



**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)

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**CENTER FOR BIOLOGICAL DIVERSITY
OPENING COMMENTS
ON ASSIGNED COMMISSIONER'S AND ADMINISTRATIVE LAW JUDGE'S
RULING ISSUING QUESTIONS ON THE DISTRIBUTED ENERGY RESOURCES
ORCHESTRATION WORKSHOP REPORTS**

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Pursuant to Assigned Commissioner Houck and Administrative Law Judge Chang’s July 9, 2026 Ruling Issuing Questions on the Distributed Energy Resources (“DER”) Orchestration Workshop Reports (“Ruling”), the Center for Biological Diversity (“Center”) provides the following opening comments. As discussed below, in order to achieve the goals of this proceeding, it is critical for the Commission to address the Investor-Owned Utility (“IOU”) conflict of interest inherent in any scenario where an IOU serves as the Distribution System Operator (“DSO”). The Commission should either extend Track 2 into 2027, or, create a subsequent phase or successor proceeding to address this significant issue.

I. The Commission Must Address IOU Conflicts of Interest.

The Center here responds to the following Questions: 2 (what additional information or development on a proposed orchestration framework should be considered before directing the IOUs to file DER orchestration framework applications?); 4 (what specific pre-application steps and activities related to DER orchestration, such as convening workshops or a working group process, should be completed prior to the IOUs filing of DER orchestration applications?); 5 (if

convening a working group or workshops is warranted what should be the explicit objectives and key topics to address?); 7 (Of the six key discussion topic areas identified during Workshop 1 for developing a DER orchestration framework, which topics or subtopics are best suited for development through stakeholder working groups or future workshops?); 12 (What technical or operational barriers remain for broader participation?); 13 (What requirements should be established to enable reliable integration of customer-owned DERs into IOU DER orchestration programs?); 16 (What components are needed for a DER orchestration framework that will ensure these operations continue while also allowing for the flexibility needed to manage load that incorporates a high level of DERs?); and 18 (Are there any other relevant issues not discussed in the March 23 Assigned Commissioner’s Ruling, but brought up in the workshops that the Commission should consider for the DER orchestration application process?).

The Center concurs with the presentations of CalCCA and the Clean Coalition detailing that the “significant unresolved concerns over potential conflict of interest for an IOU serving as the DSO must be resolved.”¹ As for-profit companies, the IOUs have a fiduciary duty to optimize profits for their shareholders. The utility regulatory system focuses those profit opportunities on the construction of central utility infrastructure, where utility companies obtain a high rate of return. Accordingly, and just as the Commission itself acknowledged at the outset of this proceeding, because DERs displace the need for some of this infrastructure, any role for the IOUs in the deployment of DERs presents an inherent conflict of interest.

Failing to address this conflict of interest “could suppress DER participation, increase risk of overbuilding the grid, and decrease market efficiency.”² Indeed, the Energy Division’s

¹ See e.g. DER Orchestration Workshop, CalCCA Presentation, Slide 8.

² *Id.* at slide 14.

own Workshop Report recognizes that “other stakeholders [also] expressed concerns regarding market structure, competition, and potential conflicts of interest, advocating for greater consideration of independent marketplace operators, open-access platforms, and alternative governance approaches.”³

To address these critical stakeholder concerns about conflict of interest, the Commission should ensure compliance with at least the following four regulatory requirements. First, if there is a conflict of interest that impacts DER participation, potentially overbuilding the grid and decreasing market efficiency, the Commission should ask whether it is maintaining just and reasonable rates.⁴ Second, and similarly, if there is such a conflict of interest, the Commission should ask whether it is ensuring that rates are the lowest amount possible.⁵ Third, pertaining to procurement but relevant here, if there is such a conflict of interest, the Commission should ask whether the Commission is procuring resources contrary to the Loading Order. And fourth, as DERs are faster to deploy than bulk system resources and offer greater community and climate benefits, the Commission should ask whether it is complying with SB 350.⁶

Moreover, the Assigned Commissioner’s November 15, 2021 Scoping Memo and Ruling appropriately scoped consideration of the issue of conflict of interest.⁷ But, as explained further

³ CPUC, Energy Division, Track 2 Workshop Report: Distribution System Operator DER Orchestration at 17.

