

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

Order Instituting Rulemaking to Develop a
Successor to Existing Net Energy Metering
Tariffs Pursuant to Public Utilities Code
Section 2827.1, and to Address Other Issues
Related to Net Energy Metering.

Rulemaking 14-07-002
(Filed July 10, 2014)

CLEAN COALITION COMMENTS ON DRAFT VERSION OF PUBLIC TOOL

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April 28, 2015

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I. INTRODUCTION

On March 30, 2015, the California Public Utilities Commission (“Commission”) Energy Division staff held a workshop to demonstrate use of the draft version of the Public Tool, which will model different options for the net energy metering (“NEM”) successor contract or tariff. On April 15, 2015, Administrative Law Judge Simon issued a ruling to allow parties a final opportunity to comment on the development of the Public Tool. The Clean Coalition commends the Commission’s continued effort to refine this important policy instrument. The following comments suggest minor adjustments to the Public Tool that will improve its functionality for many users.

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.

II. COMMENTS

- 5. Please identify any changes or clarifications that should be made to the categorization of Societal Inputs on the “Key Driver Inputs” tab. For example, should a separate category be created for user-defined locational values that are anticipated to be produced in the Distribution Resources Plans addressed in Rulemaking 14-08-013? Please provide a detailed description of each input that should be added, as well as the specific reasons for each proposed change.*

The Clean Coalition recommends that the “Societal Inputs” category within the “Key Driver Inputs” tab incorporate several additional refinements to enhance its usefulness in evaluating matters of relevance to users. First, an additional Societal Input—energy reliability—should be added. An “Energy Reliability” input would capture the reliability benefits that renewable distributed generation (“DG”) can provide, particularly in the context of Distribution Resources Planning. The input may be measured in terms of outage reduction value, based on the frequency and duration of outages—captured in SAIDI and SAIFI statistics.

To demonstrate this value, the Clean Coalition has performed an analysis of energy reliability benefits caused by increased DG in the Bayview-Hunters Point substation area. Interruption cost estimates were provided by PG&E for current Bayview-Hunters Point customers based on 5-year average outage figures for the PG&E’s Mission and Peninsula districts, provided in the table below.¹ Figures are reported across utility regions and vary substantially by location, with rural regions experiencing lower

¹ PG&E 2012 Reliability Annual Report, DOE Interruption Cost Calculator - <http://www.icecalculator.com/>

reliability. These figures are for a typical year and do not include costs associated with either power quality or more major outage events.

Interruption Cost Estimates

Sector	No. of Customers	Cost per Event (2011\$)	Cost per Average kW (2011\$)	Cost per Unserved kWh (2011\$)	Total Cost of Sustained Interruptions (2011\$)
Medium and Large C&I	339	\$4,641.7	\$88.6	\$53.2	\$1,573,536.9
Small C&I	1,661	\$883.4	\$427.6	\$256.5	\$1,467,384.3
Residential	18,000	\$4.5	\$5.5	\$3.3	\$81,346.0
All Customers	20,000	\$156.1	\$86.8	\$52.1	\$3,122,267.3

Customers installing systems capable of providing back-up power supply during an outage would realize individual benefits, however the presence of significant quantities of distributed generation with advanced inverter functionalities offers improved grid resilience in response to events. The Distribution Resources Planning process will be evaluating the specific opportunities and locational value related to these resources, and users may wish to input potential results. For example, if 1 MW of NEM DG on a circuit or substation would reduce local power interruptions by approximately 5%, local businesses would save \$152,000 in annual outages alone, totaling \$3 million over a 20-year period.

Second, the Societal Inputs category could be improved by adding clarifying pop-up windows to the “other” values cells. The Public Tool currently has three “other” values inputs—measured in \$/kWh thermal generation, \$/kWh NEM generation, and \$/kW-yr NEM capacity. For each of these the Clean Coalition suggests adding pop-up windows when the cursor moves over these cells in order to suggest possible input values to users. This relatively simple addition would substantially increase the functionality of the Public Tool for many users.

For example, a pop-up window for the “other” cell with units expressed in “\$/kWh-yr NEM capacity” would explain to users that this is where local employment benefits could be added to the model. Local employment benefits are those benefits arising from supporting local jobs required to install and maintain DG systems.

For the “other” cell with units expressed in “\$/kWh NEM generation,” the pop-up window would suggest various inputs to users including the economic impact on customer energy costs, the benefits associated with allowing customers to become self-generators, and public policy goals. The economic impact of customer energy choices reflects the benefits arising from customers having more disposable income due to their decision to self-generate. These benefits have been studied in the context of energy efficiency and have been found to have very significant aggregate value, and apply equally to the impact of net customer savings realized through onsite generation.² The benefits arising from customers becoming generators would capture both any reductions in the customers’ energy costs and the impact of these savings on the regional economy. Finally, public policy goals captures the fact that the NEM successor standard contract or tariff will allow California to either achieve its various energy goals faster, or alternatively within the established timeframe but with lower public or ratepayer expenditures required to incent targeted adoption rates.

² David Roland-Host, Energy efficiency, innovation, and job creation in California, eScholarship University of California (Oct. 1, 2008), *available at* <http://escholarship.org/uc/item/7qz3b977>.

7. *Please identify any other changes or modifications to the draft version of the Public Tool that are necessary (not merely desirable) to improve the functionality of the Public Tool for its intended use in this proceeding. Provide a detailed description and specific reasons for each proposed change. Provide publicly available supporting material for the proposed change. If no publicly available material supporting the proposed change is provided, please identify any nonpublic information or material that has been used and explain why the relevant information is not publicly available.*

The Clean Coalition proposes that the “Solar Cost Case” input— in the “DER Costs” box under the “Key Driver Inputs” tab—include a low-cost scenario in addition to the “high” and “base case” options; scenarios should include both higher than expected and lower than expected costs. Data for the low cost scenario can be obtained from projections published by the National Renewable Energy Laboratory and the Lawrence Berkeley National Laboratory.³ Likewise, an important scenario modifier to add to this input would be the projected net system impacts of changes to the federal Investment Tax Credit (“ITC”) following its current expiration date.

Further, the Clean Coalition suggests adding an additional “Key Driver Input” in the “Policy Inputs” box that would capture California’s distributed energy resources (“DER”) goals. The “DER Goals” input would reflect Governor Brown’s existing 12,000 MW renewable distributed generation (“DG”) goal for 2020.⁴ This input could reflect higher figures in line with his proposed 50% RPS target for 2030, or be expressly captured as a component within the RPS input.

³ David Feldman et al., Photovoltaic System Pricing Trends: Historical, Recent, and Near-Term Projections 2014 Edition (Nov. 22, 2014), *available at* <http://www.nrel.gov/docs/fy14osti/62558.pdf>.

⁴ Gov. Edmund G. Brown Jr., Clean Energy Jobs Plan, *available at* http://gov.ca.gov/docs/Clean_Energy_Plan.pdf.

III. CONCLUSION

The Clean Coalition appreciates this opportunity to comment on the draft version of the Public Tool.

Best regards,

/s/ Brian Korpics
Brian Korpics
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Clean Coalition

Dated: April 28, 2015