

**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
(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 15-07-007 Application 15-07-008

**CLEAN COALITION REPLY COMMENTS ON THE PROPOSED DECISION ON
TRACK 1 DEMONSTRATION PROJECTS A (INTEGRATION CAPACITY
ANALYSIS) AND B (LOCATIONAL NET BENEFITS ANALYSIS)**

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

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I. INTRODUCTION

Pursuant to Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the Clean Coalition respectfully submits these reply comments in response to several Parties’ opening comments on Assigned Commissioner’s proposed *Decision on Track 1 Demonstration Projects A (Integration Capacity Analysis) and B (Locational Net Benefits Analysis)* (“PD”), dated August 25, 2017.

II. SUMMARY

- We support the Proposed Decision’s conclusion that the basis for value assessment must not be restricted to planned investments.
- We support IRECs request that the Commission explicitly require that the IOUs publish the criteria violations for each ICA value in the underlying data.

- Joint Utility arguments against use of unplanned investments and scenarios of zero DER growth are incomplete in their consideration of facts.

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 has been an active and consistent participant in both the Integration Capacity Analysis (“ICA”) and Locational Net Benefits Analysis (“LNBA”) working groups and an original advocate for distribution resource planning and processes. In addition, we have remained a leading intervenor in interconnection proceedings and an active participant in the Integrated Distributed Energy Resources (“IDER”) working groups that seek to utilize the ICA and LNBA results. We broadly concur with and strongly support the proposed Decision.

IV. COMMENTS

Locational Net Benefits Analysis

Joint Parties

The Solar Energy Industries Association (SEIA), Stem, Inc. and Vote Solar (“Joint Parties”) correctly and importantly note that the PD provides needed guidance on how the LNBA will be used and affirms that values within it are long-term values beyond the narrow set of “deferrable” projects identified within a utility’s annual distribution planning process. The Clean Coalition agrees, and affirms that guidance from the Commission is essential to the efforts of the ICA and LNBA Working Groups to both clarify the goals and priorities and to address areas of non-consensus in identified in the Working Group Reports.

We also strongly concur with the Joint Parties’ support the PD’s conclusion that locational-values should not be based solely on deferral of specific projects identified in a utilities’ annual distribution planning process. Relying solely on short-run avoided costs would mark a dramatic departure from many years of CPUC practice which values resources over their expected lifetime. As noted, the benefits of most distributed energy resources far exceed the utilities’ 10-year distribution planning horizon. Likewise, transmission planning is generally limited to the assessment of needs which will occur within 10 years, meaning that the benefits of reducing needs occurring beyond this period are not captured through reference to either of these planning processes. Planning horizons reflect the time required for appropriate project planning

to mitigate forecast need. These timeframes are unrelated to the value of mitigating future need. As discussed further below, while project planning results are an important input for LNBA methodology, these results cannot substitute for, and should not be confused with, a long-term benefits methodology.

We also support the Joint Parties recommendation to remove the PD's restriction of non-capacity reliability projects from being used in the calculation of the LNBA, which is premature given that the deferability of particular categories of projects is an open issue in Track 3 of the instant proceeding.

Finally, we support the Joint Parties request that costs and benefits of autonomous DER growth are evaluated in a consistent manner under a "no-DER" growth scenario for assessing the cost effectiveness.

IREC

We support IREC's comments requesting that the Commission explicitly require that the IOUs publish the criteria violations for each ICA value in the underlying data.¹

Joint Utilities

We disagree with the Joint Utilities' argument that providing additional value beyond deferral of known/planned capital projects is speculative and inappropriate.² While prior Decisions and guidance from the Commission are clearly relevant, additional information should drive modification or refinement. While precise estimation of future grid needs and the value of avoiding these as-yet-unrealized needs is inherently based on incomplete information it should not be considered speculative in a pejorative sense – the goal is to improve the accuracy of estimated value based on the available information, accounting for uncertainty.

In this light, the proposition that there will be no future need for additional grid resources beyond those currently planned is not only unfounded but objectively absurd. It is most reasonable to assume that new additional grid needs will occur consistent with historical experience and forecasts, and that DER will be able to mitigate the probable future grid needs to a degree at least equal to their ability to meet existing needs.

¹ IREC opening comments at 3.

² Joint Utilities opening comments at 5.

In fact, the primary limitation on the use of DER as an alternative to conventional utility investment is not technical but is the narrow time window created by the planning and procurement process. The Distribution Investment Deferral Framework (“DIDF”) requires that an “alternative” to the planned investment must be deployed at a date sufficiently in advance of the projected need to allow time for the utility to still construct the planned conventional project if the DER alternative has not successfully mitigated the need in advance of that date. For this reason, projects planned for needs occurring within three years are generally excluded from consideration for deferral. When DER reduces future grid needs, this also eliminates the requirements for time to procure DER specifically to meet those needs, and the time required to allow for scheduling and construction of conventional solutions. As such, the ability of DER to mitigate future grid needs and provide an alternative to projects that have not yet entered the planning phase is considerably greater than the opportunity for DER to address projects already within the planning phase, and should not be ignored.