⁴ Cal. Pub. Util. Code § 451 (“All charges demanded or received by any public utility, or by any two or more public utilities, for any product or commodity furnished or to be furnished or any service rendered or to be rendered shall be just and reasonable.”)

⁵ Cal. Pub. Util. Code § 747 (“It is the intent of the Legislature that the commission reduce rates for electricity and natural gas to the lowest amount possible.”)

⁶ Cal. Pub. Util. Code § 400(a) (The Commission shall “take into account the use of distributed generation to the extent that it provides economic and environmental benefits in disadvantaged communities” to meet California’s climate targets.)

⁷ R.21-06-017, Assigned Commissioner’s Scoping Memo and Ruling (Nov. 11, 2021) at 6 (“1. How do alternative DSO models compare in their ability to plan and operate a high DER grid, unlock economic opportunities for DERs to provide grid services, limit market power, reduce ratepayer costs, increase

below, the Assigned Commissioner’s 2023 Amended Scoping Ruling amended Track 2 scoping questions to remove opportunity for consideration of this critical issue.⁸ “[I]f a public entity changes its view, it must explain its rationale.”⁹ The Commission has not done so here. The Commission should adhere to the recommendations detailed in this comment, or, provide an explanation of how the conflict of interest has been resolved to ensure just and reasonable rates, which are at the lowest amount possible, adequate procurement, and compliance with the State’s climate targets and policies.

The Center illustrates the need for consideration of conflict of interest with the below discussion of the principle of open access in designing and adopting DSOs for the IOU service areas. The Commission should also consider how to address and cure any conflicts of interest through alternative network and marketplace operators and governance approaches.

II. Open Access to Distribution is Key to Energy Affordability, Resilience, Energy Justice and Achieving California’s Climate and Clean Energy Goals Rapidly and Cost-Effectively.

The March 2026 Assigned Commissioner’s Ruling (“ACR”) identified “open access to distribution system” as one of “five priority areas to guide the focus of the Track 2 DER Orchestration Framework.”¹⁰ In the ensuing May 21 DER Orchestration Workshop, several parties offered comments on the practical meaning and importance of open access to distribution.¹¹

equity, support grid resiliency, and meet State policy objectives? [and] 2. Should the Utilities be incentivized to cost-effectively prepare for widespread DER deployments? If so, how?”).

⁸ R.21-06-017, Assigned Commissioner’s Amended Scoping Memo and Ruling (Aug. 11, 2023), at 6-7.

⁹ *Boatworks, LLC v. City of Alameda* (2019) 35 Cal.App.5th 290, 303, *citing Motor Vehicle Mfrs. Ass’n of U.S. v. State Farm Mut. Auto Ins. Co.* (1983) 463 U.S. 29, 33-34.

¹⁰ R.21-06-017 Assigned Commissioner’s Ruling (March 2026) at 3.

¹¹ *See* DER Orchestration Workshop, CPUC Energy Division (slide 16); SDG&E (slides 11 and 13); UCAN (slides 3-4); Clean Coalition (slide 8).

Yet the topic seems to have completely disappeared in the Ruling requesting comments on the workshop reports. Open access to distribution is not listed among the six key topic areas around which the workshop was organized.¹² Nor is it listed among the topics posed for parties' comments on the workshop reports.¹³ The Commission's omission of open access to distribution as a central topic for the Track 2 workshops and for these comments amounts to ignoring the proverbial elephant in the room. Adequate open access to distribution is core to maximizing the benefits of DERs to the electric system, to ratepayers, and to California's climate goals.

Taking affordability as our starting point, it is unquestionable today that IOU electricity rates and bills are unacceptably high for all ratepayers and seriously burdensome for more energy-burdened and thus vulnerable households. If electricity costs are to be brought back into the realm of affordability, growth in IOU rates must be restrained, which means restraining IOU capital investment and enabling non-utility investment in DERs to be financially viable.

A relevant illustrative analogy is the open-access transmission regulatory framework adopted by the Federal Energy Regulatory Commission ("FERC") in the 1990s to enable the formation and growth of competitive wholesale power markets.¹⁴ Foundational research in the 1980s proved the feasibility of creating wholesale bulk power markets in which diverse non-utility generators would compete to supply power and ancillary services through a market structure in which load-serving entities participated as wholesale buyers.¹⁵ The proponents of

¹² Ruling at 3.

