FILED
6-17-16
04:59 PM

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.	Rulemaking 14-08-013 (Filed August 14, 2014)
And Related Matters.	Application No. 15-07-002 Application No. 15-07-003 Application No. 15-07-006

(NOT CONSOLIDATED)

In the Matter of the Application of PacifiCorp (U901E) Setting Forth its Distribution Resource Plan Pursuant to Public Utilities Code Section 769.	Application 15-07-005 (Filed July 1, 2015)
And Related Matters.	Application No. 15-07-007 Application No. 15-07-008

RESPONSE OF ENVIRONMENTAL DEFENSE FUND TO JOINT ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE'S RULING REGARDING TRACK 2 DEMONSTRATION PROJECTS

Larissa Koehler
Attorney
Environmental Defense Fund
123 Mission Street, 28th Floor
San Francisco, CA 94105
Phone: (415) 293-6093
Email: lkoehler@edf.org

James Fine, Ph.D
Senior Economist
Environmental Defense Fund
123 Mission Street, 28th Floor
San Francisco, CA 94105
Phone: (415) 293-6060
Email: jfine@edf.org

Dated: June 17, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.	Rulemaking 14-08-013 (Filed August 14, 2014)
And Related Matters.	Application No. 15-07-002 Application No. 15-07-003 Application No. 15-07-006

(NOT CONSOLIDATED)

In the Matter of the Application of PacifiCorp (U901E) Setting Forth its Distribution Resource Plan Pursuant to Public Utilities Code Section 769.	Application 15-07-005 (Filed July 1, 2015)
And Related Matters.	Application No. 15-07-007 Application No. 15-07-008

RESPONSE OF ENVIRONMENTAL DEFENSE FUND TO JOINT ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE'S RULING REGARDING TRACK 2 DEMONSTRATION PROJECTS

I. INTRODUCTION

Pursuant to the ruling issued by Commissioner Picker and Administrative Law Judge (ALJ) Allen on May 17,[1] Environmental Defense Fund (EDF) submits the following comments. In these comments, we describe the outcomes that Track 2 demonstration projects should seek to achieve, and refer the Commission to our proposed pilot to test incentives for investor-owned

[1] *Joint Assigned Commissioner and Administrative Law Judge's Ruling Regarding Track 2 Demonstration Projects*, Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769, R. 14-08-013, *et al.* (May 17, 2016).

utilities (IOUs) to optimize distributed energy resource (DER) deployment. As well, EDF provides support for San Diego Gas & Electric's (SDG&E) Demonstration Project F proposal.

II. DISCUSSION

A. Utility proposals should share certain design elements and seek to explore how to align utility incentives with more distributed energy resources.

EDF thinks that principles laid out in an alternative pilot provided in the Integrated Distributed Energy Resource (IDER) proceeding[2] are applicable here. As such, EDF includes our proposed IDER alternate pilot by reference as Appendix A to these comments. Further, utility proposals should demonstrate how DERs can be compensated for providing distribution grid services, and how the IOUs' shareholders can enjoy financial rewards when the utility provides a DER platform for services that empowers the customer to optimize their DER investment for themselves and the grid.

As EDF testified in the New York Reforming the Energy Vision (NY REV) proceeding, we believe a well-constructed pilot should aim to do the following:

(1) "determine how the consumption and pattern of energy use is influenced by varying rate designs and accompanying enabling technologies;"

(2) "determine the extent of environmental benefits, such as the reduction in carbon dioxide emissions and other air pollution, that can be achieved by the use of such time variant prices and enabling technologies;" and

(3) "evaluate the potential economic benefits of implementing time variant prices."[3]

The NY REV ruling described "the widening gulf between the competitive realities of the modern economy and the regulated utility model of the previous century [that] makes the *status*

[2] *Opening Comments of Environmental Defense Fund on the Assigned Commissioner's Ruling Introducing a Draft Regulatory Incentives Proposal for Discussion and Comment: Appendix A – Proposed Language of EDF for IDER Business Model Framework,* Order Instituting Rulemaking to Create a Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Distributed Energy Resources, R. 14-10-003 (filed May 9, 2016).
[3] *Direct Testimony of Elisheba Spiller,* Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service, Case 16-E-0060 at 6-7 (filed May 27, 2016).

quo unsustainable."[4] Observing that "innovations in ratemaking can create new financial opportunities for utilities in response to the challenges of the modern marketplace,"[5] the NY REV decision provides four ways[6] for IOUs to be rewarded for integrating DERs. Accordingly, DRP Demonstration Projects C, D, and E should demonstrate how ratemaking innovations and other incentives can be offered as market-facing strategies from the utility to guide DER deployment, in order to increase the opportunity to optimize DER values. In so doing, the IOUs should be allowed to demonstrate earnings from services that facilitate putting additional DERs onto the grid.

