

**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)

**REPLY COMMENTS OF THE INDEPENDENT ENERGY
PRODUCERS ASSOCIATION ON THE STAFF AMENDED
PROPOSAL ON SOCIETAL COST TEST**

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In response to the Administrative Law Judge’s Ruling Seeking Responses to Questions and Comments on Staff Amended Proposal on Societal Cost Test (ALJ Ruling), dated March 14, 2018, the Independent Energy Producers Association (IEP) replies to parties’ comments related to the questions posed on the Staff Societal Cost Test Addendum #2.

I. GENERAL REPLY COMMENTS

In Opening Comments, IEP urged consideration of the Societal Cost Test in the integrated resource planning (IRP) proceeding to enable a consistent approach when determining the cost-effectiveness of resources needed to meet SB 350 goals, including distributed energy resources (DERs), energy efficiency (EE), demand-response (DR), and supply-side resources interconnected to the transmission system such as utility-scale renewables. Application of the Societal Cost Test in the context of the IRP enables the Commission to direct the development of an optimal portfolio of resources to meet SB 350 goals in a least-cost and best-fit manner as prescribed in statute.¹

¹ Comments of the Independent Energy Producers Association, pp. 1-2.

Several parties expressed similar sentiments in their opening comments. For example, TURN notes that part of the problem with the staff proposal is the potential use of the societal cost test to authorize budgets for specific demand-side and DER resources without comparing these resources to clean energy supply resources, such as utility-scale generation, which can also include distributed generation.² ORA states that to create accurate and reasonable comparisons between carbon abatement options, the Commission should immediately undertake efforts in this proceeding in coordination with IRP proceeding.³ The Joint Utilities state that a key principle for meeting the state's 2030 greenhouse gas (GHG) goals is least-cost, resource-neutral GHG reductions; yet the staff proposal undermines this goal by creating greater divergence in resource valuation than would be applicable to conventional resources for the DER cost-effectiveness tests.⁴ Advanced Energy Economy (AEE) also supports the development of a common resource valuation methodology to capture the resource valuation attributes of all demand-side and supply-side resources so that the Commission can identify the optimal strategies for meeting the state's climate goals at the least cost to ratepayers.⁵

Broad support exists for considering (and subsequently applying) resource cost-effectiveness tests such as the Societal Cost Test in the IRP proceeding to ensure consistent comparisons across various resources in integrated resource planning. Developing and subsequently applying the Societal Cost Test in the Integrated Distributed Energy Resources (IDER) proceeding skews development of an optimal resource portfolio needed to achieve 2030 policy objectives at least cost. Discriminating to favor resources interconnected at the

² Opening Comments of The Utility Reform Network (TURN), p. 6.

³ Opening Comments of the Office of Ratepayer Advocates (ORA), p. 1.

⁴ Opening Comments of Pacific Gas and Electric Company, Southern California Edison Company, Southern Gas Company, and San Diego Gas & Electric Company (Joint Utilities), p. 1.

⁵ Advanced Energy Economy's Comments, p. 3.

distribution level over resources interconnected at the transmission level (*e.g.*, utility-scale renewables) is harmful to customers and, ultimately, risks undermining timely and cost-effective achievement of 2030 goals.

II. REPLY TO PARTIES' RESPONSES TO QUESTIONS POSED IN ALJ RULING

Below, IEP responds to parties' comments on the specific questions in the order posed in the ALJ Ruling.

1. Explain why the Commission should or should not adopt the modified TRC and PAC tests as replacements for the existing TRC and PAC tests.

The Joint Utilities oppose adopting the GHG values proposed by staff for use in the modified versions of the TRC/PAC tests (*i.e.* the IRP DER GHG Adder Values). The Joint Utilities note that Decision 18-02-018 (the IRP Decision) established two different GHG prices, and the staff proposal to apply the DER GHG Adder values is not factually based. The DER GHG Adder values effectively exceed any possible GHG abatement mechanism values in place between 2018 and 2030.⁶ As a result, the Commission would be setting a precedent using unfounded values in its cost-effectiveness tests were it to adopt the staff proposal.⁷ Moreover, electric customers will be paying much higher prices for GHG abatement than would be paid were the abatement value derived from GHG Planning Prices (which apply to supply-side resources in the IRP).⁸ Similarly, TURN concludes that the staff proposal does not represent a reasonable estimate of avoided abatement costs. Moreover, TURN challenges the staff assertion that the GHG values proposed are based on "RESOLVE outputs."⁹

IEP concurs with the Joint Utilities and TURN's assessment. The staff proposal sets a bad precedent by adopting values that are the maximum prices expected to be incurred by

⁶ Opening Comments of the Joint Utilities, p. 4.

