December 13, 2006

California Energy Commission Dockets Unit 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 Attn: Docket No. 06-OIR-1



To Whom It May Concern:

Re: Docket No. 06-OIR-1

Enclosed herewith are additional comments submitted in response to Proposed Adoption of Regulations Establishing a Greenhouse Gases Emission Performance Standard for Baseload Generation of Local Publicly Owned Electric Utilities (Dated October 30, 2006). These comments were also submitted electronically at <u>docket@energy.state.ca.us</u> on December 13, 2006.

If any additional attention is required concerning this matter, please contact Mr. Oscar Alvarez at (213) 367-0677 or Mr. John Kerrigan at (213) 367-1286 of my staff.

Sincerely,

Randy S. Howard Executive Assistant to Chief Operating Officer--Power System

LJK:

STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:

Proposed Adoption of Regulations) Establishing a Greenhouse Gases) Emissions Performance Standard) For Baseload Generation of Local) Publicly Owned Electric Utilities

Docket No. 06-OIR-1

Additional Comments of the Los Angeles Department of Water and Power on the Implementation of SB 1368 Emission Performance Standard

The Los Angeles Department of Water and Power (LADWP) respectfully submits additional comments on the implementation of SB 1368 Emission Performance Standard. The LADWP appreciates the efforts of the Energy Commission and staff to address the issues that have been raised in our previous written comments and oral testimony at the Electricity Committee's Workshop held on Friday, December 8, 2006.

Due to the aggressive rulemaking schedule imposed by SB 1368, the LADWP has not had the adequate opportunity to fully assess all the issues related to the implementation of a Greenhouse Gas (GHG) emissions performance standard (EPS). The LADWP is available and welcomes the opportunity to meet with the Energy Commission staff and other parties to discuss our comments and/or issues with regard to the implementation of SB 1368 to ensure the adoption of an effective EPS.

As noted in our preliminary comments, the LADWP reiterates our key concerns with regarding to the adoption of an EPS. The EPS should:

1. Be adopted in a manner that complements and does not conflict with efforts to increase renewable resources under a Renewable Portfolio Standard Program.

- 2. Apply to new ownership investment and not existing ownership investments.
- 3. Be defined based on actual or projected future operating capacity factor of 60% and not on name plate or equivalent permitted capacity factor.
- 4. Apply to contracts for procurement of electricity only and should not be applied to other types of contracts related to baseload generation.
- 5. Apply to new cogeneration/distributed generation units and not to existing cogeneration/distributed generation units.
- 6. Serve the intent of SB 1368 without jeopardizing the opportunity for meaningful public comment.
- 7. Be established in a tiered or phased approach over time to minimize costs to ratepayers and ensure system reliability.
- 8. Provide self-certification for the publicly owned utilities' Governing Boards.

LADWP's specific responses to the staff report and corresponding questions are

provided below.

Chapter 3: Affected Entities and Financial Commitments

Question 3.1

Does it only apply to an investment in a newly constructed facility or does it also apply to the repowering of an existing facility? Should there be a size or monetary threshold below which the phrase would not apply?

LADWP Response:

Section 8340 (j) defines long-term financial commitment as "either a <u>new ownership</u> <u>investment</u> in baseload generation or a <u>new or renewed contract with a term of five or</u> <u>more years</u>, which includes procurement of baseload generation." Baseload generation is then defined in Section 8340 (a) as "electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent."

As specifically stated in the statute, "long-term financial commitment" applies to new ownership investment and thus, LADWP believes such commitment does not apply to existing ownership investment in baseload generation where the ownership of the facility has not changed, and therefore would not trigger an EPS for any related activities. These would include but are not limited to repowering, maintenance, environmental upgrades, refinancing, or contracts for activities other than procurement of electricity. On-going financial commitments are necessary throughout the life of the plant to maintain it in reliable, safe and efficient operating condition.

Any actions or activities that preserve the existing ownership investment or preserve an existing baseload energy procurement contract up to its original termination date are not considered a long-term financial commitment. A renewed or renegotiated contract that does not extend the procurement of electricity beyond the original termination date should not be considered a long-term financial commitment under Section 8340 (j), and therefore should not trigger an EPS.

Question 3.2

How does the intent of the legislation guide our choice?

