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

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 16, 2004)

#### BEFORE THE CALIFORNIA ENERGY COMMISSION

AB 32 Implementation – Greenhouse Gas Emissions.

Docket No. 07-OIIP-01

## REPLY COMMENTS OF THE WESTERN POWER TRADING FORUM ON DESIGN OF GREENHOUSE GAS REGULATORY STRATEGIES

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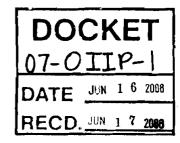
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In accordance with the direction provided in the May 20th, 2008 Administrative Law Judge's Ruling under Rulemaking 06-04-009, the Western Power Trading Forum ("WPTF") respectfully submits the following reply comments in response to several of the submissions that were made on June 2, 2008 to the submissions that on the questions raised by the California Public Utilities Commission ("Commission") and California Energy Commission ("CEC"), together, ("Commissions") regarding design of a GHG trading system for the electricity sector.

### I. INTRODUCTION.

Due to California's already relatively low GHG-intensity, achievement of AB32's emission targets will likely be costly. For this reason, it is critical that the state pursue the most cost-effective approach to achieving emission reductions. WPTF firmly believes that a multi-sector GHG trading system is the most cost-effective approach to achieving GHG reductions in

the long-term, and therefore urges the Commissions to stand firm on the earlier interim decision recommending a first deliver cap and trade system for the electricity sector. In support of this recommendation, WPTF submits the following reply:

- 1. Reply (in opposition) to Los Angeles Department of Water and Power ("LADWP") and Southern California Public Power Authority (SCPPA), Northern California Power Authority (NCPA), and The Utilities Reform Network (TURN): The comments of LADWP, SCPPA, NCPA, and TURN urge the Commission to abandon the development of a California cap-and trade program. WPTF urges the Commissions to maintain its commitment to cap-and-trade.
- 2. **Reply (in opposition) to LADWP and SCPPA:** LADWP and SCPPA suggest that the results of the E3 modeling support a conclusion that cap-and-trade will be an unnecessarily costly way to achieve emission reductions. In these reply comments, WPTF demonstrates why that conclusion is inaccurate.
- 3. Reply (in opposition) to San Diego Gas and Electric (SDG&E), Pacific Gas and Electric (PG&E), Southern California Edison ("SCE"), Northern California Power Agency (NCPA), LADWP and SCPPA: WPTF also continues to believe that allocation of auctions should coincide with the point of regulation, and that the economic harm proposal put forth by SCE may be inappropriate for California.
- 4. Reply (in support) of the Energy Producers and Users Coalition and the Cogeneration Association of California(EPUC/CAC): WPTF endorses the comments of EPUC/CAC that market designs may preclude adequate recovery of emission reduction investments in the early years of the GHG program, supporting the conclusion that there should be a free allocation of allowances to emitting resources at the outset of the program, with a gradual transition to auctions.

# II. <u>CALLS TO REVERSE THE INTERIM DECISION ON A FIRST DELIVERER APPROACH SHOULD BE REJECTED.</u>

The comments of several Parties, including LADWP, SCPAA, NCAP, and TURN, call for the Commissions to reverse the previous interim decision recommending a first-deliverer cap and trade system in favor of continued reliance on a prescriptive regulatory approach, or a load-based system. For the most part, these arguments seems to arise from two concerns: 1) that the more GHG intensive Southern California Public Utilities will be disproportionately impacted by the first deliverer approach and 2) that consumers should be shielded from the costs of carbon

emission reductions. While WPTF does not agree with either argument, it is clear that the Commissions' staff have taken these concerns seriously and have taken them into account in the proposed allocation methods.

Further, these Parties who urge the Commissions to reject cap-and-trade for California nevertheless have indicated that they support a source-based GHG trading system in a regional or federal context. While a regional or federal GHG trading system may result in lower carbon prices due to it broader scope, and perhaps that is why the parties are willing to support cap and trade in this larger context but not in the California-only context, it makes little sense for California to implement any system that would be so out of step with the federal approach. Rather than seeking to impose an entirely different system in California than is likely to be implemented nationally, the Parties' customers would be better served by having those entities use their considerable influence to achieve a national program.

WPTF also notes that the Commissions' interim decision followed lengthy deliberations regarding the type of regulation and the point of regulation for GHG reduction, and that all of the issues raised by LADWP and SCCPA in this filing have been previously stated, debated and considered. WPTF agrees that the E3 modeling does not allow for complete evaluation of GHG trading. However, given the inherent limitations of the model, we do not believe there is any meaningful benefit to be gained by further developing it. We believe that the record and analysis conducted to date is sufficient to make recommendations to ARB regarding the electric sector's participation in the cap and trade system; further evaluation of a GHG cap and trade program should and will occur in ARB's economy wide modeling.

