante* assumption.

(To allay what might be concerns of some parties, creating an open access regulatory framework for distribution does not imply any erosion of state jurisdiction over the distribution system. In fact it would strengthen state control over distribution system policy by mitigating potential concerns by third-party DER operators and aggregators regarding non-discriminatory access to the CAISO markets in compliance with FERC Order 2222.)

In response to SCE's incrementality argument quoted above, The Climate Center reiterates its concern<sup>20</sup> that the bundling of competitive activities with natural monopoly services under the current regulated monopoly framework tends to inhibit competition and innovation and as a result may impose risks on ratepayers that are better borne by the private sector and thus be an impediment to full realization of the value of DERs in the most cost-effective way. The Track 1 scope should investigate whether the benefits of the High DER Future could be advanced by unbundling some of today's regulated monopoly functions and redefining the roles and responsibilities of the monopoly IOU distribution utilities based on natural monopoly principles.

As the Commission stated in the OIR (p 14): "Stakeholder engagement will provide input on the study's scope and objectives, draft deliverables, public engagement, and findings." The Climate Center urges the Commission to bring these questions to the stakeholders for discussion and consideration, and not to pre-emptively narrow the scope of inquiry in order to preserve or expand the regulated monopoly scope.

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<sup>20</sup> The Climate Center opening comments, p 13. The opening comments of UCAN (pp 7-11) document the ways the bundling of competitive activities within the regulated monopoly has stymied realization of the potential benefits of the "Smart Grid" in spite of 2008 California legislation intended to open that arena to entities other than electrical corporations.

### **C. Examine and apply lessons from other jurisdictions**

The phenomenon of DER proliferation in regions with established bulk power systems is a global phenomenon. The same technologies, the same drives for renewable energy, the same operational and business model impacts are happening everywhere, though at somewhat different rates of change. And for the same reasons, other jurisdictions have been examining DSO models for several years, most notably the UK, Europe and Australia. The OIR expressed the intent in Track 1 to "... gather feedback from national and international experts on electric grid models and architectures (both existing and conceptual) and the state-of-the-art on approaches to DER integration." The Climate Center urges the Commission to build examination of relevant international examples into the Track 1 investigation early on, not just for feedback near the end of the process.

LGSEC's explanation of the UK approach to supply licensing and distribution system use fees (mentioned above) illustrates the relevance and value of examining alternative approaches early in the Track 1 process, not later.

UCAN's opening comments also provide valuable insights into DER and DSO-related inquiries and findings in Australia and the European Union,<sup>21</sup> all of which are relevant to this proceeding. In addition, the primary author of The Climate Center's opening and reply comments has recently completed projects on DER integration, DSO models and grid architecture for the Independent Electricity System Operator (IESO) in Ontario, Canada and the Australian Energy Market Operator (AEMO).

The Climate Center urges the Commission to initiate examination of these international experiences early in the Track 1 process, including stakeholder working groups with presentations by knowledgeable experts.

### **D. The Commission should ensure the objectivity of the DSO consultant's reports.**

The usefulness of the Track 1 investigation will depend to a great extent on whether the consultant's report(s) are perceived as objective and credible. In particular, because the

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<sup>21</sup> UCAN Opening Comments, pp 13-17.

Track 1 reports will be dealing with potentially significant changes to the distribution IOUs' functional roles, responsibilities and business models, it will be essential to ensure that the IOUs do not have any privileged access to or influence on the reports. In this regard The Climate Center finds SCE's demands inappropriate.

SCE:<sup>22</sup> "As is common practice with consultant reports, the IOUs must be afforded an opportunity to review draft reports that contain IOU-specific information to ensure accuracy, that the record from workshops is accurately reflected, and that there are no confidentiality concerns."

The Climate Center believes that all workshop participants should have the opportunity to review and offer comments on the official workshop records to ensure accuracy, this should not be an IOU responsibility or exclusive privilege. For the July-August 2021 workshops on the Microgrid Incentive Program (in R.19-09-009), the Commission's independent facilitator circulated notes for each workshop to the workshop participants with an opportunity to review and comment before the notes were deemed final. The Climate Center believes that this approach helps to enhance stakeholders' confidence in the process.