⁷ *Ibid.*, p. 5.

⁸ *Ibid.*, p. 4.

⁹ Opening Comments of TURN, p. 2.

customers. As noted by IEP in its Opening Comments, the Commission should be adopting common values to be applied uniformly and consistently across all resources considered in integrated resource planning. It is inappropriate methodologically to apply different values to resources considered in an integrated manner. Equally important, it is harmful to customers.

Moreover, the Commission should be adopting uniform values applied across all resources, given that each ton of GHG abatement is effectively equivalent from a climate-impact perspective. Consistent with the recommendations of the Joint Utilities and TURN, the Commission should employ an avoided GHG value based on the forecast price of cap-and-trade allowances over the planning horizon, *i.e.*, the values should be based on the GHG Planning Price determined in the IRP proceeding.¹⁰ A cost-effectiveness test applying the forecast GHG Planning Price, based on forecast cap-and-trade allowance costs, will increase the probability that the resources procured to meet various public policy objectives and SB 350 goals reflect the cost of avoided GHG emissions actually incurred by customers.

2. Explain why the Commission should or should not also adopt a modified Ratepayer Impact Measure (RIM) test that is modified in the same manner as the TRC and PAC tests.

The Joint Utilities comment that the Commission should adopt a modified RIM test only if that test uses the IRP GHG Planning Price.¹¹ TURN also argues that the RIM test should not incorporate any additional adders at this time, given the uncertainty in the calculation of a reasonable adder.¹² IEP agrees with the Joint Utilities and TURN for the reasons stated above in answer to Question 1.

3. Explain why the Commission should or should not adopt the Societal Cost Test as an additional test to be used initially for information purposes only. If the Commission adopts the Societal Cost Test as an additional test, explain why the Commission should or should not then allow each resource proceeding to determine how (if at all) to use the test in decision-making.

¹⁰ D.18-02-018, pp. 116-118.

¹¹ Opening Comments of the Joint Utilities, p. 8.

¹² Opening Comments of TURN, p. 4.

Many parties raised concerns about applying the Societal Cost Test as proposed by staff. TURN comments that only a reasonable and scientifically derived GHG adder or social cost of carbon measurement should be applied in the Societal Cost Test.¹³ The staff proposal does not meet the test of being either reasonable or scientifically based, as noted by TURN. The implications of using a flawed approach are significant. The Joint Utilities point out that misapplication of the Societal Cost Test can “lead to under-procurement of economic resources, over-procurement of uneconomic resources, and unnecessarily expensive electric rates.”¹⁴ IEP agrees with the observations and concerns raised by TURN and the Joint Utilities. Accordingly, IEP does not support use of the Societal Cost Test as proposed by staff even for informational purposes, because it is not based on reasonable and scientifically derived inputs, and it will skew planning and procurement outcomes inappropriately.

With regards to whether the Commission should or should not allow each resource proceeding to determine whether and how to use the Societal Cost Test, the Joint Utilities oppose allowing decision-makers in each resource proceeding to determine how to use the test.¹⁵ ORA also opposes allowing independent determinations of how to use the test in each proceeding. ORA correctly notes that maintaining a consistent cost-effectiveness approach across proceedings will enable the Commission to ensure cost-effectiveness analyses are technology neutral and ensure consistency across proceedings. On the other hand, enabling independent determinations as to how to use the test across proceedings creates confusion and risks a mis-allocation of ratepayer funding.¹⁶

¹³ Ibid, p. 5.

¹⁴ Opening Comments of the Joint Utilities, p. 9.

¹⁵ Opening Comments of the Joint Utilities, p. 9.

