September 28, 2012

California Energy Commission
Dockets office, MS-4
Re: Docket No. 12-OIR-1
1516 Ninth Street
Sacramento, CA 95814-5512

In the Matter of:
Rulemaking to Consider Modification of Regulations Establishing A Greenhouse Gases Emission Performance Standard For Baseload Generation of Local Publicly Owned Utilities

Docket Number 12-OIR-1
Rulemaking Workshop

Reply Comments of the Independent Energy Producers Association to Consider Possible Modifications to the Emission Performance Standard Docket Number 12-OIR-1

On August 31, 2012, the California Energy Commission (CEC) Posted Requests for Reply Comments in its Rulemaking to Consider Modification of Regulations Establishing A Greenhouse Gases Emission Performance Standard for Baseload Generation of Local Publicly Owned Utilities; Docket Number 12-OIR-1. The Energy Commission instituted this rulemaking to consider possible modifications to the Emissions Performance Standard ("EPS"). The Request for Reply Comments is meant to give parties an opportunity to discuss the remaining topics and to respond to the NRDC/Sierra Club ("the proponents") proposal to lower the EPS and to examine the technical information that they have provided on this subject.

I. General Comments on the Requirements of SB 1368:

The Energy Commission has asked stakeholders to address whether to make any other changes to the EPS to carry out the requirements of SB 1368. In response to this question, the

Independent Energy Producers Association (IEP) proposes that the current emissions performance standard of 1,100 pounds of CO_2 per megawatt-hour does not need to be modified as the requirements to reevaluate the emissions performance standard under SB 1368 have not been triggered. However, if the Energy Commission concludes, contrary to its "Tentative Conclusions", that the requirements of SB 1368 have been triggered and reevaluation of the EPS is indeed warranted, IEP recommends discontinuing the existing EPS and replacing it with an enforceable statewide greenhouse gas emissions limit (i.e. the cap-and-trade program) implemented by CARB.

A. Changes to the Existing Emissions Performance Standard Are Not Necessary to Carry Out the Requirements of SB 1368.

The requirement to reevaluate the EPS under SB 1368 has not been triggered; therefore changes to the existing emissions performance standard are not necessary to meet the requirements of the statute. SB 1368 requires the Energy Commission "to reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities."[1] In determining whether an enforceable greenhouse gas ("GHG") emissions limit is established and in operation, that is applicable to local publicly owned electric utilities (POUs), the Energy Commission, in consultation with the CARB, concluded that "no emissions limit that applies to publicly owned utilities has been established by the cap-and-trade regulations" because the "program does not set any specific emissions limit for any single entity, or for any sector nor does the program require specific reductions in emissions from any entity or sector."[2] Rather, it is a program-wide limit on aggregate emissions from those covered by the program. Specifically, ARB explains, "Because the cap-and-trade

[1] Senate Bill No. 1368, Filed with the Secretary of State September 29, 2006, page 9.
[2] Energy Commission's Tentative Conclusions and Requests for Additional Comments, posted July 9, 2012, page 7, 8.

program does not create an emissions limit applicable to local publicly owned electric utilities, ARB believes the trigger for the Energy Commission to reevaluate the emission performance standard has not been met as a result of ARBs enforceable cap-and-trade regulation.[3] Accordingly, in its Tentative Conclusions and Requests for Additional Information, posted July 9, 2012, the Energy Commission indicated that because the requirement to reevaluate the EPS has not been triggered, it will not "reevaluate and continue, modify, or replace the Commission's EPS at this time."[4]

The proponents suggest that updating (i.e. lowering) the emissions performance standard would continue to fulfill the purpose of Senate Bill 1368 and maintain California's leadership role in setting policies that achieve meaningful GHG reductions.[5] However, there is no requirement under SB 1368 that the emissions performance standard be reevaluated or changed by the Energy Commission, except in the case that a GHG emissions limit is applicable to POUs. Given that CARB and the CEC have concluded that the trigger for reevaluation has not been met, no further changes to the EPS, which include adjusting the number, are required to carry out the requirements of SB 1368.

If the Commission determines, contrary to its Tentative Conclusions, that the trigger point has been met, and it is necessary to reevaluate and continue, modify or replace the GHG emission performance standard, IEP recommends that the existing emissions performance standard be eliminated and replaced with the Cap-and-Trade Program.

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[3] Energy Commission's Tentative Conclusions and Requests for Additional Comments, posted July 9, 2012, page 7.
[4] Energy Commission's Tentative Conclusions and Requests for Additional Comments, posted July 9, 2012, page 6.
[5] Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop, July 27, 2012, page 5.

