

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

DOCKET

07-OIIP-1

DATE JAN 18 2008

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Order Instituting Rulemaking to Implement the
Commission's Procurement Incentive Framework and to
Examine the Integration of Greenhouse Gas Emissions
Standards into Procurement Policies.

Rulemaking 06-04-009
(Filed April 13, 2006)

BEFORE THE CALIFORNIA ENERGY COMMISSION

AB 32 Implementation – Greenhouse Gas
Emissions.

Docket #07-OIIP-01

**REPLY COMMENTS OF THE WESTERN POWER TRADING FORUM
ON MODELING RELATED ISSUES**

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Date: January 18, 2008

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In accordance with the direction provided in the November 9, 2007 Administrative Law Judge's Ruling in Rulemaking 06-04-009 (November 9 Ruling"), the Western Power Trading Forum ("WPTF") respectfully submits the following reply comments on the questions posed therein regarding modeling related issues.

I. INTRODUCTION

WPTF has read with interest the opening comments, and welcomes the many useful suggestions to improve the modeling of greenhouse gas emission ("GHG") reductions for the electricity sector. We note that many parties – e.g., SCE, PG&E, DRA, IEP, and SGDE – share WPTF's concern regarding the sensitivity of the modeling approach to input assumptions, particularly the availability of low-carbon resources and energy efficiency. We are also

encouraged that most parties agree that more consideration should be given in the modeling to the potential impacts of enhanced reliance on renewable resources on electric system reliability. These comments emphasize the need for modeling a full range of GHG emissions reduction scenarios, rather than the base and reference cases presented by E3 to date.

Several other parties also echoed WPTF's concern that the modeling approach does not address environmental dispatch – an option that is explicitly being addressed in this proceeding through consideration of a source-based or first-seller approach to a cap and trade system in the electricity sectors. We reiterate the need to model environmental dispatch by running Plexos with carbon prices reflected in variable cost dispatch.

Finally, WPTF disputes statements made by several parties regarding the appropriateness of a cap and trade system for reducing electric sector emissions. Emission trading has the potential to substantially reduce the cost of achieving GHG reductions, while aligning financial incentives with emissions reductions and should be a core component of the modeling work.

We provide more discussion of these comments below.

II. INPUT ASSUMPTIONS

SCE, PG&E, SDGE, and SCPPA share WPTF's concern that overly optimistic supply and cost assumptions for renewable resources and energy efficiency may distort model results. However, NRDC/UCS, GPI and CEERT have made several assertions that WPTF believes would result in even lower cost assumptions in the model than originally proposed and additional distortion of the results. For example:

- Wind integration costs will be lower than expected. (NRDC, pp. 10-11; CEERT, p. 35)
- Firming for wind per se is not needed. (NRDC, p.13)

- Needed transmission capacity for wind may be less than E3 suggests. (NRDC, p. 15; CEERT, p. 37-38)
- Natural gas prices and demand should be lower due to increased reliance on renewable resources. (NRDC, p. 17)

We also note that CEERT has proposed alternative Base and Reference cases. CEERT has not provided sufficient descriptions of their alternative proposed cases to understand the differences between their proposed cases and the cases E3 is using thus far. However, it appears that their cases are all variants of E3's aggressive policy scenario. WPTF has no objections to the consideration of alternative cases. In fact, WPTF believes it is helpful to simulate a variety of cases. At the same time, however, WPTF recognizes that there are not "right cases" and "wrong cases." Instead any case is simply a representation of a possible future state, and the outputs of that case would be dependent upon the case definition. Therefore, WPTF believes that it is more important that the model simulate a range of input assumptions, rather than simply the high-end of resource availability and the low-end of costs. The fact that parties to this proceeding have such widely different views about input assumptions underscores the need to fully understand the sensitivity of GHG costs estimates to these assumptions. In order to provide Commissioners with a means to evaluate the uncertainty regarding these assumptions, and the consequences of guessing incorrectly, we support the recommendation of SCE that E3 should model a range of assumptions for key inputs (e.g. high-medium-low).

WPTF would also like to support the comments concerning the appropriateness of load forecasts used in the model. For instance, PG&E in its comments (pp. 7-8) raises some questions about the load forecasts and whether the CEC forecast is net of energy efficiency or not. Similarly, SCE raises the possibility that policies to promote GHG reductions in other sectors,

such as port electrification and plug-in hybrids, could increase load. WPTF supports the concern that the load forecasts should be fully understood and also believes there is value in performing sensitivity analysis around these forecasts. The establishment of workgroups to refine the data and input assumptions in phase two of the modeling, as proposed, would improve the rigor of the modeling effort.