¹⁶ Opening Comments of ORA, p. 3.

IEP concurs with these parties. The Societal Cost Test should be based on reasonable and/or scientifically derived values, and it should be imposed uniformly and consistently across all resource proceedings. As noted in IEP's Opening Comments, the Commission's adopted cost-effectiveness tests including the Societal Cost Test ought to apply consistently and uniformly in the IRP to minimize confusion and mitigate the risk of a misallocation of ratepayer funding. To do otherwise undermines the integrity of integrated resource planning prescribed by SB 350, thereby risking outcomes in which customers incur higher costs than necessary to achieve SB 350 goals.

4. Explain why the Commission should or should not require all distributed energy resources activities that currently use the TRC and PAC tests to instead use the modified TRC, modified PAC, and Societal Cost tests.

The Joint Utilities support requiring all distributed energy resources to use the cost-effectiveness tests IF they are based on the IRP GHG Planning Price.¹⁷ IEP concurs with the caveat that, as suggested by the Joint Utilities, TURN, and IEP, the cost-effectiveness tests should be applied in a uniform and consistent manner across all resources and not just all distributed resources.

5. Explain why the Commission should or should not revise its nomenclature such that the value for the greenhouse gas adder used in the modified TRC and PAC tests is referred to as the "avoided cost of carbon abatement" and the greenhouse gas adder value used in the Societal Cost Test is referred to as the "avoided social cost of carbon."

The Joint Utilities make a compelling argument that the Commission should not revise the name of the GHG Adder to the "avoided cost of carbon abatement." As the Joint Utilities point out, the DER GHG Adders developed from the IRP proceedings and approved for use in the IDER proceeding (*i.e.*, those that the staff proposes to apply in the modified cost-effectiveness tests) are not related to the actual cost of GHG abatement. ORA also comments

¹⁷ Opening Comments of the Joint Utilities, p. 9.

that the staff proposed values represent an incomplete depiction of carbon abatement as it does not allow direct comparison of all carbon abatement options such as the use of supply-side renewable resources. ORA raises concerns about misleading nomenclature and urges the Commission to not adopt the proposed change.¹⁸

To “abate” is to reduce in amount, degree, or intensity, *i.e.*, to lessen.¹⁹ The cost of carbon abatement is the cost of reducing a unit of carbon. Because the staff proposal is unrelated to the actual cost incurred by customers associated with reducing a unit of carbon, the phrase “avoided cost of carbon abatement” is a misnomer and it should not be applied in this context until the GHG Adder reflects a reasonable, scientifically derived value, as suggested by TURN.

6. Explain why the Commission should or should not determine the “avoided cost of carbon abatement” in R.16-02-007. Explain why the Commission should or should not adjust this value to avoid double counting.

The Joint Utilities support the IRP proceeding as the proceeding in which to plan for and conduct the associated modeling for the electric sector GHG planning target.²⁰ TURN appears to support using specific data compiled in the IRP proceeding as well (*i.e.*, Table 5 in D.18-02-018).²¹ Determining the avoided cost of carbon abatement in the IRP proceeding helps ensure consistent and uniform treatment across resources and, thereby, lessens the risk of resources inappropriately benefiting from double-counting/double-valuing of carbon abatement associated with their operation, which is a shared goal of many parties including ORA.

IEP concurs with the Joint Utilities, TURN, and ORA on this issue. The IRP proceeding (currently R.16-02-007) is the proper proceeding to determine the avoided cost of abatement as well as the other factors embedded in the Commission’s adopted cost-effectiveness tests.

¹⁸ Opening Comments of ORA, p. 4.

¹⁹ The American Heritage Dictionary, 1978.

²⁰ Opening Comments of the Joint Utilities, p. 11.

²¹ Opening Comments of TURN, p. 2 where TURN recommends adoption of the IRP Table 5 values determined in D.18-02-018.

7. Explain why the Commission should or should not adopt the high impact value, developed by the Interagency Working Group on Social Cost of Greenhouse Gases, as the “social cost of carbon.”