# III. ARGUMENTS THAT CAP AND TRADE WILL IMPOSE EXTRA COSTS WITH NO GHG BENEFITS ARE FLAWED.

Several of the publicly-owned utilities, notably LADWP and SCCPA, have argued against a California-only GHG trading system on the grounds that such a system will impose additional costs on utilities and consumers, but yield no additional GHG benefit. Their argument is based on a comparison of the result of E3's modeling of various cap and trade scenarios with the Reference Case. WPTF considers this argument flawed for several reasons.

First, the E3 GHG calculator does not provide a reliable assessment of the costeffectiveness of a GHG trading system relative to regulatory approaches for GHG reduction because it does not support comparison to a true business-as-usual case, but rather imposes a cap and trade system on top of the state's 20% renewable portfolio standard and energy efficiency targets. As WPTF noted in our opening comments, the calculator's gas build-out cases scenario may have been intended to allow for comparison of costs between GHG cap-and-trade and the regulatory approach incorporated in the reference case scenario. However, the levels of renewable investment in the gas build out scenario seem to be much higher than would have occurred without the RPS.

Nevertheless, the generation supply curves used in the E3 calculator suggest that there would have been cost reductions had the state chosen to pursue a cap and trade system at the outset, instead of the RPS. WPTF created an alternative gas build-out scenario, under which the amount of renewable generation has been limited to approximately the levels that existed at the end of 2008. This case is built on E3 Scenario #22, except that the amount of demand response is restored to 5% of peak demand and the level of energy efficiency is set to the same level used in the reference case. Using the E3 renewable generation supply curves, this analysis shows an average carbon price for renewable generation of \$78/ton (Figure 1).

	Biogas	Bio	Biomass		Geothermal		Hydro - Small	Solar Thermal		Wind	
CO2 Savings	-		_		(4.9)		-		(2.2)		(5.3)
GWh at Generator	-		-		(10,360)		-	(4	,405)	(10	,634)
Peak MW at Generator	_		-		(1,314)		_	(1	,074)		(633)
Utility Energy Value (\$/MWh) Utility Capacity Value	\$ -	\$	-	\$	61	\$	-	\$	63	\$	60
(\$/kW/yr)	\$ -	\$	-	\$	188	\$	-	\$	188	\$	188
Utility Cost (\$/MWh)	\$ -	\$	-	\$	118	\$	-	\$	152	\$	112
Utility Energy and Capacity (\$/MWh)	\$ -	\$		\$	85	\$	-	\$	108	\$	71
Cost \$/ton	-		-		\$68.75		-	\$3	86.80	\$	82.10

Figure 1

<sup>&</sup>lt;sup>1</sup> Comments of the Western Power Trading Forum, on Design of Greenhouse Gas Regulatory Strategies, June 2, 2008.

Conversely, with carbon pricing under a cap and trade, additional emission reductions due to the displacement of imported coal with natural gas begin to occur at prices around \$60/metric ton of carbon. Ninety percent of the coal is completely displaced at \$110/ton. This simple analysis suggests that there are cost gains that would have occurred from imposing a cap and trade system to achieve the 2020 GHG target in lieu of the RPS. The potential cost gains are even more significant when compared to an increased RPS goal of 33%. At levels beyond 20% RPS, E3 finds the implicit carbon price for incremental investments in renewable energy to be around \$133/ton.

Second, the cost-effectiveness of GHG trading should be assessed not only in meeting AB32's 2020 targets, but with a recognition that the 2020 goal is not the likely end state of required emission reductions, either in California or nationally. AB32 has not specified what those further reductions might be, but WPTF would note that various federal legislative proposals call for emission reductions on the order of 50-60% by 2050. It is unlikely that increasing the use of renewable resources to the levels necessary to achieve this level of emission reductions within existing electric grid operation technologies is feasible. Therefore, in these expanding emission reduction scenarios, a cap and trade program will be the most cost-effective means of achieving such long-term reductions, because it supports the lowest cost emission reductions, regardless of how/where they occur. The potential for lower cost emission reductions in other sectors to mitigate costs within the electric sector cannot be captured in the E3 results, as it cannot model a multi-sector cap.

Third, a cap and trade program also has a substantial advantage over an RPS in meeting GHG targets because it will accommodate and reward emerging GHG control technologies, a factor that the E3 modeling does not capture. Continued reliance on a prescriptive regulatory approach, such as a 33% RPS goal presumes that no other cost-effective CO2 emissions control methods exist, nor will be developed. This undermines the flexibility of a trading system and increases costs by dictating the use of specific technologies, erecting barriers for alternative, competing technologies and potentially missing GHG reduction opportunities in enterprises that operate across multiple sectors. Renewable energy may clearly be an important part of the climate change solution, but it will not be the only part. Development and deployment of a range of other technologies to reduce, avoid, capture and sequester carbon will also be needed. Increasing the RPS to 33% will make it harder for other GHG control technologies that do not

also count toward satisfying the regulatory procurement obligation to compete. In contrast, a cap and trade system would place renewable energy and other emerging GHG technologies on the same footing.

