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 ENVIRONMENTAL DEFENSE FUND ON THE ORDER INSTIUTING RULEMAKING

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**OPENING COMMENTS OF ENVIRONMENTAL DEFENSE FUND
ON THE ORDER INSTITUTING RULEMAKING**

I. INTRODUCTION

Environmental Defense Fund (EDF) respectfully submits these opening comments in response to the Order Instituting Rulemaking (OIR), pursuant to Rule 6.2 of the Rules of Practice and Procedure of the California Public Utilities Commission ("CPUC" or "Commission"). EDF believes this Rulemaking has the potential to accelerate the state's transition to an affordable, clean and safe energy system for all Californians.

While EDF intends to participate in most aspects of this proceeding, we encourage the Commission to focus its efforts on updating policies to unlock electric grid investments in disadvantaged communities, particularly those plagued by harmful local air pollution. The Commission should prioritize DER investments that enable grid upgrades to be deferred– that is low hanging fruit. However, the Commission has the opportunity to be more holistic in this proceeding and consider other non-energy benefits, including reductions in climate pollution and local air quality improvements. The Commission's policy framework should recognize that electrification will be a key strategy to uplift disadvantaged communities. EDF contends that new policies contemplated in this OIR combined with new investments in the electric grid to install clean energy infrastructure in these communities will be a "win-win-win" for both the community, ratepayer and for the utility. EDF intends to suggest several areas in this proceeding where it can link local community investment and engagement. EDF encourages the

Commission to consider the affordability of new investments, and the right mixture of deployment of investment through private capital, ratepayer-backed utility investments and community-owned investments will yield the biggest bang for the buck.

EDF particularly encourages the Commission to consider how to update both the distributed operator model and the electric utility's pricing signals in connection with anticipated changes to the electric grid spurred by transportation electrification and building decarbonization. These two areas are critical strategies to decarbonize the economy and should be prioritized. The Commission should expect utilities to be preparing to meet the growing electric service needs of energy applications that are conventionally fossil fueled – namely, including truck and bus charging as well as provision of heat in ways that will be critical to decarbonize the California economy. These electricity uses are not entirely new, but the scope and scale of their deployment will be expanding at an unprecedented pace over the next decade; conventional policies will not be sufficient to create the proper market structure to make the needed investments. California needs a DSO model and accompanying pricing signal to yield the most benefit focusing on times and locations where the electric grid will be anticipated to grow – this is a vitally important policy area to get right and EDF encourages the Assigned Commissioner's Scoping Memo to consider policies on a prospective basis. With that high framing, EDF now turns to comments on the proposed scope of the Rulemaking.

II. Comments on Scope of the Rulemaking

The Commission should recognize that California needs to put into place policies that will value the location of investments. Locational values should incorporate two factors: 1) present electric grid conditions. If there are significant grid constraints that would require electric utilities to undergo a costly distribution system upgrade, this proceeding should enable new DER investments as a "non-wires alternative" to those traditional upgrades and; 2) anticipated electric grid conditions, based on projected electric load growth from new sources as the Commission implements the state's decarbonization policies. For example, EDF anticipates that there will be significant load growth in parts of the electric grid with high concentration of warehouses as more trucks and other heavy-duty vehicles are electrified. Warehouses may not constitute a large electric load now, but the need for utility infrastructure investments to support the charging of large truck fleets is already predictable and should be managed accordingly. Moreover, prioritizing disadvantaged communities with disproportionately high local air pollution such Particulate Matter or Ozone (PM or NOx) for investments in non-emitting DERs, including truck and bus charging in locations where diesel trucks and buses currently operate, will help uplift these communities. EDF also suggests that health benefits be another metric of non-energy benefits, including cancer or asthma rates, since they are highly correlated to exposure to emissions from these polluting vehicles. Updating electric grid policy to encourage investments in these communities will be critical so that the state is not always "playing catch up". We encourage the state to take a pro-active approach.

EDF notes on pages 7-8 of the OIR, the Commission refers to electric vehicle impacts as a single category. In response to Track 2, question 4, EDF contends that the Commission should consider lite-duty vehicles separately from medium- and heavy-duty vehicles; the charging needs, ability to respond to price signals, marketing education and outreach and a slew of other factors are fundamentally different. In response to Track 2, question 1,4 and 5 of the OIR, EDF observes that just as the Commission has different approaches for residential buildings (such as single-family homes) and office parks, the Commission should consider the electrification of vehicles with more granularity for this Rulemaking. Most likely, lite-duty vehicles will use an aggregator model where as individual medium- and heavy-duty fleets may be able to participate more directly with the grid. EDF is also concerned that Level 1 charging will be completely inadequate in almost all charging circumstances, and that including it in this proceeding[1] will only serve as a distraction. This will be particularly important for the Distribution Planning Process development envisioned in Track 2, and EDF encourages the Commission to have coordination for *all types* of vehicles.

In response to Track 2, Question 2 of the OIR, EDF encourages the Commission to recognize that there are large portions of the state that do not yet have reliable access to the electric grid; in these areas, predominantly tribal lands, communities rely on electricity supplied by diesel generators or other highly polluting options. These communities, like all other Californians, need a pathway to a clean energy future – and at this juncture, expansion of the grid using the framework of high DERs is a highly promising pathway available. Therefore, EDF suggests that the proposed scope be modified to explicitly consider future expansion of the grid. This should include a series of community engagements and public participation hearings. Relatedly, community engagement should more explicitly include an approach in DACs and in places in the service territory that are unserved/underserved by the utility.