¹³ Ruling at 3-6.

¹⁴ See FERC Order No. 888 (1996): Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities.

¹⁵ See e.g. Fred Schweppe et al, *Spot Pricing of Electricity*.

these new energy markets recognized that an “open-access” transmission system was essential to enable market-clearing transactions to be consummated by the injection of market-clearing energy offers into the transmission grid, and withdrawal of market-clearing procurement bids from the grid, while maintaining system balance and reliable operation in accordance with required operating standards. Thus, open access was at the core of enabling non-utility suppliers of bulk energy to be competitive and financially viable, so that competitive bulk power markets could deliver cost efficiencies for load-serving entities and their customers.

While there are acknowledged technical differences between bulk transmission systems and electric distribution systems, the High-DER Future that motivated this proceeding from the start requires an analogous open-access structure for the distribution system. Open access to the distribution system is the *raison-d’être* for a DSO. The DSO should be thought of as a distribution-system complement to the ISO on transmission. DERs on both the customer side and the utility side of the utility meter, can provide a substantial portion of California’s clean energy needs.¹⁶ For instance, deployed as front-of-meter resources on built structures such as roofs of warehouses, schools, shopping malls, and parking lots, DERs can supply clean energy to meet SB 350 and SB 100 mandates without triggering land-use conflicts. Because such sites tend to be close to load centers, their energy production could be entirely consumed within the same local distribution area without using transmission, requiring transmission upgrades or incurring transmission thermal losses. Such front-of-meter resources can be designed and sited to provide local energy resilience by acting as grid-forming resources for circuit-level

¹⁶ See NREL, *Rooftop Solar Photovoltaic Technical Potential in the United States: A Detailed Assessment*, Table 6 (2016) available at <https://docs.nrel.gov/docs/fy16osti/65298.pdf>. (California could meet 74 percent of annual electricity demand from rooftop solar, considering all types and sizes of roofs and sizing the installations to take maximum advantage of solar exposure.)

community microgrids in the event of upstream utility outages. Moreover, such resources owned locally by a local government or agency, school district, community non-profit or cooperative, would enhance local economic development and economic resilience. And by avoiding CAISO interconnection and need for transmission upgrades, a High-DER Future can achieve state clean energy goals cheaper and faster than the current trajectory.

The trajectory of DER cost and performance over recent decades has been consistently positive. This makes DERs of all types attractive for non-utility investment. The crucial missing ingredient to maximize the societal value of DERs is an open-access distribution network and transaction platform that enables non-utility DERs to earn revenues from transacting energy and providing grid services. Indeed, it is this platform for economic transactions, with well-defined grid services, transparent price formation, fair charges for DSO services and timely and transparent settlement, that enable non-utility DER investment to be financially viable.

Unfortunately, the current path of this Track 2 is not heading in this direction, largely due to the Commission's failure to undertake a principle-based consideration of open access to distribution and how that translates into the essential functional roles and responsibilities of an open-access DSO.

This proceeding's Order Instituting Rulemaking ("OIR") stated its focus on "preparing the grid to accommodate what is expected to be a high DER future and *capture as much value as possible from DERs* as well as mitigate any unintended negative impacts."¹⁷

In pursuit of this focus, the OIR articulated the Commission's intention to examine DSO models:

In California, DSO functions, including distribution system planning and operations, are provided by the electric IOUs. As the market evolves into a

¹⁷ OIR at 10 (emphasis added).

high-penetration DER scenario, IOU roles will also evolve and there may be a need to consider different DSO roles. The term, “DSO,” is often used in reference to conceptual models designed to efficiently operate distribution systems with high numbers of DERs. The various DSO models present alternative approaches to distribution system planning and operations that may help integrate DERs at least cost by increasing DER market opportunities and value capture while maintaining system safety and reliability.¹⁸

At the same time the Commission noted some important concerns about the IOUs potentially assuming the role of DSO:

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.¹⁹

In the five years since the issuance of the OIR, however, the Commission has never visibly addressed its earlier concern about the potential need for either “performance incentives not tied to capital investment” for IOU-administered DSOs, or for “a third-party DSO administrator.”