Several parties oppose adoption of the “high impact value” developed by the Interagency Working Group (IWG). First, as noted by the Joint Utilities, choosing resource portfolios based on higher costs than what consumers are reasonably expected to pay to abate a unit of GHG is not socially optimal.²² It has the effect of skewing rational decision-making and, thus, results in irrational planning and procurement outcomes. TURN states the cost to society would include the over-procurement of non-economic and unnecessary distributed resources and ultimately slow California’s achievement of a low-carbon economy.²³ *Second, the high impact value calculated by the IWG is a low probability modeling result (i.e., 95th percentile).*²⁴ Third, climate change is a worldwide problem and abating carbon in California does not per se mitigate climate-related risks faced by California; therefore, it is inappropriate to compare the IWG report’s finding to California-specific risks.²⁵

IEP agrees that the application of the high impact value developed by the IWG is inappropriate in the California-specific context. More broadly, we concur that adopting the high impact value will serve to skew planning/procurement decision-making toward increasingly irrational and uneconomic decisions that will ultimately undermine attainment of the state’s carbon reduction goals in a cost-effective manner as prescribed by SB 350.

8. Explain why the Commission should or should not adopt a 3 percent discount rate for the Societal Cost Test.

TURN and the Joint Utilities oppose the Commission applying a 3 percent discount rate for the Societal Cost Test. TURN observes that all supply and demand-side resources should be

²² Opening Comments of Joint Utilities, p. 15.

²³ Opening Comments of TURN, p. 6.

²⁴ Ibid, p. 7.

²⁵ Ibid, p. 8.

compared on a comparable basis.²⁶ The Joint Utilities point out that the staff's proposal to apply a low social discount rate misapplies the rate when considering relatively short-lived assets, as is the case here.²⁷ Instead, the Joint Utilities propose adopting a 5% rate now and then modifying the rate over time as the facts dictate.

IEP concurs with TURN and the Joint Utilities' concerns regarding the relatively low discount rate proposed to be used. Whatever social discount rate the Commission determines to be use should be applied uniformly and consistently across all resources considered in the context of integrated resource planning. Furthermore, the level of the social discount rate ultimately determined by the Commission ought to match fully with the planning/procurement time horizon (*e.g.*, 10 years in the IRP). This approach appears reasonable considering the dynamic, rapidly evolving California energy sector and the relatively short-term investment horizon.

9. Explain why the Commission should or should not use the USEPA COBRA Tool to compute and adopt an Interim Air Quality Adder until a more robust model can be developed. If you believe that another model should be used, explain why and provide a detailed description of how that model should be used instead.

The Joint Utilities recommend that the Commission start a set of workshops or working groups to determine the appropriate models and inputs necessary to calculate an air quality adder. Given the complexities of this issue and the divergent opinions as to the methodological approach and/or best model to employ, IEP supports addressing the air quality impacts of resource procurement through additional workshops and/or working groups that include inputs from key agencies throughout the state (*e.g.*, CARB, SCAQMD) and universities. The staff proposal raises several issues that cannot be reasonably or fully vetted at this time.

²⁶ Opening Comments of TURN, p. 10.

²⁷ Opening Comments of Joint Utilities, p. 15.

10. Explain why the Commission should or should not authorize Staff to continue to study and analyze improvements to the distributed energy resources cost-effectiveness framework, including the development of a common resource valuation method, and issue reports on its findings and subsequent proposals. Are there additional improvements that should be considered?

A number of parties support developing a reasonable, empirically based cost-effectiveness framework, including IEP. Many parties, including IEP, believe this work should be pursued in the IRP proceeding where it may be applied in a uniform and consistent manner across all resources considered in the context of achieving state policy goals (*i.e.*, SB 350, RPS, reliability, etc.) We concur with the Joint Utilities' proposal to convene technical working groups to delve into the details with the goal of transparently informing policymakers and stakeholders of the best empirically based data available to support adoption of a reasonable, scientifically based methodology for assessing the cost-effectiveness of resources, including determining a Societal Cost Test as needed, to ensure attainment of 2030 policy objectives in a cost-effective manner as prescribed by SB 350.

Respectfully submitted May 7, 2018 at San Francisco, California.

A handwritten signature in black ink that reads "Steven Kelly". The signature is written in a cursive style with a large, sweeping flourish at the end.

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