LADWP Response:

The Legislative history shows that SB 1368 does not apply to investments that are made in existing facilities where the ownership of the facility has not changed. The original version of SB 1368 included the phrase, "an ownership investment." Thus, the original version of the bill would have subjected all ownership investments in power plants to the definition of "long-term financial commitments." However, that language was changed during negotiations on the bill. The bill was amended to change the phrase "an ownership investment" to "a *new ownership* investment" in the definition of long-term financial commitment modified the type of ownership investment that would constitute a "long-term financial commitment" — only a "*new ownership* investment in baseload generation" would now qualify. The addition of the word "new" differentiates "*new ownership* investments" from *existing "ownership* investments." If the Legislature wanted to subject all ownership investments to the EPS, it would not have added the modifying adjective "new" before the term "ownership investment."¹

¹ Reply comments of Southern California Edison Company (U 338-E) on the Final Staff Workshop Report and Proposal for an Interim Emissions Performance Standard Program Framework, CPUC Proceeding 06-04-009.

Question 3.3

Is it generally clear that Joint Power arrangements constitute ownership under the statute?

LADWP Response:

JPAs are structured in different ways and for different purposes. Some are established to actually own and operate resources. Others are established to arrange financing. Unlike IOUs, in order to obtain their power resources POUs are often either permitted or required by law to enter into unique legal arrangements that do not fit neatly into either the ownership or contract categories. A subset of the ownership category is "ownership-like" interests. A formalistic, one-size-fits-all approach to defining ownership interests ignores POUs' unique legal arrangements. Such an approach will likely impose multiple layers of regulation (i.e., on both the JPA that technically "owns" the resource and on the POUs who technically "contract" for the power.)

It should be noted that there are other models that may reflect "ownership-like" interests that are not JPAs. For example, the LADWP has a "take or pay" power purchase agreement with the Intermountain Power Authority (IPA) of Utah for the purchase of power from the Intermountain Power Project (IPP). Under this arrangement, the LADWP and other California purchasers have assumed all of the burdens of ownership.

For example, the California purchasers have the duty to pay debt service on the bonds, which were issued to finance the construction of IPP. The California purchasers have further assumed legal liability for tort claims arising out of the IPP. The California purchasers must pay all operating and maintenance costs associated (e.g. salaries, benefits, administration, taxes, upkeep, repair etc.) with IPP even if no energy is received. In other words, the LADWP and the other California purchases have assumed all of the traditional burdens of ownership. These ownership-like characteristics lead to the conclusion that this contract with the IPA should be treated more accurately as an ownership investment.

The California Climate Action Registry reached a similar conclusion in 2005 in determining that emissions from IPP should be reported as direct and indirect according to the LADWP's interest in the IPP, which it concluded was "effective ownership" for its entitlement share. The Registry stated: "The nature of these agreements suggests that the members of the Coordinating Committee shoulder the substantial economic risks as well as rewards of the plant, a fundamental principle for determining 'effective ownership.' This, coupled with the control the Coordinating Committee exercises, is a strong indicator that the municipalities that comprise the Committee are in effect, the plant's owners." (See Pg. 2 of the Registry's report titled*: Case Study: Reporting Responsibility for GHG Emissions from a Source over which and Entity has Effective Ownership.*)

Question 3.4

Can one infer any legislative intent from the fact that the definition of "long-term financial commitment" refers to both "new and renewed" contracts but to only a "new" ownership investment? Does omission of the term "renewed" provide guidance for the types of activities that should be covered under "new ownership investment"?

LADWP Response:

Yes. Since the statute defines "long-term financial commitment" as "either a new ownership investment in baseload generation *or* a new or renewed contract with a term of five or more years", it refers to "new or renewed contracts" and only to "new" ownership investment. The reduction of GHG emissions from existing baseload generation resources is more appropriately addressed under the provisions of AB 32 that allow entities to manage the emission reductions for their existing resource portfolio while taking into consideration impacts on system reliability and costs to ratepayers. SB 1368 should complement AB 32 by focusing the EPS on all new baseload generation resources and new or renewed energy procurement contracts where an emissions performance standard can effectively restrict investments in new non-EPS-compliant baseload generation that would work in opposition to the State's efforts to reduce GHG emissions.

Question 3.5

Does the investment have to affect a power plant's operation and production of

greenhouse gases to subject it to the standard?