Indeed, the Commission’s next action on the DSO subject was its August 11, 2023 Assigned Commissioner’s Amended Scoping Memo and Ruling (“2023 Ruling”), which limited the scope of the DSO inquiry to “operational needs” and sought to identify how the “Utilities” as DSOs could overcome any existing gaps and barriers in meeting those needs.²⁰ Thus, absent a transparent stakeholder process or any procedural record, the Commission implicitly predetermined the IOUs as DSOs, ignoring any concerns about whether the existing incentive structures would allow “an IOU-administered DSO to be successful.”

¹⁸ *Id.* at 11.

¹⁹ *Id.* at 11-12.

²⁰ 2023 Ruling at 6-7.

The March 23, 2026 Assigned Commissioner’s Ruling on Track 1 and Track 2 Distributed Energy Resources Orchestration (“2026 Ruling”) appeared to cement the Commission’s designation of the IOUs as DSOs and its continued avoidance of any questions about how IOU investment incentives and lack of performance incentives would conflict with the essential mission of the DSO to enable California to realize the greatest value from the exponential growth of high-performing, cost-effective DERs.

As the Commission has already acknowledged in this proceeding’s OIR, “the current cost recovery and investment structures for electric distribution systems focuses on large capital investments.”²¹ This observation places the IOU conflict of interest concern in clear focus. For all the reasons discussed above, the real benefit of DERs for energy affordability must come from constraining IOU capital investment, which would result from enabling non-IOU DER investments to proliferate. Except that IOU profit growth depends on constraining DER growth, which plays out by undervaluing DER benefits and limiting their opportunities to be financially viable by providing renewable energy and grid services.²²

Which brings us to today. The Commission has predetermined that the IOUs are now DSOs, without specifying what exactly that means for IOU-DSO roles and responsibilities the performance of which they will be accountable for. The Commission has paid lip service to open access to the distribution system, without any articulation of what that means for either the DSO regulatory framework or the transaction opportunities for participating non-utility DERs. The Commission has said that affordability is an urgent driver of this proceeding, but has yet to trace the linkage from the current Track 2 path of IOU-DSO formation to actual reductions in

²¹ *Supra* fn. 19.

²² A testament to this observation is the failure of the DIDF to yield any significant non-wires alternatives to IOU distribution system investment.

rates or customer bills. On its current course, Track 2 looks to be eminently successful in minimizing the benefits of DERs and ensuring IOU domination of a far too costly High-DER Future Grid.

III. Recommendations.

The Center recommends that the Commission remedy the crucial omissions of Track 2. That would entail placing on hold any application process by IOUs to become DER-orchestrating DSOs and either extending Track 2 into 2027, or, creating a subsequent phase or successor proceeding that would take up the matters raised above, specifically including the following:

- Consideration of DSO formation as the operator of an open-access distribution network and transaction platform,²³ comparable in principle to the FERC's formulation of open-access transmission service and the ISO's functions with respect to the transmission system and bulk power markets;
- Designing a regulatory framework for the open-access DSO that precludes any bias toward utility capital investment and compensates the DSO based on performance of its core roles and responsibilities; this could involve reforming the incentive structure of an IOU that wants to be the DSO to be consistent with open-access, or forming a separate entity to be the DSO, like the ISO was formed to an independent system operator for transmission and wholesale power markets.

To be fair, many of the technical and operational specifics developed through the three tracks of this proceeding will still be valuable and useful in the context of an open-access DSO and will not be lost efforts. However, the open-access DSO is the missing piece, the unifying framework that will unlock all the benefits the Commission and the State more broadly could realize from a high penetration of DERs. Absent the Commission's commitment to take up these

²³ For a detailed exposition of the core functional roles and responsibilities of a DSO along the lines discussed in these comments, see chapter 5 of the 2025 Distribution System Operator (DSO) Feasibility Study prepared for the State of Maine Governor's Energy Office;
<https://www.maine.gov/energy/sites/maine.gov.energy/files/2025-01/DSO%20Study%20Final.pdf>

matters in earnest, the Center requests that the Commission explain its changed rationale and how its decision not to address IOU conflicts of interest will ensure just and reasonable rates, which are at the lowest amount possible, adequate procurement, and compliance with the State's climate targets and policies.

IV. Conclusion.

For the foregoing reasons, the Center respectfully requests that the Commission adopt the recommendations in this opening comment.

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Respectfully submitted,

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