EDF also suggests that the Commission consider a distribution system credit, as articulated in our filings for the NY REV proceeding.[7] More specifically, a credit would be given for DER projects "located in areas of the distribution system in which constraints have been identified by the applicable distribution utility, in recognition of the fact that these DER[s] can help defer or avoid expensive distribution infrastructure investment and create system-wide benefits."[8]

B. In order to have robust DER deployment, utilities must enhance marketing, education, and outreach to customers.

Thus far, the IOUs have treated the DER and load forecasting steps as removed from utility programs; for example, DER growth forecasts are not linked dynamically to utility incentive programs. In fact, the rate of DER deployment will be influenced greatly by IOUs' marketing, education, outreach and pricing policies and programs. Therefore, the

---

[4] State of New York Public Service Commission, *Order Adopting a Ratemaking and Utility Revenue Model Policy Framework,* Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Case 14-M-0101 (effective May 19, 2016).
[5] *Id.* at 5.
[6] *Id.* ("utilities will have four ways of achieving earnings: traditional cost-of-service earnings; earnings tied to achievement of alternatives that reduce utility capital spending and provide definitive consumer benefit; earnings from market-facing platform activities; and transitional outcome-based performance measures").
[7] *Joint Comments of Environmental Defense Fund and the Institute for Policy Integrity at New York University School of Law in Response to the Notice Soliciting Comments and Proposals on an Interim Successor to Net Energy Metering and of a Preliminary Conference,* In the Matter of the Value of Distributed Energy Resources and Options Related to Establishing an Interim Methodology, Case 15-E-0751 at 11-12 (filed Apr. 18, 2016).
[8] *Id.* at 11.

implementation phase should allow for iterations that test market responses (i.e., deviations in time and place from forecasted DER build-out) and thus "fine tune" DER deployment as a dynamic process. Doing so comprehensively necessarily involves two modes of customer engagement – directed, place-based programs and indirect mobilization of 3rd party service providers with market-facing pricing programs (i.e., tariffs, rebates, subsidies).

Until this point, distribution resources plan (DRP) planning has treated the customer – with or without DERs – as an entity that is not tied to the dynamics of the marketplace, and thus has not yet explored how customer responses to utility (and third party initiatives) can influence DER buildout. We know this to be untrue; ratepayers have been shown to and will increasingly show load flexibility, as evidenced by the success of demand response programs and growth in implementation of technology.[9] EDF supports reasonably rewarding utilities that provide customers least-cost means to optimizing DERs that will remain useful in the future, including via fees and performance-based incentives for serving customers with DERs.

C. *Southern California Edison and Pacific Gas & Electric should be compelled to study utility business models.*

EDF strongly supports the SDG&E proposed project F. We are enthusiastic to see it move forward, whether it is decided by the Commission that it belongs in the DRP or the IDER proceeding. That being said, we believe there is a misalignment between customer interests in DERs – both individually and in support of state goals – and the interests of IOU shareholders.[10]

---

[9] *Phase 1 Testimony of Environmental Defense Fund,* Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor-Owned Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations, R. 12-06-013 at 32-33 (Sep. 15, 2014); *see, e.g., Decision on Residential Rate Reform for Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company and Transition to Time-of-Use Rates,* Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor Owned Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations, R. 12-06-013 at 118 (Jul. 3, 2015).

[10] *Assigned Commissioner's Ruling Introducing a Draft Regulatory Incentives Proposal for Discussion and Comment,* Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Distributed Energy Resources, R. 14-10-003 (Apr. 4, 2016).

Project F, as proposed by SDG&E, has the potential to demonstrate new revenue strategies associated with providing DER platform services. While SDG&E has clearly taken the first step in this context, it would be beneficial for Pacific Gas & Electric (PG&E) and Southern California Edison (SCE) to explore new revenue strategies associated with co-optimizing DER deployment for customers and the grid as well. The proposal should therefore be extended to the other two IOUs.

In EDF's view, this demonstration should be technology neutral. Rather than requiring the customer to bring a particular technology to the grid, the relevant metric for determining eligibility should be whether the customer can meet a set of pre-determined criteria.

III. CONCLUSION

In sum, EDF believes that demonstration projects should abide by a set of core, common principles in order to ensure effective and adequate integration of DERs onto the grid. Relatedly, PG&E and SCE should conduct a demonstrate project related to utility incentives, as SDG&E has done.

Respectfully signed and submitted on June 17, 2016.