For example, Micro-grids are proven distribution level systems capable of meeting all the electrical needs within a defined area, even doing so “islanded” in complete separation from other distribution or transmission grids, thereby avoiding any distribution or transmission investment. It is objectively clear that where those needs have already been met by DER, this DER has avoided having these needs ever enter into either the distribution planning process (“DPP”) or the transmission planning process (“TPP”). This is not “mere speculation”.

Similarly, DER can prevent transmission needs from arising. For example, the Long Island Power Authority (LIPA) identified a high locational value and offered a 7¢/kWh premium to 40 MW of appropriately sited solar DG facilities to encourage locational capacity sufficient to avoid \$84,000,000 in new transmission costs that would otherwise be incurred, resulting in a net ratepayer savings of \$60,000,000.³ This was a recognized need. However, if a comparable quantity of DER had already been deployed in this area, the “need” for new transmission capacity would never have arisen. The quantity and location of the DER would have been the same, and the same new transmission capacity would have been equally avoided regardless of

³ Uncontested Testimony of Kenneth Sahn White: *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; CPUC Proceeding A.12-01-008 and A.12-04-020, at 2.

whether the DER were deployed before or after the capacity shortfall threshold was reached. If DER mitigates load service requirements such that the limits of existing infrastructure capacity will not be reached within the planning cycle, the value is no less than if it provides the same mitigation after a mitigation project is triggered.

The utilities' claim that value is inherently limited to only those needs occurring within the current planning cycle is an error of fact and reason. The PD remains correct in recognizing that future as-yet-unplanned-for needs have value. The PD is also correct in recognizing that there is uncertainty in forecasts, and consequently in seeking to apply a probabilistic analysis of future needs, and in utilizing a "no DER growth" scenario as a basis of comparison for determining the impact of forecast growth in DER. It is precisely these impacts, both positive and negative, which the Commission is appropriately seeking to capture through a benefits assessment, with the added component of locational variation in the LNBA.

As noted in prior uncontested testimony,⁴ deploying DER that displace transmission-sourced energy during peak demand periods avoids the need to increase transmission capacity, which in turn preempts the need for future infrastructure investment planning. For example, a May 2012 study by Southern California Edison found that transmission upgrade costs to support their share of the Governor's goal of 12,000 MW of distributed generation could be reduced by over \$2 billion in a "guided case" in which 70 percent of projects would be located in urban areas compared to an "unguided case" in which 70 percent of projects would be in rural areas in a business-as-usual trajectory scenario.⁵ (*Figure 1: Locational Integration Cost Factors for Distributed Generation.*)

Recognizing location-driven differences in costs and benefits of DER growth are precisely the purpose of LNBA. Major transmission and distribution infrastructure cost savings can be realized if forecast DER growth occurs where there is greater capacity to accommodate that growth. However, in the example of the SCE study, an LNBA methodology that only considered planned projects would fail to reflect the very cost differential predicted by the utility planners, since none of the specific infrastructure projects for either scenario had yet been planned.

⁴ *ibid* at 5-7.

⁵ The Impact of Localized Energy Resources on Southern California Edison's Transmission and Distribution System, SCE, May 2012.

Failing to account for projects that have not yet been planned, or the value of DER mitigations relative to the ratepayer costs that would otherwise occur in the absence of these mitigations, provides a false and unrealistic projection of future costs and savings. For example, CAISO forecasts of future ratepayer High Voltage Transmission Access Charges, based on transmission costs, show an illusory leveling off of future costs, showing no increase after 7 years (see attached *Figure 2: Forecast ISO High Voltage Transmission Access Charges.*) This levelling off isn't the result of an investment freeze, but only occurs because this analysis only includes currently planned projects, and does not include projects that will be built outside of the planning window, creating the inaccurate impression that there will be no additional investment beyond the planned investments.

In contrast, as demonstrated in the attached *Figure 3: Projected Total PG&E Transmission Access Charges: Accounting for Investments Not-yet-planned, Relative to DER Growth Scenarios,*⁶ if we forecast the continued addition of new transmission projects beyond the current planning period, even utilizing CAISO's lower projected average future estimate of 7% nominal escalation (5% real) over the next 20 years, the transmission charges, and associated ratepayer costs, do not actually level off, but continue to climb. Increased deployment of DER mitigations would result in major savings that must be recognized.

V. CONCLUSION

The Clean Coalition appreciates the opportunity to submit these reply comments on the proposed Decision on Track 1 Demonstration Projects A and B and implementation of the ICA and LNBA methodologies. We support the Proposed Decision 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

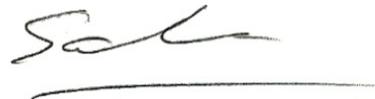
⁶ Clean Coalition Transmission Access Charge Impact Model, available at: <http://www.caiso.com/informed/Pages/StakeholderProcesses/ReviewTransmissionAccessChargeStructure.aspx>

Dated: Sept 19, 2017

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 September 19, 2017, 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