B. If the Existing Emissions Performance Standard Requires Reevaluation, IEP Recommends Replacing It with the Cap-and-Trade Program.

If the Commission determines that the requirements in SB 1368 have indeed been triggered and reevaluation of the existing emissions performance standard is necessary, IEP recommends that the Energy Commission eliminate the existing emissions performance standard and replace it, as allowed by statute, with the enforceable GHG emissions limit (i.e. the cap-and-trade program). The statute indicates that when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned utilities, the commission shall reevaluate and continue, modify or **replace** the greenhouse gas emissions performance standard. If the Commission is reevaluating the EPS under the requirements of SB 1368 then it means that an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned utilities. Under these circumstances, replacing the existing EPS with the cap-and-trade program is a valid solution.

The cap-and-trade program is an appropriate replacement of an emissions performance standard. As noted in CARB's Initial Statement of Reasons, "California's cap and trade program is purposely designed to leverage the power of the market in pursuit of an environmental goal. It opens the door for major investment in emissions-reducing technologies, and sends a clear economic signal that these investments will be rewarded."[6] Replacing the existing EPS with the cap-and-trade program will save consumers money because it will provide the least-cost solution for generators to comply, while achieving the environmental improvement and maintaining grid reliability.

Once the cap is imposed and begins to decline, allowances will become scarcer, making inefficient units more expensive and cleaner units more attractive. Given these conditions, it is

[6] CARB Staff Report: Initial Statement of Reasons for Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance instruments Issued by Linked Jurisdictions; Date of Release: May 9, 2012, page 8

foreseeable that the POUs will continue to invest in cleaner, more efficient resources to keep costs for their customers low. In addition, the Investor Owned Utilities (IOUs) Request for Offer (RFO) process, which is overseen by the CPUC, will take into account the cost of carbon when procuring the resources necessary to meet the state's load. Cleaner resources will become more cost-effective with a cap-and-trade program in place. The cap-and-trade program is essentially the market-driven equivalent of the EPS, which effectively achieves the same outcome of reducing long-term investment in high-emitting resources. If the emissions performance standard is going to be reevaluated, it should be replaced with the cap-and-trade program.

II. Specific Comments Regarding the NRDC/Sierra Club Proposal to Lower the EPS:

If the CEC decides to move forward with lowering the EPS, despite the comments made above, IEP has the following concerns.

A. Lowering the Existing Emissions Performance Standard May Make It Difficult to Maintain Grid Reliability

In supporting a lower emissions performance standard of 825-850 lbs. CO_2/MWh on a net emissions basis (with a potentially higher EPS for smaller facilities) the proponents cite to annual CO_2 emission rates for California units constructed since 2007. From this data, they conclude that (1) all California units constructed since 2007 emit substantially below the current EPS of 1,100 lbs. CO_2 /MWh, and (2) that the majority of these units constructed since 2007 emit at rates at or near the proposed 825-850 lbs. CO_2 /MWh level.[7]

In reviewing their data, it is apparent that only two of the ten California facilities cited in their table (in the net representative rate column) actually meet the lower EPS they are

[7] Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop, July 27, 2012, page 11.

proposing.[8] In fact, the other 8 facilities that are listed would not be in compliance if the proposed emissions performance standard were in place today. The proponents suggest that the EPS should be based on the best performing units to reflect what is technologically and economically feasible, and to force utilities to procure highly efficient resources.

The CAISO indicates that conventional resources will be dispatched to the net load demand curve, which is expected to change significantly starting in 2015.[9] This change will likely affect the amount of flexibility (including regulation, load following, and maximum ramping capabilities) required from conventional resources, which will change the typical operational characteristics of conventional resources potentially resulting in an increase in plant GHG emissions per megawatt-hour of output. Furthermore, the CAISO indicates that "not all plants can ramp over their full range, or ramp while being at their most efficient state" and flexibility contributions differ between technologies and within technologies.[10] The flexible attributes from conventional generators that the CAISO will need to reliably operate the electric grid may result in increases in emissions per MWh of output even from the most efficient units depending on how they operate.