/s/ Larissa Koehler
Larissa Koehler
Attorney
Environmental Defense Fund
123 Mission Street, 28th Floor
San Francisco, CA 94105
Phone: 415-293-6093
Email: lkoehler@edf.org

/s/ James Fine
James Fine
Senior Economist
Environmental Defense Fund
123 Mission Street, 28th Floor
San Francisco, CA 94105
Phone: 415-293-6060
Email: jfine@edf.org

Appendix A: Proposed Language of EDF for IDER Business Model Framework

Environmental Defense Fund (EDF) agrees strongly with Commissioner Florio's concern that:

> *…to create a truly successful model for future distribution infrastructure planning and DER deployment, we cannot reasonably proceed without acknowledging and attempting to address the conflict between the Commission's policy objectives and the utilities' financial imperatives.*[11]

EDF also concurs with Commissioner Florio's statement that "…command-and-control regulation faces major challenges in this context."[12] EDF believes that the regulatory burdens and inefficiencies of command and control (CAC) approaches can be lessened using customer-facing, market-based methods that resolve the conflict identified by the Commissioner. This can be accomplished through (1) providing consumers and third-parties with transparent, actionable, information about the value of distributed energy resources (DERs) at specific times and locations; (2) offering price signals that, to the extent possible, accurately reflect time and place; and (3) creating avenues for the utilities to earn revenues by providing an expansive array of services.

The Commission is already progressing towards (1) and (2), as reflected in expanding deployment of time-variant rates, and the development of place-based information in the distribution resources plan (DRP) proceeding, notably as reflected in locational net benefit analyses (LNBA). However, whereas Commissioner Florio seeks a "regulatory process for identifying opportunities for cost-effective DER deployment, selecting, deploying and verifying them, and awarding incentives,"[13] EDF believes a market-based approach that puts the customer first by emphasizing the communication of LNBA results through retail pricing and other customer-facing incentives will offer the best opportunity to produce efficient and equitable outcomes that are easier to regulate and enforce, and that result in DER deployment that will aid the evolving distribution system over the long run and provide uncapped revenue opportunities for utilities who successfully compete to provide services to customers and their DERs.

In this context, EDF offers the following suggestions to Commissioner Florio's framework, starting on page 11.

First, the utilities would ~~begin to~~ identify opportunities for the cost-effective deployment of DERs on their systems <u>by conducting system-wide local net benefits analyses that comprehensively consider potential DER values, and by engaging their customers and DER innovators in public discourse. Alternatively, if the investor-owned utilities (IOUs) are unwilling or unable to complete a full-system LNBA, or corroboration is valuable, others can be asked to produce this DER-market-empowering information; for example, the Lawrence Berkeley National Laboratory (LBNL) team developing the</u>

[11] *Assigned Commissioner's Ruling Introducing a Draft Regulatory Incentives Proposal for Discussion and Comments,* Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Distributed Energy Resources, R. 14-10-003 at 3 (filed Apr. 4, 2016).
[12] *Id.* at 7.
[13] *Id.* at 11.

Demand Response (DR) Potential study[14] and the team at SLAC developing the Visualization and Analytics of Distributed Energy Resources (VADER) platform[15] can be asked to develop feeder level LNBA maps.

Once ~~the utility has identified one or more such opportunities~~ we've identified locational net benefits across the utility's entire service territory at the feeder level, ~~it would~~ the CPUC will convene a meeting of ~~its~~ the utility's Distribution Planning Review Group (DPRG), a new entity similar to the existing Procurement Review Group (PRG) but with differing membership, to describe and discuss ~~the proposed DER procurement~~ the proposed sourcing strategies that begin with cost-based tariffs and other incentives, both in isolation and in combination with other utility and third-party DER programs. The purpose of the DPRG is to provide strategic guidance to the CPUC to use pricing strategies and programs to guide the deployment of DERs in ways optimize DER deployment for customers with and without DERs.

In parallel with and informed by the DPRG, the utility will engage the public, hosting workshops, and implementing marketing, education, outreach and other engagement strategies as necessary to comprehensively alert and eventually harvest potential and interest in DER investments within a given community of customers. The "community" will be defined in consultation with the DPRG at a line segment, planning node, or other relevant area or aggregation as necessitated by a specific planning need or indicated in the findings of the LNBA.

Second, following this consultation, the utility would submit a Tier 3 advice letter proposing to procure DERs using a pricing-first, programs-second, and bilateral procurement as the third option. The goal should be to achieve the best, most cost-effective DER packages that can be obtained, at the right locations. Doing so begins with forward-looking, cost-based retail tariffs and an intent to optimize DER deployment.

