

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

Order Instituting Rulemaking to Create a  
Consistent Regulatory Framework for the  
Guidance, Planning and Evaluation of  
Integrated Distributed Energy Resources.

Rulemaking 14-10-003  
(Filed October 2, 2014)

**CLEAN COALITION RESPONSE  
TO ADMINISTRATIVE LAW JUDGE'S RULING TAKING COMMENT ON STAFF  
PROPOSAL RECOMMENDING A SOCIETAL COST TEST**

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March 23, 2017

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**I. INTRODUCTION**

Pursuant to the Rules of Practice and Procedure of the California Public Utilities Commission (CPUC, or Commission), and in compliance with Administrative Law Judge (ALJ) Hymes’ Ruling Taking Comment On Staff Proposal Recommending a Societal Cost Test (Ruling), issued February 9, 2017, the Clean Coalition hereby provides these comments related to the Staff Proposal.

**II. DISCUSSION**

The Clean Coalition commends Commission staff for the work on developing a Societal Cost Test and broadly—and strongly—supports the Staff Proposal, including the greenhouse gas (GHG) component, air quality component, and adoption of a fixed social discount rate. Costs associated with energy choices directly impact society at large, and decisions regarding energy options must reflect these costs in order to avoid inappropriate cross subsidies or transfers of cost responsibility between stakeholders. Likewise, benefits that accrue to stakeholders beyond the category or ratepayers are

important to recognize when evaluating the net impact of programs, incentives, and the appropriate mix of funding sources to support these programs.

Additionally, we note that the adopted discount rate has a critical impact on assessment of the value of avoiding costs borne by ratepayers and all members of society in future years. The application of commercial discount rates will reduce by 75% the value of costs and benefits realized in as little as twenty years, and as such is largely inappropriate for use in the development of public policy. The Staff Proposal recommendation for a social discount rate of 3% is well supported, and we recommend its adoption, although lower rates should be considered.

### **Responses to select questions regarding the Staff SCT Proposal**

*1. Staff recommends that the Commission adopt a consistent SCT for use in evaluation of all types of DER and describes several arguments in supporting of this proposal. Explain why you agree or disagree with the arguments provided in the Staff SCT Proposal. Describe any arguments for adoption that the Staff SCT Proposal did not include and that the Commission should consider. Describe any arguments against adopting a consistent SCT that the Commission should consider.*

Public policy goals addressed by the Commission and other agencies are broadly outcome-focused, and strategies to achieve these goals rely upon both a variety of technologies and, increasingly, on aggregated portfolios of resources available through market mechanisms. Under these circumstances, consistent metrics for evaluation enable effective comparison between options.

The efforts of the Cost Effectiveness Working Group in this proceeding, and the prior Load Modifying Demand Response Working Group Report, have supported the development of consistent evaluation protocols. While it is acknowledged that not all metrics are applicable to all resources, a consistent and comprehensive valuation

methodology can capture each resource's components for direct comparison across any set of applicable factors or timescales.

While the proposal addresses requirements specific to evaluation of distributed resources, the SCT Staff Proposal provides an important foundation for comparing all resources and offers an important contribution to future Integrated Resource Planning.

*7. The Staff SCT Proposal recommends that the SCT use a social discount rate set at 3 percent real. Explain why you agree or disagree with this recommendation.*

As noted above, the Staff Proposal recommendation for a social discount rate of 3% is well-supported, and we recommend its adoption, although lower rates should be considered in light of the actual Federal interest rates, observed inflation, and Federal Reserve policy targets recorded over the past decade.

*11. The Staff SCT Proposal also posed a second option, to add the greenhouse gas adder to the TRC and PAC tests to create a modified TRC and modified PAC tests, which would not include the social discount rate or the air quality value. Explain why you support or oppose this recommendation.*

The benefit and its value exist regardless of whether the benefit is considered in conjunction with other societal benefits. While there is strong merit in inclusively counting all benefits, not all benefits are equally associated with defined regulatory goals or mandates. As a mandated regulatory goal, GHG reduction value should be considered even when one or more other societal benefits may be not deemed applicable for inclusion in evaluation metrics.