In addition to the locational value of grid resources, EDF also encourages the Commission to consider the temporal aspect of those grid resources.. The Commission should recognize that we will not need full capacity of all assets for all 8,760 hours of the year, and to prioritize investments for the times that we need them. As California moves to decarbonize its electric generation, there will be time-based changes to what is needed from the electric grid, which will

[1] *See* Track 2, Question 4(g), on page 20 of the OIR

spur investment. Efficient price signals for building and deploying distributed energy resources will help contain overall system costs. For example, in a recent study[2] released by EDF, decarbonizing the last 5-10% of the generation was the most expensive because there was a diminishing return on solar + storage during a few days out of the year when there are multiple cloudy days with low renewable potential generation. The state would have to over invest in solar generation (as the least cost generation resource) to such a degree that making other more local investments for these periods would be far more cost effective on a system wide basis, even if the per unit investment was slightly more expensive. Targeting investments to meet needs with particular temporal characteristics is essential to maintaining system affordability; EDF encourages the Commission to consider the temporal component of future investments, both on a per unit basis and a system-wide basis.

Last, EDF encourages the Commission to make equity and affordability central criteria in Track 1, especially in the development of the technical consultant report that will compile analysis into the various Distribution System Operator (DSO) models. In response to Track 1, Question 4 of the OIR, EDF contends that the electric utility has a built-in alignment for new investment that will achieve a high decarbonization future. The Commission authorizes a lucrative rate of return for the electric utility's investment in distribution capital expenditures. If the Commission were to give direction as to *where and when* those upgrades should occur, combined with the existing authorized rate of return, should be sufficient to incent proper investment. It is unclear beyond an already generous return on equity is required for the utility to act as a DSO. However, EDF recognizes that there may be other methods we have not yet considered that could further incent investment. At the outset, any other incentives (and the

[2] Available online at https://issues.org/california-decarbonizing-power-wind-solar-nuclear-gas/

corresponding metrics to measure success) should explicitly consider decarbonization as a metric. EDF does note that there could be several other non-utility DSO models that enable a high penetration of DERs that will accelerate decarbonization. Therefore, in addition to the topics presented in the Rulemaking, EDF encourages the Commission to consider a DSO that is able to conduct community engagement, evaluate the impact of non-energy benefits (such as reducing local air pollution), bill affordability and bill equity. The comments in this paragraph are also responsive to questions 2 and 3 of Track 1.

III. CATEGORIZATION AND NEED FOR EVIDENTIARY HEARINGS

The OIR preliminary categorized this Rulemaking as quasi-legislative. EDF agrees with this preliminary determination and requests that the Assigned Commissioner's Scoping Memo confirms this categorization. Further, based on our review of the preliminary scoping memo as supplemented by today's comments, EDF does not need see the need for Evidentiary Hearings. There are numerous issues that will need to be resolved in this proceeding, but at present EDF does not see material issues of disputed fact that would warrant the time and protracted nature of an evidentiary hearing.

EDF encourages the Commission to either revise the tracks to be more interactive with each other (to allow for record development and subsequent decision making to happen in parallel) or to have more distinct phases of the proceeding.

IV. COMMENTS ON SCHEDULE

EDF appreciates the magnitude of the issues identified in this proceeding. However, EDF is concerned by the preliminary schedule. Most of the issues identified in the preliminary scoping memo do not reach resolution until late 2024, more than two full years from now. EDF encourages the Commission to "move faster" in several areas, especially where mid-term investment is pending now. Especially in light of the recent "code red" warning put out in the most recent Intergovernmental Panel on Climate Change (IPCC) assessment[3], EDF encourages faster action. EDF believes the Commission is more than capable of resolving several of these issues in 2023. EDF makes a few suggestions below, but is open to other opportunities to accelerate the proposed schedule. For example, EDF could envision having a second phase to this proceeding once some threshold matters are addressed.

For Track 1, EDF suggests that the envisioned En Banc could be held in Q2 of 2023 (more than a year from now, and a year ahead of the proposed schedule). Educating our decision-makers earlier in the process will be important. Once that En Banc occurs, then the resolution of the main framework of the DSO model can be determined in Q4 of 2023 (if not earlier); the Commission can then launch a successor proceeding to implement that direction.

For Track 2, EDF suggests that a workshop and technical report can occur in late 2021, and a staff proposal can be issued earlier than 2024. EDF has complete confidence that Commission Staff can complete a proposal in less than 24 months. EDF suggests that the Commission target Q2 2023 for a final proposed decision to this Track of the proceeding.

For Track 3, EDF suggests that the working group can be convened in late Q3 or early Q4 2021. EDF further suggests that given the extensive record already developed in prior proceedings that a full year is not needed for this working group; EDF suggests that resolution be shifted forwards by at least six months. EDF suggests that this phase of the proceeding be concluded by Q4 2023.

EDF notes that it will be seeking intervenor compensation in this proceeding. Having a two-plus year long process with no decisions issued places an unfair burden on parties who have

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[3] https://www.ipcc.ch/report/ar6/wg1/

a significant financial hardship. EDF encourages the Commission to make smaller and more regular decisions in this proceeding.

V. CONFIRMATION OF PARTY STATUS

Pursuant to Section 12, at pages 34-35: "Persons who file responsive comments become parties to the proceeding (see Rule 1.4(a)(2)) and will be added to the 'Parties' category of the official service list upon such filing." By filing these responsive comments, therefore EDF requests "party status" and inclusion on the service list of R.21-06-017 as follows:

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VII. CONCLUSION

EDF appreciates the Commission's consideration and the opportunity to provide these Opening Comments on the OIR. We look forward to fully engaging in this proceeding.

Respectfully submitted,

August 16, 2021

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