LADWP Response:

Since the law applies only to new ownership investment, existing baseload generation is excluded. Therefore, this question is not applicable.

Question 3.6

Should the investment definition be tied to the size of the power plant modifications, similar to the 50 MW size threshold used for State siting permits?

LADWP Response:

Please see the response to question 3.5.

Question 3.7

Should the definition of investment exclude expenditures made to comply with another law or regulation, such as unit retrofits to comply with once-through cooling limitations?

LADWP Response:

Please see the response to question 3.5.

Question 3.8

If a plant must be modified to comply with changing environmental regulations (or be shuttered for failure to comply), does the statute imply such plants be closed rather than modified if they cannot meet the EPS? If not, how does one reconcile two potentially competing environmental goals and determine which should take precedence?

LADWP Response:

Please see the response to question 3.5.

Question 3.9

Would a stringent investment definition discourage owners from undertaking modernization or maintenance investments? If the process for reviewing proposed financial investments is lengthy or covers many types of investments, would the cost of complying outweigh the benefits of maintaining or modernizing the plant?

LADWP Response:

Yes. Maintenance investments are something electric utilities undertake on an ongoing

and repeated basis in order to keep its generating facilities in reliable, safe, and efficient operating condition. Electric utility investments made to keep generating facilities operational include maintenance on the following equipment:

- Boiler tube assemblies (e.g. superheaters, reheaters, economizers and boiler walls and floors)
- Air heaters
- o Fans
- Turbines and generators

- o Condensers
- o Control systems
- o Burners
- o Motors
- o Electrical equipment
- o Pumps
- o Piping/ducts

Question 3.10

If an investment significantly improves the GHG performance of a facility, but not below the performance standard, should it be prohibited? A POU might be interested in financing the retrofit of existing facility units to make partial improvements to the facility's GHG profile. Does the law intend to prohibit such investments?

LADWP Response:

The LADWP does not believe that SB 1368 applies an EPS to activities associated with existing generation resources. As such, a POU should not be precluded from making efficiency improvements to an existing generation resource, particularly activities that improve the GHG performance of the facility or unit. In fact, such prohibition would be in direct conflict with AB 32 that provides for a portfolio approach to reducing GHG emissions over time.

Question 3.11

Does the statute require, allow, or prohibit defining "new ownership investment" as any investment that extends the life of a baseload power plant for more than 5 years? Does the statutory clause "term of five or more years" apply to ownership or contracts?

LADWP Response:

The statute states that a long-term financial commitment is "*either* [emphasis added] a new ownership investment in baseload generation *or* new or renewed contract with a term of five or more years..." Thus, LADWP believes that the statute is clear that the clause "term of five or more years" applies solely to agreements for the procurement of electricity.

Question 3.12

Should expenditures excluded for complying with New Source Review requirements, such as routine replacement and repair, not be considered investments?

LADWP Response:

Please see responses to questions 3.1 above. It is LADWP's position that the EPS does not apply to existing baseload generation resources and therefore routine replacement and repair are specifically excluded from consideration under an EPS.

Question 3.13 (first question)

What constitutes routine replacement and repair and how should such activities be defined in the regulations?

LADWP Response:

As stated in our preliminary comments and response to question 3.1 above, the EPS developed under SB 1368 does not apply to investments made in existing baseload generation resources where the ownership of the generation resource has not changed. As such, any activities related to the existing baseload generation resource, including routine replacement and repair, are specifically excluded from consideration under an EPS.

Question 3.13 (second question)

What documentation will be required for POUs and the Energy Commission to distinguish between baseload and non-baseload facilities? Does the 60% threshold apply to a facility's produced power or grid-supplied power? Would the statute's "design and intended" language apply to the facility's original or current capacity factor? Are there other factors that need to be considered to accurately identify baseload facilities?

LADWP Response:

To accurately calculate the GHG footprint of a generation unit, the LADWP recommends that baseload be defined based on the current operating capacity factor, and not on name plate or permitted limit. Data that is required to calculate the C02 emissions based on current operating capacity factor include:

> projected or actual fuel burned (fuel type, quantity and heating value) and net

generation (MWh)

> Fuel-specific C02 emission factor from a GHG reporting protocol (i.e. CCAR)

It can be calculated by individual unit using Continuous Emissions Monitoring System (CEMS) data, or for the entire generating station using plant fuel records (e.g. SoCal Gas bills and/or plant operation reports).