*12. The Staff SCT Proposal provided two options for determining the greenhouse gas adder: damage cost and marginal abatement cost, recommending the greenhouse gas abatement cost. Explain why you support or oppose this recommendation. Identify any*

*other option(s) that you support, which the Staff SCT Proposal did not include, and explain your support of the other option(s).*

The choice between using the Damage Cost or the Marginal Abatement Cost is a practical one: the goal is to reflect the actual costs incurred and to avoid inappropriately burdening a resource, thereby distorting valuation with excess costs above those actually incurred. As such, it is generally appropriate to apply the lesser of the two cost options. It is unreasonable to assign high damage costs if the cost of abatement is low, just as it is unreasonable to assign high abatement costs if the actual damage is lower. The Staff Proposal to adopt the marginal abatement cost is generally appropriate under these considerations, but should be reviewed.

It is also critical to note that abatement costs are only appropriate where abatement is actually performed. It would be inappropriate to assign a value based upon abatement if the actual damage is allowed to occur (although abatement substitution would be acceptable, as is practiced under GHG offset and trading mechanisms).

**Responses to select questions regarding the Cost Effectiveness Working Group Final Report:**

*4. The Final Report stated that bundles of different technologies, as well as new technologies, are likely to become more and more important as we develop new procurement methods and markets. Thus the Final Report recommended that there is a need to enable valuation of bundled and emerging technologies that do not fit into the current technology-specific cost-effectiveness framework. What can the Commission do, in the short term to facilitate the difficulty in determining DER values without a common method or metric? In addition to standardizing the costs and benefits used, are there approaches to standardize models, processes, methods, and metrics either within the cost-effectiveness framework or among the various Commission proceedings, so that DER can be bundled, valued, and compared?*

Value is derived from the services delivered—such as the time of delivery, reliability, and ability to dispatch energy—not from the technology utilized for providing these services. Therefore, the emphasis is most appropriately placed on valuation of services rather than technologies. By valuing the services provided, technologies can be freely and agnostically bundled, aggregated, or substituted to offer a defined set of services without requiring a new assessment of value.

The Commission may adopt technology-specific procurement requirements from time to time as appropriate to advance development of new technologies and provide predictable markets as needed to stimulate investment. In these circumstances, the relative capacities of technologies to provide services can be evaluated and compared when such comparisons are needed. However, grid operations depend upon services and capabilities and are inherently agnostic to the technology used to provide these services. Markets will have greater opportunity to develop innovative efficiencies and value in meeting the operational needs of the electric grid if they are free to bundle and substitute technological components when providing service products to Load Serving Entities or directly to customers.

*5. The Final Report recommended that more issues will emerge in the future related to the details of the models and methods contained within the avoided cost calculator, and will require additional stakeholder input. What updates should be made during the next annual avoided cost calculator review, other than routine data updates?*

Multiple areas for refinement were identified in the Final Report, and consideration of locational variation in value—as the Locational Net Benefits Assessment Working Group within the Distribution Resources Plan proceeding (R.14-08-013) is currently addressing—will add important components.

While each of these is worthy of attention, the largest and most significant factor for major refinement in the current avoided cost calculator is inadequate consideration of

avoided future transmission investment. Where DER reduce the use of existing transmission capacity, this “freed up” capacity becomes available to meet future needs that would otherwise trigger new transmission capacity investment. Transmission capacity is among the largest and fastest growing cost components of electric delivery, and failure to appropriately reflect the value of avoiding, deferring, or reducing such major future infrastructure investment results in substantial undervaluation of DER resources that provide energy and services without utilization of transmission capacity.

The Clean Coalition provided written testimony related to transmission-related avoided costs in relation to the Green Tariff Shared Renewables Programs (A.12-01-008 and A.12-04-020) in January 2014, and that testimony is applicable here. While multiple factors influence the value of DER, the average value of avoided transmission capacity is estimated to be in excess of \$30,000 per MW (see attached testimony).

### **III. Conclusion**

The Clean Coalition supports the Staff Proposal in development of a Societal Cost Test and technology-neutral cost effectiveness methodology for distributed energy resources. This work will allow comparison of value to the fullest and most accurate extent practical.

Respectfully submitted,

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Dated: March 23, 2017

Attachment 1

**Exhibit:** CC-01

**Witness:** Kenneth Sahm White

**Proceeding:** A.12-01-008 and A.12-04-020

**Judge:** Richard W. Clark

***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