At this point it is not clear how a lower EPS will affect new and or existing resources operating under the future requirements of the "flexible grid". What is clear is that, in light of the state's Once Through Cooling (OTC) policy, significant long-term investment will have to be made in capacity resources (new and/or repower) in the very near future to serve local areas. Will resources that have been defined traditionally as non-baseload facilities become subject to the lower EPS as the operational needs of the grid require them to operate differently than they

[8] See Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop, July 27, 2012, page 11, table 3.
[9] See CAISO Presentation: *RA Flexibility Workshop Flexible Capacity Procurement Proposal*, CPUC R.11-10-023, August 13, 2012, slide 9, 10.
[10] See CAISO Presentation: *RA Flexibility Workshop Flexible Capacity Procurement Proposal*, CPUC R.11-10-023, August 13, 2012, slide 9, 10.

have in the past? Lowering the emissions performance standard to any number below 1,100 lbs. CO_2/MWh before we can have a firm grasp on how the new operating characteristics of the grid will impact the operating characteristics of these conventional units and their associated emissions, does not seem to be the best path forward at this juncture. First, we need to evaluate, over the next few years, how the emerging "flexible grid" will ultimately play out under our existing emissions performance standard. After the new parameters that we will be operating under have been vigorously tested, in a variety of operational scenarios, it may then be appropriate for the CEC, CPUC, CAISO and stakeholders to further debate this issue and determine if a lower EPS is even feasible, given these new conditions and operating characteristics.

B. Meaningful Reductions and Efficiency Improvements Will Result from the Cap-and-Trade Program.

The purpose of the cap-and-trade program is to provide a carbon price signal so that companies will make efficiency improvements when they are cost effective to do so, while ensuring attainment of the state's carbon reduction goals. Lowering the EPS to force these efficiencies on top of an emissions reduction program creates a redundant regulatory environment that adds additional costs to consumers without any commensurate benefit.

Individual generating facilities have a continuous incentive to reduce their emissions in order to reduce their compliance costs under the cap-and-trade program. The cap-and-trade program is designed to send a price signal to producers and consumers about the energy and services that they provide or use and allows covered entities the flexibility to seek out and implement the lowest cost options to reduce their emissions.[11]

Throughout their proposal, the NRDC/Sierra Club point to a variety of "cost effective" efficiency improvements that are routinely offered as optional upgrades in the design of natural

[11] CARB's Climate Change Scoping Plan Appendices, Volume I, December 2008, page, C-11

gas combined cycle facilities. They indicate that the added capital cost of the more efficient designs is more than offset by the reduction in fuel cost, especially in base load applications, which can reduce CO_2 emissions from affected electricity generation by approximately 25 percent.[12] Furthermore, the NRDC/Sierra Club indicate that existing developers do not always choose the most efficient units, even with the higher natural gas prices of a decade ago, which is why a lowered emissions performance standard is needed, to force these kinds of efficiency improvements.[13]

Given an allowance price starting at ten dollars (the floor), to be increased annually by 5 percent plus the rate of inflation based on the Consumer Price Index,[14] it is highly unlikely that generators, and their counterparties responsible for procuring the adequate amounts of generation will simply disregard these increased costs. Because every obligated entity will have to surrender one allowance for every metric ton of carbon it emits, all generators that face a compliance obligation will be seeking low-cost efficiency improvements that will reduce the added costs associated with their cap-and-trade compliance obligation.

Moreover, since the CARB is imposing a hard cap on emissions declining over time, any proposal to mandate a higher level of efficiency on electric generators does nothing to lower CO_2 emissions beyond what will otherwise be achieved through the cap-and-trade program. Fundamentally, the cap-and-trade program gives regulated sources an incentive to pursue efficiency improvements on their own, rather than implementing a source-by-source mandate. Effectively, the efficiency improvements that the proponents are seeking to mandate through a lower EPS will result through the imposition of a cap. In fact, lowering the emissions

[12] Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop, July 27, 2012, page 6.
[13] Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop, July 27, 2012, page 7.
[14] Final Regulation Order, Article 5: California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms; Subarticle 10, Section 95911(c), August 30, 2012.

performance standard on top of implementing a cap-and-trade program will increase costs to consumers by adding additional restrictions on generators, without creating any additional benefits to what will already be achieved through the cap-and-trade program. Independently, the cap-and-trade program will achieve the results the proponents are seeking through a lower EPS.

In Conclusion, the requirement for the CEC to reevaluate the emissions performance standard under SB 1368 applies if an enforceable greenhouse gas emissions limit is established and in operation that is applicable to local publicly owned electric utilities. If the Energy Commission concludes that the trigger point has been met and reevaluation of the emissions performance standard is required, IEP recommends discontinuing the existing EPS and replacing it with an enforceable statewide GHG emissions limit, i.e. the cap-and-trade program. In either scenario, further changes to the EPS are not required. As a result, IEP does not support changing the emission performance standard to a lower number. Given the upcoming operational changes to the grid and the imposition of the cap-and-trade program, now is not the time to adjust the existing emissions performance standard in the downward direction.

IEP thanks the CEC for this opportunity to comment in its Rulemaking to Consider Modification to the Emission Performance Standard.

Respectfully Submitted,

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