III. MODELING OUTPUTS

The November 9 Ruling asked parties to suggest output metrics that would be useful in evaluating the least-cost way of achieving emission reductions under AB32. In addition to impacts on a broader set of market participants (e.g., smaller LSEs and generators), which we suggested in opening comments, WPTF supports suggestions for the modeling to provide annual costs and marginal costs.

IV. ENVIRONMENTAL DISPATCH

As WPTF noted in opening comments, the current model is ill-equipped to fully evaluate alternative GHG policy options, due to the fact that GHG Calculator’ assumes a load-based approach and is therefore not able to evaluate potential emissions reductions from incorporating carbon costs into dispatch. This concern was echoed by several parties, including SCE, PG&E, and DRA. LADWP criticized the model for assuming “a single WECC-wide economic dispatch on the basis of variable cost with no variable adder for carbon.” WPTF agrees that this is a significant deficiency in the model. The solution, as WPTF recommended in opening comments, is to run the Plexos model with carbon prices reflected in variable cost dispatch to enable assessment of alternative regulatory approaches. A working group should be tasked with developing one or more Plexos/E3 scenarios to reflect an environmental dispatch that mirrors possible regulatory approaches for a CA-only GHG market and for a WECC-wide GHG market.

WPTF disputes the assertion by SCCPA that incorporation of carbon cost in generator dispatch is inappropriate as a policy option because it would raise wholesale electricity prices. In WPTF's view, the overall objective of a market-based approach is to capture the environmental externality associated with GHG emissions into prices. An increase in power prices would be an expected, and desirable, effect of the policy because it sends an important price signal for valuation of low-carbon resources and energy efficiency. Failure to consider environmental dispatch of generation ignores the potential of alternative trading system designs to reduce carbon-intensive imports through environmental dispatch.

V. OPPOSITION TO CAP-AND-TRADE SYSTEM

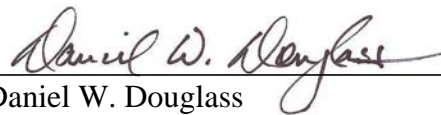
As many parties to this proceeding have noted, a cap-and-trade system has the potential to significantly reduce the costs of achieving GHG emission reductions compared to other regulatory approaches, while also aligning financial incentives with emissions reductions. This is particularly important in view of the long-term challenge of climate change; regulators are not developing a short-term program, but one that will continue for potentially 50 years or longer. As emission caps become tighter over this period, the economic advantages of a cap and trade system will become greater. Further, delay of a cap-and-trade system would forego California's leadership role under AB32, and put the state beyond the curve vis-à-vis a national or regional program.

For this reason, WPTF disagrees with the argument of SCCPA, LADWP and CEERT that the modeling should focus solely on LSE procurement rather than emissions trading. For instance, LADWP asserts that "the focus of the analytical support for AB 32 compliance must be the adopted and approved resource plans of the LSEs, not the output of the PLEXOS model." As numerous parties to this proceeding have previously stated, a GHG policy that is based solely on

LSE procurement will be unacceptably prone to contract shuffling. Recognition of this flaw led the Market Advisory Committee to recommend an alternative model – the ‘first-seller’ approach. LSE procurement plans will undoubtedly affect the cost to consumers of any GHG policy implemented, and should therefore be taken into account in assessing the impacts on individual LSEs and consumers. However, for the modeling exercise to be useful to policy-makers and enable evaluation of alternative options, it is essential that the model also evaluate the cost and emission reduction potential for GHG trading for all the various models under consideration.

WPTF appreciates this opportunity to comment and the Commission’s consideration of the discussion provided herein.

Respectfully submitted,

A handwritten signature in dark ink, reading "Daniel W. Douglass", is positioned above a horizontal line.

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Date: January 18, 2008

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of Reply Comments of the Western Power Trading Forum on Modeling Related Issues on all parties of record in proceeding R.06-04-009 by serving an electronic copy on their email addresses of record and by mailing a properly addressed copy by first-class mail with postage prepaid to each party for whom an email address is not available.

Executed on January 18, 2008, at Woodland Hills, California.



Michelle Dangott