BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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CLEAN COALITION COMMENTS ON THE JOINT AMENDED SCOPING MEMO AND RULING OF ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE

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February 16, 2018
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| | Application 15-07-008 |

CLEAN COALITION COMMENTS ON THE JOINT AMENDED SCOPEING MEMO AND RULING OF ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE

I. INTRODUCTION


II. SUMMARY

- The Clean Coalition broadly supports the Amended Ruling
- We strongly support the policy scenario analysis use case and respond here to related questions contained in the E-Mail Ruling
• A policy scenario analysis is necessary to address the requirements of P.U. Code §769
• A policy scenario analysis may evaluate specific results of a policy or program proposal, or compare multiple alternatives. Determination of optimal DER portfolios will require the Commission to establish the valuation metrics upon which “optimal” is assessed, and the addition of optimization methodologies to either the ICA model foundation or an alternative.
• Locational variation of DER benefits, as established by the Locational Net Benefits Assessment (LNBA), should be incorporated into optimization determinations.

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

Policy Scenario Analysis Use Case

The Clean Coalition has been an active party throughout this proceeding and an active participant in the associated DRP working groups. We believe that there are clearly two primary Planning Use Case applications - Policy Planning, and Service Planning. The prior Ruling ordering development of a Planning Use Case did not distinguish between these applications. The Clean Coalition and other non-IOU parties have understood “planning” to include use by the Commission (i.e. scenario analysis in policy planning and development) and not only planning by the IOUs, which appears
A policy scenario analysis is necessary to address the requirements of P.U. Code §769. Public Utilities Code Section 769 (b) a distribution resources plan proposal to identify optimal locations for the deployment of distributed resources. Each proposal shall do all of the following:

1. Evaluate locational benefits and costs of distributed resources located on the distribution system. This evaluation shall be based on reductions or increases in local generation capacity needs, avoided or increased investments in distribution infrastructure, safety benefits, reliability benefits, and any other savings the distributed resources provides to the electric grid or costs to ratepayers of the electrical corporation.

2. Propose or identify standard tariffs, contracts, or other mechanisms for the deployment of cost-effective distributed resources that satisfy distribution planning objectives.

3. Propose cost-effective methods of effectively coordinating existing commission-approved programs, incentives, and tariffs to maximize the locational benefits and minimize the incremental costs of distributed resources.

4. Identify any additional utility spending necessary to integrate cost-effective distributed resources into distribution planning consistent with the goal of yielding net benefits to ratepayers.

5. Identify barriers to the deployment of distributed resources, including, but not limited to, safety standards related to technology or operation of the distribution circuit in a manner that ensures reliable service.

These five requirements, individually and in combination, effectively require policy scenario analysis. This is particularly true regarding the development of tariffs and other deployment incentives, and cost-effective methods of effectively coordinating existing commission-approved programs, incentives, and tariffs to maximize the locational benefits and minimize the incremental costs of distributed resources, as well
as identify grid related barriers to the deployment of distributed resources, such as hosting capacity.

**Policy Scenario Analysis Use and Application**

We clarify the distinctions between the use cases, and differentiate service planning and policy planning as distinct applications with the Planning Use Case topic.

ICA is a powerful tool that can help inform future policy deliberation. This use case provides a framework for how the ICA tool can be used in active CPUC proceedings to inform future CPUC Decisions. Specifically, this use case is designed to help provide analysis to provide additional insights to build the on active topics in scope in a given proceeding. Modeling changes in forecast DER operations, locations, and growth rates associated with policy and program alternatives provides understanding of limits imposed by the existing grid in accommodating DER policy goals, and a foundation for estimating the degree of any grid investments or savings associated with the DER deployment differences forecast in relation to a proposed change in a policy or program.

This use case contrasts with the interconnection and service planning uses. Whereas both the interconnection and service planning use cases are designed to inform specific IOU operations, the policy planning use case is envisioned to inform CPUC proceedings and Decisions.

Furthermore, whereas the interconnection and service planning use cases define specific analyses that the IOUs will perform on a recurring basis, the policy scenario analysis use case refers to potential future analyses to be scoped out and developed in proceedings as the need arises. This use case could ultimately encompass a recurring analysis and/or it could encompass a series of one-off analyses.

At this stage, the policy analysis planning use case provides a framework to begin to define the modeling requirements for this use case. The IOUs have recommended these requirements be developed further before formal implementation, and we concur.

Policy scenario analysis does not require the same degree of locational detail and
accuracy as the interconnection use case, by orders of magnitude. However, scenario analysis is greatly benefited by streamlined implementation and use, and by appropriate results metrics useful in policy evaluation. Drawing upon the existing ICA model, alternative DER forecasts and operational profiles can be input easily if provided in the appropriate format; however establishing and implementing this input process is not a trivial task. The existing model currently being implements already incorporates measures to optimize computational efficiency that meets the level of granularity and accuracy required for interconnection. The dramatically lower level of precision required for policy scenario analysis allows equally greater efficiency in computational performance while maintaining appropriate accuracy in comparing policy options.

