

**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 REPLY COMMENTS
TO ADMINISTRATIVE LAW JUDGE'S RULING TAKING COMMENT ON
STAFF PROPOSAL RECOMMENDING A SOCIETAL COST TEST**

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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 brief reply comments related to the Staff Proposal.

II. DISCUSSION

The Clean Coalition encourages the Commission to reject the simple application of the commercial weighted average cost of capital (WACC) discount rate when evaluating future societal and ratepayer costs and benefits as argued in the Joint Utilities opening comments in response to Question 7.¹ The Clean Coalition would prefer to have provided detailed point-by-point argument in response, but was unable to do so before the submission deadline.

¹ Opening Comments on Administrative Law Judge's Ruling Taking Comment on Staff Proposal Recommending a Societal Cost Test Of Pacific Gas And Electric Company (U 39 M), Southern California Edison Company (U 338 E), Southern California Gas Company (U 904 G), San Diego Gas & Electric Company (U 902 M), March 23, 2017, at 10-13.

Nevertheless, we believe the fundamental principles warrant reference and consideration by the Commission and outline these in response to this single issue.

When comparing future benefits with present costs, economic modeling of dynamic efficiency requires that future benefits be discounted at a rate of growth equal to the net growth of wealth or welfare of the population. While factors such as consumption of non-renewable resources and social and environmental quality is properly debated in determination of this value, Gross Domestic Product (GDP) is commonly put forth as a proxy measurement, although most estimates of the rate of growth of social welfare is lower than GDP growth rates.

WACC is only appropriate where this cost of capital is actually realized by the subject of the cost test when this applies directly to ratepayers or society at large, such as when funds are borrowed on the commercial market to pay for a future benefit, as this is the actual cost of realizing that benefit.

While investors may realize loss or gain relative to the WACC, this metric does not translate into a useful measure for determining societal costs and benefits. The WACC aims to determine the long-term rate that a company is expected to pay on average to finance its assets and depends on the type of assets, tax effects, opportunity costs, and rate of return for different capital types. This has proved a useful tool for determining actual capital investment costs should be valued and weighted with WACC.

However, these considerations do not usefully apply to societal costs and benefits. Future costs or losses incurred—such as ratepayer payments, health, and environmental costs incurred by society at large—should be considered at an appropriate social discount rate because these stakeholders would typically neither realize a similar WACC-based capital or opportunity cost. Rather, individuals and society experience direct impacts on their future assets or income that should be subject to no discount other than inflation. In the case of public capital investment, a more appropriate discount would be a public agency cost of capital, presumably lower than the WACC.

Since the average ratepayer will not see their income increase at a rate comparable to WACC, it is not appropriate to discount the ratepayer impact of future utility bill increases by WACC. Long-term changes in income are fundamentally subject to different constraints than capital assets, and applying WACC to approximate them is problematic. Instead, future costs should be considered relative to future customer income and statewide or national measurements, such as the Gross Domestic Product.

For example, in one study of GHG damage, applying a 4% discount rate on future impacts implies a value neutral carbon tax rate of \$2.45 per ton, and the effect of this level of carbon tax would be only a 5% reduction relative to uncontrolled emission levels. By contrast, applying zero discount, which would be appropriate with a GDP or social welfare growth rate near zero, implied a value neutral carbon tax rate of \$66 per ton, which would result in a 33% reduction in emissions and associated impacts (if a linear correlation is assumed).

It is not appropriate to consider the present value of a future cost to be lower than an alternative if the future impact is larger relative to future customer income or Statewide GDP. To do so would, in some cases, lead to the perverse conclusion that any future costs increasing at a rate less than than the WACC discount rate are actually resulting in lower costs to ratepayers and potentially deemed "cost effective", despite recognition that exponential increases in customer bills at the WACC rate would be unsustainable. Discounting future monetary costs to ratepayers will lead to decisions that result in higher future electric rates, as evident when high future fuel costs are discounted only to result in rate shock when they are actually incurred.

As both the Clean Coalition and others have previously noted, 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, especially where health and environmental impacts result in lives lost or habitat degraded.

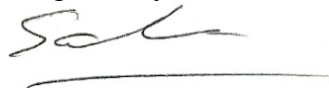
While it is necessary to assign a monetary value to these factors, a change in WACC rates does not change their actual value. If a reduction in air pollution results in 100 fewer premature deaths in 20 years, it is questionable policy for value of these lives to change based on a higher or lower rate of inflation. Even if we strip out inflation and only look at the future cost in constant dollars, public agencies must consider if the value of lives lost in the future should be discounted at a rate equal to the cost of capital.

We note additionally that investment in avoiding environmental damage today widens the menu of options available for future generations, substantially reducing the future cost of coping with related problems or impacts, regardless of whether the physical facilities remain in operation in the future period.

III. CONCLUSION

We appreciate the opportunity to offer Reply Comments and hope this all to brief response is of value to the Commission. The Staff Proposal recommendation for a social discount rate of 3%, while open to debate, is well-supported in application to benefits realized by ratepayers or externally by society at large, although lower rates should be considered.

Respectfully submitted,



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