

**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 15-07-002 Application 15-07-003 Application 15-07-006
<b>(NOT CONSOLIDATED)</b>	
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 15-07-007 Application 15-07-008

**CLEAN COALITION COMMENTS ON THE PROPOSED DECISION  
ON TRACK 3 POLICY ISSUES:  
SUB-TRACK 2 (GRID MODERNIZATION)**

Kenneth Sahm White  
Director, Economic & Policy Analysis  
Clean Coalition  
16 Palm Ct  
Menlo Park, CA 94025  
(831) 295 3734  
sahm@clean-coalition.org

March 12, 2018

**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 15-07-002 Application 15-07-003 Application 15-07-006
<b>(NOT CONSOLIDATED)</b>	
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 15-07-007 Application 15-07-008

**CLEAN COALITION COMMENTS ON THE PROPOSED DECISION ON TRACK 3  
POLICY ISSUES:**

**SUB-TRACK 2 (GRID MODERNIZATION)**

**I. INTRODUCTION**

The Clean Coalition respectfully submits these comments in response to the Proposed Decision On Track 3 Policy Issues: Sub-Track 2 (Grid Modernization) (“PD”), dated February 20, 2018. The Clean Coalition appreciates the opportunity to comment on this topic and the work done by the California Public Utilities Commission (Commission) staff to date. In summary, the Clean Coalition strongly encourages that the Commission’s cost effective grid modernization efforts accelerating the deployment of distributed energy resources (DER) in order to maximize ratepayer benefits and to accelerate the development of a modern grid.

## **II. SUMMARY**

- We broadly agree with and support the Proposed Decision.
- We recommend that the first GMP submitted by each utility, at least, receive an initial review through the DRP proceeding or an associated Advisory Group.
- DER must be evaluated as aggregated portfolios of resources in order to properly assess their impacts and cost effectiveness, and recommend adding specific language to reflect this.
- We recommend that the PD explicitly reference optimization of DER assets in relation to the metrics applied in the GRCs.
- We support adoption of performance based metrics.

## **III. DESCRIPTION OF THE PARTY**

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources (“DER”)—such as local renewables, advanced inverters, demand response, and energy storage—and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

The Clean Coalition has been an active and consistent participant throughout the history of the Distribution Resources Plan (“DRP”) proceeding, and have remained a leading participant in the related interconnection proceedings and an active participant in the Integrated Distributed Energy Resources (“IDER”) working groups that seek to integrate DRP results and processes.

We broadly concur with and strongly support the proposed Decision, while offering specific recommendations for refinement.

## **IV. COMMENTS**

## **General**

We broadly concur with and support the Proposed Decision and its important focus on coordination with other tracks of both the DRP and related proceedings. We offer specific recommendations for refinement in relation to grid modernization plan submission and review, and evaluation for cost reasonableness of grid modernization plans as discussed below.

### **2.3.3 Grid Modernization Plan Submission and Review**

The PD notes that ORA, SEIA, Clean Coalition, and IREC agreed that there should be some review process prior to GRC applications, while also noting that TURN, Siemens, and the IOUs state that Grid Modernization Plans (“GMPs”) should not be reviewed separately from the GRC. The PD concludes that, while it can be time consuming for parties to participate in General Rate Case (“GRC”) proceedings, it is the only way to sufficiently vet the IOUs’ grid modernization funding requests to ensure that they are reasonable.<sup>1</sup>

Clean Coalition finds this insufficient as it fails to address the question of input from the DRP proceeding and parties to the GMP prior to the GRC. We agree that GRC should be the final review, but that proceeding will necessarily lack participation by most non-utility parties with expertise in the details of grid modernization, and is not an appropriate place for either initial technical review or repetition of reviews that have occurred in other proceedings.

We recommend that GMPs receive initial review within the DRP proceeding, or an associated Advisory Group, at this time. In the future, after experience is gained in the development of GMPs and Distribution Resource Plans, and after standards, procedures, and methodologies are well established, such review may no longer be warranted. As such, we recommend at a minimum that the first GMP submitted by each utility to the GRC be accompanied by a brief report indicating the recommendations of parties who have reviewed the GMP through the DRP proceeding, or an associated Advisory Group.