The C02 emissions metric (lbs C02/Net MWh) should be calculated as follows:

 Metric (Lbs C02/Net MWh)
 =
 Fuel Burned MMBtu
 X
 Appropriate C02 Emission Factor

 Net MWh Generated

Using net generation to calculate the metric is consistent with the Power Utility Protocol established by the California Climate Action Registry. Using gross generation would result in a lower C02 emissions per MWh generated.

To calculate baseload generation, it is best to calculate it from annual projected operation or actual operation as opposed to the permit limit. Data is readily available, including historical operation (e.g. last five years of operation records) and projected operation (e.g. production modeling cost runs or contract requirements). This can be applied consistently to all generating units. It is problematic to calculate baseload based on permit limits for a number of reasons, including:

- a) the assumed capacity factor is not stated on the permit,
- b) there are no operation limits for older units, and
- c) the permitted capacity may exceed actual operation.
- d) Most importantly, it is <u>not</u> possible to apply the baseload definition consistently across all generating units.

The actual operating capacity factor should be calculated as follows:

Actual Operating = Annual MWh Generated

Capacity (%)

[(Maximum MW Capacity) x (8760 hours per year)]

Question 3.14

Under the statute, should JPAs be treated as a contract for electricity procurement or as an ownership interest?

LADWP Response:

Please see response to question 3.3.

Question 3.15

Are there any other issues related to JPAs that should be addressed?

LADWP Response:

The LADWP does not know of any other issues related to JPAs or other forms of "ownership-like" interests like Intermountain Power Project that are not already addressed in our comments.

Chapter 4: Emissions Performance Standard

The LADWP recommends that the Energy Commission adopt an EPS that is tiered or phased in over time that establishes a threshold at 1400 lbs/MWh initially and then ramps down. This would accommodate a shift to cleaner resources while minimizing costs to ratepayers and ensuring system reliability by avoiding the shutdown of essential facilities in the near term.

Question 4.1

Could any coal-fired or advance coal-fired technologies meet the EPS?

LADWP Response:

The LADWP is not aware of any current coal-fired or advanced coal-fired technologies that would meet an emissions performance standard that is set at 1,100 lbs/MWh. However, the LADWP and other members of SCPPA will be pursuing both feasibility and economic studies of placing integrated coal gasification combined cycle (IGCC) at Intermountain Power Project as well as a study focusing on the existing two units to determine if they can be brought into compliance with an emissions performance

standard under SB 1368 through geologic sequestration.

IPP and Navajo are critical baseload resources for the LADWP and it is in the best interest of our customers that we pursue all options for reducing GHG emissions from those plants, so that they may continue to provide 1,708 MW of gross capacity (maximum load) to LADWP until such time that other clean resources, including renewables, can be brought on-line. Given the direct and near-term impacts resulting from SB 1368 of having to replace California's capacity currently served by coal resources, the LADWP recommends that the CEC aggressively pursue the funding and demonstration of geologic sequestration for coal generation through its partnership, WESTCARB, with the U.S. Department of Energy and other entities.

Question 4.2

Would a demonstration project for advance coal-fired technologies and/or CO2 sequestration need to operate at more than 60% capacity factor or for more than five years, requiring the unit(s) to meet the EPS?

LADWP Response:

As mentioned in our response to question 4.1 above, it is in the best interest of the State that demonstration projects for advanced coal and C02 sequestration be aggressively pursued. Financial commitments related to research and development and pilot projects should not trigger an EPS, regardless of whether they extend beyond five years and/or 60% capacity factor. For example, LADWP is aware that carbon capture and sequestration (also known as CCS) has been successfully used in the oil industry. CCS, however, has not been successfully used to capture, store or sequester CO2 from a conventional electric utility.

There are a number of environmental and non-environmental issues that electric utilities such as LADWP will need to explore before undertaking a full-scale CCS program (e.g. there are states which have special laws governing oil, natural gas and other minerals in an extractive process that do not cover utilities). Thus, LADWP supports research and development efforts for advanced coal-fired technologies and/or CO2 sequestration, but if these technologies have not been demonstrated on a full-scale basis, they should not

trigger an EPS. The LADWP recommends that the CEC support well-established research and development efforts, including demonstration projects to reduce GHGs from coal sources by ensuring that such efforts are not prohibited under an EPS by the fact that they may constitute financial commitments longer than 5 years and may require demonstration under real-world baseload operations greater than 60% capacity factor.