It is important to understand that the foundational ICA model only provides information regarding hosting capacity in relation to policy alternatives. This is important in assessing how the existing grid infrastructure will influence policy performance and any associated costs or savings, but it is only one factor to be used in evaluation. In particular, the Locational Net Benefits Assessment map of relative value should be utilized in an integrated manner to understand both what the value of DER is across locations and how much hosting capacity for this DER is available. A policy targeting high value locations will have limited effect if capacity is not available at these locations. Additionally, the current model is of the existing grid; adjusting the model to reflect planned or envisioned changes in the grid will require review to determine whether this is reasonably feasible and warranted. In cases where changes in the grid infrastructure are important to consider, statistical sampling is likely preferable. Such issues should be addressed by the Working Group.

Following a number of discussions, the WG identified two main concerns that require resolution. First, should policy planning and service planning be part of the same use case, or become two separate planning use cases? Second, how should the policy analysis planning use case be implemented? This document attempts to answer both of these questions.
The policy analysis use case is substantively different from the service planning use case. The following chart illustrates this through comparison of all three use cases.

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<td><strong>Use Case</strong></td>
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| Interconnection | Estimate available hosting capacity for new resources | Streamline interconnection process by eliminating the need for certain screens and/or analyses | Support the interconnection process  
  - Developers use the results to identify favorable locations.  
  - IOUs will use the results to during the interconnection application process to avoid the need for certain engineering components of interconnection studies. |
| Service Planning | Identify grid locations where autonomous DER growth forecasts exceed hosting capacity | Identify potential grid investments to increase hosting capacity in advance of expected DER growth | Support the Distribution Service Planning Process  
  - IOUs use the results to identify potential locations requiring projects in distribution plans and in GRC.  
  - Stakeholders use the results to assess investments needed to meet expected autonomous retail growth of DER |
| Policy Planning Scenario Analysis | Identify interactions of policy driven DER growth forecast scenarios and grid hosting capacity | Compare hosting capacity impacts of policy alternatives, by scale and location, for optimizing goal achievement and ratepayer value | Support CPUC Policy Proceedings and Decisions  
  - Stakeholders use the results to advocate among policy options  
  - CPUC uses the results to compare investments needed to meet alternative policy |
Proposed Framework for the Policy Scenario Analysis Planning Use Case

This section provides a high-level framework for developing the policy scenario analysis use case.

Under this concept, Policy Scenario Analysis use could be implemented on a case-by-case basis as needed by an active CPUC proceeding. This use case is envisioned to reflect alternative DER growth scenarios associated with policy options in support of the specific needs of a given proceeding. This is additional to the use of baseline ICA results in proceedings to identify or target locations for investments and incentives.

1. Initial Identification of potential ICA scenarios for analysis
   a. Within the context of a CPUC proceeding, Commission staff or parties to the proceeding identify proposed scenario analysis through formal or informal processes (e.g. via a Staff Report, Comments, PHC statement, workshop discussion, etc.)
   b. The parties proposing an ICA scenario analysis should attempt to include the following information:
      i. What questions are being asked; how the ICA results answer the questions; how the answers will inform the scope topic
      ii. What is the detailed scope of the proposed analysis
         1. Can the existing 576 hourly ICA results be used to inform the policy?
         2. If not, what scenarios will be tested (i.e., alternative forecasts, alternative policy regimes, etc.)
         3. How the (numerical) inputs for the scenarios will be determined
         4. Etc.
2. Development of scope of analysis
   a. CPUC staff and parties collaborate to develop the proposed analysis.
   b. IOUs estimate the workload associated with the analysis, and suggest options to minimize additional workload, including use of statistically representative samples or simplified granularity for efficiency.
   c. Once the proposed analysis is defined, IOUs estimate lead time required for the analysis, as well as the estimated cost of the analysis
   d. While a scenario evaluation schedule aligned with the IOUs annual distribution planning process may be appropriate for updating results, additional or initial policy scenario evaluations may be warranted at any time according the schedule of associated proceedings. We note that the results will not change significantly over any 12 month period.

3. CPUC formally provides guidance for the analysis, including cost recovery
   a. CPUC Ruling provides final guidance on scope, data inputs, schedule, etc., and authorizes IOUs to open a memo account to track incremental costs of the analysis

I. CONCLUSION
   The Clean Coalition appreciates the opportunity to submit these comments on the Joint Memo and respond to the associated questions.

Respectfully submitted,

Kenneth Sahm White
Director, Economic & Policy Analysis
Clean Coalition

Dated: Feb 16, 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 February 16, 2018, at Santa Cruz, California

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