The Clean Coalition supports the PD’s requirement for each IOU to present a 10-year Grid Modernization vision to provide context for their GMP request. We agree that the 10-year vision should focus on the distribution system changes the IOU anticipates to be necessary

---

<sup>1</sup> PD at 20

considering the long-term outlook for different types of DERs, and the requirement that the IOUs include the 10- year vision as a chapter in their GMP.

#### **2.3.4 Evaluation for Cost Reasonableness of Grid Modernization Plans**

The PD concludes<sup>2</sup> that cost-effectiveness of grid modernization needs to be evaluated within the context of the overall cost-effectiveness of the DERs. The methodology to calculate the cost-effectiveness of DERs is under consideration in the IDER decision, which will inform procurement policies to optimize the resource mix in the IRP proceeding.

The tools we are developing in the DRP—Integration Capacity Analysis (“ICA”), Locational Net Benefits Analysis (“LNBA”), and Grid Needs Assessment (“GNA”)—as well as the cost effectiveness methodology and DER sourcing policies under consideration in the IDER proceeding, are appropriate to enable cost effective DER procurement. While the PD does not require a method to quantify a *cost-effectiveness* showing in order to evaluate grid modernization investments in the GRC, careful vetting of the *cost reasonableness* of these requests remains a critical role for the GRC to meet distribution planning objectives at the lowest possible cost. The LNBA, once fully implemented, will inform cost effectiveness evaluations of different DER resources within the IDER proceeding.<sup>3</sup>

Clean Coalition agrees that future DER growth projections will drive the need for Grid Modernization investment related to DER integration, and that, while there remains room for improvement, current GRC approaches are effective and appropriate, and should continue to be used. We strongly encourage the Commission to begin addressing rates, tariffs and other compensation mechanisms to influence DER deployment and operation in accord with net ratepayer benefits at both local and system levels, and appreciate the revised scoping currently under consideration in that closely related proceeding.

The PD further concludes<sup>4</sup> that Grid Modernization investments, along with other DER integration costs, must be considered against the benefits presented in the LNBA in order to determine the cost-effectiveness of each DER, and finds it is critical for the IOUs to identify the drivers of grid needs in the GNA and propose the most appropriate method to quantify the DER

---

<sup>2</sup> PD at 23

<sup>3</sup> PD at 25

<sup>4</sup> PD at 25

integration costs to incorporate into the LNBA. The process is to be addressed in the next phase of this proceeding.

While we agree with these conclusions, the Clean Coalition reminds the Commission that DER must be evaluated as aggregated portfolios of resources in order to properly assess their impacts and cost effectiveness. Neither individual DER nor discrete technologies operated in isolation on the grid, and the synergistic or exacerbating characteristics of combined operational profiles and DER management systems (DERMS) must be considered, both to optimize operational benefits and mitigate costs. LNBA Working Group members have ensured that the LNBA inputs are able to reflect any defined operational profile of a diverse DER portfolio. We believe the Commission and stakeholders are already aware of this, but it bears repeating and emphasis to ensure the point is properly reflected in the final Decision.

We recommend adding the explicit reference to DER portfolios in the above paragraph to read: “For this reason, we find it is critical for the IOUs to identify the drivers of grid needs in the GNA and propose the most appropriate method to quantify the DER *portfolio* integration costs to incorporate into the LNBA.” This is consistent with the language of the prior Decision<sup>5</sup> which states “LNBA must be able to flexibly calculate net benefits at the distribution system granularity and value aggregation method required by the particular application (e.g., portfolio, program, tariff, or contract) being evaluated.”