Finally, it is not clear that the reference case will achieve the desired emissions reductions by 2020. As many Parties, including WPTF, have noted, the E3 model results are highly sensitive to input assumptions. For instance, as PG&E correctly points out, slight changes in load-growth would yield higher emission levels than suggested by the reference case. Moreover, the RPS-rich areas are typically located far from load centers, which means significant amounts of new transmission that will have to be sited and built in order to move RPS generation from where it is produced to where it is consumed, yet the E3 analysis assumes that the 20% RPS target will be met. In light of the ongoing difficulties in siting renewable generation due to transmission infrastructure limitations, this assumption may not be realistic. A multi-sector cap and trade program could capture any resulting shortfall in emission reductions due to higher load growth or delayed RPS development.

## IV. ALLOCATION MUST COINCIDE WITH THE POINT OF REGULATION.

Many of the investor-owned (SDG&E, PG&E) and public utilities (NCPA, LADWP, SCPPA) continue to call for allocation of allowances, rather than allocation of auction revenue, directly to retail electricity providers. While WPTF is open to dedicating some small proportion of any auction revenue to retail providers to mitigate rate impacts, we strongly oppose the general allocation of allowances directly to retail providers. As WPTF has previously stated, jurisdictional retail providers would have an inherent conflict of interest as the recipient of the allowances because in most instances, they also (i) own generating resources and/or (ii) are in direct competition with non-jurisdictional entities for providing electricity to retail load. Thus, a direct allocation of allowances to jurisdictional retail providers would potentially confer an unfair competitive advantage to utility-owned resources in procuring allowances, and increase the existing market power of jurisdictional entities.

The Commissions should also reject SCE's "economic harm" proposal on the same grounds. Under SCE's proposal, allowances would be allocated to utilities and generators that

suffer economic harm, defined in three categories: Independent generator harm; retail provider harm from its portfolio, and retail provider harm from its market purchases.

However, SCE defines economic harm as only accruing to generators with an emission rate higher than the emission rate of the marginal generator, e.g. coal resources. Since there is essentially no in-state coal generation (one qualifying facility), in-state generators would not be eligible for allowances. Similarly, suppliers that sell into California from system resources rather than from specific generating units would also not be eligible to receive allowances, since energy provided by these suppliers would presumably be attributed a default system-average emission rate. Thus, only coal generators that import under specified contract would be eligible to receive emission allowances. Since the vast majority of these resources are utility owned, the SCE economic harm allocation would advantage utility-owned generation.

### V. TRANSITION TO AN AUCTION SHOULD BE GRADUAL.

While WPTF supports a transition to auctioning of allowances over time, we believe that such a transition should be gradual. Several Parties to this proceeding (The Natural Resources Defense Council (NRDC), NCPA, LADWP, SCCPA, PG&E) have called for 100% of allowance value to be returned to retail providers from the onset of the cap and trade program. WPTF considers such an approach to be drastic, and likely to be inconsistent with future federal legislation, which is anticipated to allocate some portion of allowances to electric generators.

There is no avoiding the fact that GHG regulation will impose costs and raise consumer rates, regardless of the type of GHG regulation imposed. As NRDC noted, the E3 result showed a greater increase in utility costs and consumer rates between the 2020 reference case and 2008, than it did between GHG trading and reference case. WPTF agrees that it is in the state's interest to consider and mitigate these rate impacts of its policy choices. However, it is also imperative to consider the costs that GHG regulation will impose on generators, and the potential risk that generators' inability to recover these costs poses for electric supply adequacy and system reliability.

For the reasons stated in our opening comments, WPTF does not believe that independent power producers will be able to fully pass on and recover carbon costs, and therefore we do not support an immediate 100% auction of allowances. We are further convinced of this position by the points made by EPUC/CAC regarding the limitations that the market power mitigation features of MRTU will place on the ability of independent power producers, which supply a

sizable portion of California's electricity needs, to pass through carbon costs. WPTF agrees with EPUC/CAC's argument that creation of a situation where generators are unable to recover carbon-related costs will impact their profitability and thus their decision to run. It is therefore imperative that in determining the appropriate timing of a transition to auction, that the Commission consider not only assumptions regarding carbon cost pass through, but also the potential supply reliability problems that may arise if these assumptions are wrong.

## VI. CONCLUSION.

WPTF appreciates this opportunity to comment and the Commission's consideration of the comments listed herein. WPTF urges the Commissions to maintain their commitment to capand-trade as the most cost effective means of reducing GHG emissions from the electric sector and to recommend a free allocation of allowances to generators and first deliverers at the outset of the program, with a gradual transition to auctions over time.

Respectfully submitted,

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June 16, 2008

### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of the *Reply Comments of the Western Power Trading Forum on Design of Greenhouse Gas Regulatory Strategies* 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 June 16, 2008, at Woodland Hills, California.

Michelle Dangott

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