SCE:<sup>23</sup> "It will be important for the consultant to work directly with the utilities in the development of their white paper on DSO models."

The Climate Center believes that granting such privileges to the IOUs will undermine the credibility of the consultant's reports on DSO models. We urge the Commission to reject these demands by SCE, and to ensure that the consultant's work is not influenced by any parties that have vested interests in the outcomes of this proceeding.

#### **IV. Track 2: Distribution Planning, Data Portals, Community Engagement, and DER Integration**

The Climate Center agrees with the parties who argued that the current DIDF process unduly limits opportunities for DER to offset distribution infrastructure needs and thereby

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<sup>22</sup> SCE opening comments, p 5.

<sup>23</sup> SCE opening comments, p 5.



leaves potential DER value unrealized, and therefore that greater integration of DER into distribution planning is warranted.<sup>24</sup> We particularly like CalSSA's description of the needed shift of thinking regarding how DER growth should be viewed from a distribution planning perspective:

CalSSA (p 6): "Question 4 is framed in terms of how distribution planning can support transportation electrification. That sounds like old school thinking of how to build the system to serve a need that is growing and thinks only of itself. It is not modernization. The better question is how electrification loads can be managed dynamically to avoid distribution system expansion."

We would modify the last sentence to read, "The better question is how electrification loads *and DER* can be managed dynamically to avoid distribution system expansion."

The CAISO's TPP drew a lot of attention when their 2018 comprehensive plan included elimination of \$2.6 billion in previously approved upgrades because those upgrades were no longer needed, in large part due to the growth of DERs in the affected areas of the grid. The avoided costs in that case clearly added up to real money, but no specific DERs received recognition much less compensation for those ratepayer benefits. And we note, there was no explicit intention on the part of the people who invested in those DERs to avoid transmission upgrades; the avoided upgrades were simply the result of DER investment decisions made for other reasons.

The Climate Center believes that some of the greatest value of DERs for deferring the need for distribution upgrades can be realized by incentivizing DERs to operate in a manner that reduces the factors that drive upgrade needs. Such DER activity could be accounted for at the beginning of the distribution planning process (DPP), before the process even identifies needed upgrades. For example, third party DER aggregators and community choice agencies (CCAs) could be compensated for operating batteries as a local virtual power plant to "flatten the ducklings," the net load profiles on circuits with high solar penetration, so as to mitigate the extremes and enable increased solar installation without having to upgrade circuit capacity. The Climate Center in our

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<sup>24</sup> See opening comments of: 350 Bay Area (p 13); Cal Advocated (p 11); CESA (p 2); CalSSA (p 6); SCE (p 8)

opening comments recommended creation of a profile smoothing service that DERs can provide as a near-term action the Commission can take to obtain system value from DERs while enhancing DERs' commercial viability.<sup>25</sup> Such a service would have direct benefit for distribution planning by reducing the factors that drive distribution upgrades. This would be in the spirit of CalSSA's comment quoted above, as well as SCE's recommendation "... that the proceeding shift the focus away from the DIDF and procuring DERs after the DPP is complete, and instead focus on how to integrate DERs directly into IOUs' capacity planning processes."<sup>26</sup>

### **V. Track 3: Smart Inverter Operationalization, Grid Modernization, and GRCs**

Some parties have recommended moving grid modernization out of the general rate cases (GRCs).<sup>27</sup> The Climate Center supports this recommendation in the following sense. Grid modernization investments should be driven by functional capabilities needed by the DSO to operate a high-DER distribution network. Even if the GRC is where the Commission approves IOU spending for grid modernization, the substance of the IOUs' grid modernization plans must be based on the functional and technical requirements that are developed in the tracks of this proceeding and in other related proceedings.

### **VI. Conclusion**

The Climate Center appreciates the comprehensive thinking the Commission and staff have invested in this OIR and the September 22 workshop, and we look forward to full participation as the proceeding continues.

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<sup>25</sup> The Climate Center opening comments, pp 14-15.

<sup>26</sup> SCE opening comments, p 8.

<sup>27</sup> See opening comments of: CalSSA (p 7); Cal Advocates (p 14)

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