The advice letter would identify in detail the locations in question – where "smart" DER deployment has greatest potential to either avoid or create system costs, over both the near and long terms ~~and the system issue that the proposed procurement was intended to address, specifically including the electrical products and/or services that would be sought~~. The advice letter can identify near-term system issues that cannot be addressed, with reasonable confidence, with DER solutions sourced via pricing and programs, and thus are ripe for a utility request for offer (RFO) process. For these projects, the utility will specify in the advice letter the problem that the proposed procurement will address, specifically including the electrical products and/or services that would be sought.

Where there are DER "hot spots" (i.e., areas where DERs have great potential to be immediately valuable or costly) ~~The utility would also describe in its~~ the advice letter can contain a proposal for notifying end-use customers in the affected area of the electrical products and/or services the utility

[14] Peter Alstone, *et al., 2015 California Demand Response Potential Study: Charting California's Demand Response Future – Interim Report on Phase 1 Results*, Lawrence Berkeley National Laboratory (April 1, 2016).
[15] http://energy.gov/eere/sunshot/project-profile-visualization-and-analytics-distribution-systems-deep-penetration

~~was~~ is seeking to obtain. Affected customers and third-party aggregators could propose their own DER projects or, more likely, various vendors and aggregators could offer packages of DERs in the defined area. Here again, the IOUs should consult the DPRG to determine how best to reflect DER value potential in retail pricing and associated incentives. This customer-first pilot will examine how DER deployment occurs as customers in the affected area respond to prices and associated marketing by utilities and DER service providers who study and respond to the LNBA information by developing locational-specific product offerings and marketing. Along the way, this pilot will allow for utilities to propose, in their advice letters, how they plan to earn rewards for providing DER-hosting and enabling services, and should be coordinated with ongoing DRP demonstrations and electric vehicle (EV) vehicle-grid integration (VGI) and residential time-of-use (TOU) pilots.

To facilitate DER solutions providers, ~~C~~customers in the affected area could also indicate that they would like to have their names and contact information placed on a public list that vendors could use to solicit participants in a DER project. Absent such affirmative consent, the identities of individual customers in the affected area would not be disclosed.

Third, a public workshop would be held before any comments or protests to the advice letter were due (in other words, the standard protest period would be extended), and in that workshop the utility would explain the proposed ~~solicitation~~ sourcing strategy, in sufficient detail for attendees to understand what products and/or services the company was seeking, where, and for what purpose - including plans for pricing, programs, and utility solicitation for DERs. ~~Proposed performance requirements for any selected DERs would also be presented for discussion.~~ Parties would be invited (and encouraged) to suggest alternative approaches.

Fourth, after the workshop(s), a deadline of a certain number of days would be set for the submission of comments or protests to the advice letter. (The deadline could be determined by the Commission or could be flexibly determined by Energy Division.) Energy Division would then prepare a resolution for Commission consideration, addressing any issues raised in comments.

Fifth, if the advice letter is approved (with or without modifications) the utility would then undertake the approved ~~procurement~~ sourcing process, in consultation with its DPRG ~~and an independent evaluator~~.

Sixth, the Commission should plan for iteration based on adaptive management; this means updating LNBA calculations with improvements, revisiting retail pricing and utility/3rd party programs to improve performance and/or developing strategies for optimizing DERs to address emergent grid and customer needs.

Seventh~~, Sixth~~, any resulting contracts would be submitted for Commission approval via an application, in which the utility would justify the chosen DERs and propose an appropriate incentive, consistent with the Commission's prior guidance. If a DER solution is chosen and approved, the utility would be authorized to record the approved shareholder incentive in a balancing account at the same time as payments were made to the DER provider, and entries to the account would be subject to review in a designated subsequent formal proceeding. The presumption would be that the utility would be able to collect the incentive as long as a potential distribution capital investment or expenditure was, in fact, deferred at a cost less than that of the avoided utility expenditure. I anticipate that ORA and other traditional GRC intervenors would be involved in ensuring consistency among DRP results, GRC requests, and claims for successful deferrals.

~~During the interim period, while this process proceeds in parallel with the DRP Demonstration projects, I envision that a utility could submit the initial Tier 3 advice letters as often as necessary, hopefully grouping several identified projects together to avoid multiple, overlapping requests. A potential minimum requirement of at least one proposed project every six months could be established to ensure that the program is actually implemented, but I would hope and expect that the utilities would be more aggressive in seeking out DER deployment opportunities~~. This process shall proceed in coordination with the DRP Demonstration projects, including demonstrating utility service payments for hosting, serving, and optimizing DERs for customers beyond those who invest in the DER.