Likewise, it is essential to continue the work to assess the impact of DER on long term transmission and distribution expenditures, as also noted in the prior Decision.<sup>6</sup> As the Clean Coalition has referenced in testimony and numerous proceedings,<sup>7</sup> trajectory transmission expenditures, including initial capital investment, high rates of return on equity for transmission owners, and higher lifetime O&M costs, are projected to exceed energy costs in future years. Growth in DER adoption and deployment with the correct operational profiles can reasonably

---

<sup>5</sup> D.17-09-026 at 44

<sup>6</sup> Ibid at 44-45

<sup>7</sup> See for example: Clean Coalition Rebuttal Testimony Regarding Pacific Gas And Electric Company’s And San Diego Gas And Electric Company’s Applications To Establish Green Tariff Shared Renewables Programs, January 10, 2014. Proceeding: A.12-01-008 and A.12-04-020; and Clean Coalition Comments on the CAISO Review Transmission Access Charge Structure Straw Proposal available at <http://www.caiso.com/Documents/CleanCoalitionComments-ReviewTransmissionAccessChargeStructure-StrawProposal.pdf>

reduce new transmission needs and associated costs by 50% or more, and help meet distribution loads associated with EV adoption and electrification of building energy use with reduced local grid impacts. These benefits must be considered in GMP development, and assessed against GMP costs.

At least as important, we note that the PD seems to miss the critical issue of investments needed to increase the value of DER to ratepayers – this goes beyond the safety, reliability, and accommodation factors noted in the PD, and should include the role of management, communication and/or control system (“DERMS”) investments to access and utilize DER where cost effective. DER offer a range of benefits from the individual customer to system wide grid need mitigation and meeting state policy objectives. DER also offer a range of benefits beyond those directed at the individual customer or deferral of individually identified conventional grid investments, and can address local and system wide operational optimization. They offer a potentially responsive or dispatchable resource that can provide grid services or mitigate grid needs at lower cost than other alternatives, especially when these are secondary services available from DER that are being deployed for other primary uses and cost recovery. However, accessing this value will require some investment, even for low cost and high value approaches such as fast response load modification (HVAC or EV charging signaling etc.).

We recommend that the PD explicitly reference optimization of DER assets in relation to the metrics applied in the GRCs for Option 1, as well as the Least Cost Best Fit (“LCBF”) approach applied in Option 3. The PD notes that maximizing the value of DERs<sup>8</sup> is one of the appropriate drivers of investment in the GNAs and GMPs, but does not refer to this in either of the options adopted for review of distribution funding requests and determination of the appropriate levels of investment.

#### **2.3.4.2. Performance Based Metrics – agree & support**

We support adoption of performance based metrics, as well as associated incentives in the IDER proceeding. We strongly agree that it is important to track grid modernization investments as they are implemented over time, in order to assess the degree to which they realize the benefits for which they were proposed, including the use of consistent accounting

---

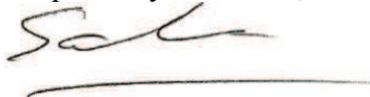
<sup>8</sup> PD at 24-25

codes that are clearly defined and provide reference for review of any past investments. We requiring the IOUs to list the status of projects from the previous GRC in the GMP so that Commission and other stakeholders may assess the implications of these results in future Grid Modernization Plans.

## CONCLUSION

The Clean Coalition appreciates the opportunity to submit these reply comments on the proposed Decision on Track 3 policy issues in the DRP. We support the Proposed Decision and the recommended modifications as noted, and the Commission's continued and evolving efforts in this proceeding to assess the impacts of DER and locational factors such that the benefits may be realized for ratepayers at large, individual customers, and communities.

Respectfully submitted,



Kenneth Sahm White  
Director, Economic & Policy Analysis  
Clean Coalition

Dated: March 12, 2018

## VERIFICATION

I, Kenneth Sahm White am the representative for the Clean Coalition for this proceeding. I am authorized to make this verification on the organization's behalf. The statements in the foregoing document are true of my own knowledge, except for those matters that are stated on information and belief, and as to those matters, I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on March 12, 2018, at Santa Cruz, California



Kenneth Sahm White  
Director Economic & Policy Analysis

Clean Coalition  
16 Palm Ct.  
Menlo Park, CA 94025  
831.295.3734  
[sahm@clean-coalition.org](mailto:sahm@clean-coalition.org)