Questions 4.3

If fuel oil is the designated back up fuel for a baseload unit:

- How are the CO2 emissions from potential, but uncertain back up fuel use rates calculated and included in the unit CO2 emissions; and
- How are the CO2 emissions associated with actual fuel use calculated and included in the unit CO2 emissions?

LADWP Response:

The LADWP uses diesel fuel as an emergency backup for in-basin generating units. Under the CCAR reporting protocols, we report any emissions associated with the burning of diesel fuel during emergencies or readiness testing, in addition to the burning of natural gas under normal operating conditions. The LADWP recommends that emissions from diesel fuel burned during actual emergencies be reported, but excluded from determining compliance when calculating annualized emissions from the specific baseload unit affected.

Question 4.4

Could any petroleum coke or advance petroleum coke-burning technologies meet the EPS?

LADWP Response:

The LADWP does not have any comments at this time.

Question 4.5

Are micro/small combustion turbines used in baseload applications?

LADWP Response:

The LADWP does not typically use microturbines or small combustion turbines in traditional baseload applications. However, several units operate as baseload at our

main office for new technology research and 50-units operate as baseload units burning landfill gas. Also, there are examples of such applications with some of our customers that have other environmental benefits, such as site remediation of oil fields in which the waste gas would otherwise be flared. In these examples, although small in size they are technically baseload at >60% capacity factor and would be subject to the EPS. It would be desirable to capture energy for electricity production over the wasteful practice of direct flaring. The LADWP recommends that small technologies such as microturbines fall under a "de minimis" threshold as it was not the intent of SB 1368 to preclude such technologies.

Question 4.6

What criteria are used to define a waste fuel? Does the use of a waste fuel result in zero GHG emissions or would there be a formula to calculate avoided GHG emissions? Would current emissions of GHG from a flare that would be avoided with the use of the fuel in a power plant be considered in net emission calculations? How would the GHG emissions be calculated for a unit using a mixture of waste fuels and fossil fuels? How should non-cogeneration qualifying facility units using a waste or renewable fuels calculate net emissions, or should they receive a credit for being a qualifying facility?

LADWP Response:

The LADWP currently uses the following waste fuels to generate electricity:

- (1) Digester gas from the Hyperion Wastewater Treatment Plant
- (2) Landfill gas from several sites

The calculation of net emissions should recognize the environmental benefit of converting these waste fuels to electricity instead of flaring.

> What criteria are used to define a waste fuel?

According to the California Climate Action Registry protocol, biofuels are non-fossil carbon bearing fuels. Examples include landfill gas, digester gas, organic waste, municipal solid waste, wood, wood waste, etc.

> Does the use of a waste fuel result in zero GHG emissions?

According to the California Climate Action Registry, international consensus on the net impact on climate from the combustion of biofuels has not yet been reached (Power/Utility Protocol Version 1, April 2005, page 17). The reporting protocol states that CO2 emissions from biofuels are reported separately from fossil fuel emissions and <u>not</u> added to the total GHG emissions. However, CH4 and N2O emissions from combustion of biofuels are <u>not</u> considered biogenic and <u>are</u> included in the total GHG emissions.

In summary, use of biofuels results in zero CO2 emissions (not counted in the GHG inventory) but CH4 and N2O emissions are counted.

> Or would there be a formula to calculate avoided GHG emissions?

Use of biofuels to generate electricity reduces the consumption of fossil fuels that would otherwise have been burned to generate the same amount of electricity.

Avoided CO2 emissions = (MMBtu heat input from biofuels displaces equivalent MMBtu from fossil fuel) x (fossil fuel CO2 emission factor) = CO2 emissions avoided.

Would GHG emissions from a flare that are avoided by use of the fuel in a power plant be considered in net emission calculations?

Yes, assuming CO2 emissions from biofuels are not counted in total GHG emissions (per current reporting practices), CO2 emissions avoided by burning biofuels in a power plant instead of flaring should be used as emissions credits to offset GHG emissions from other sources.

How would GHG emissions be calculated for a unit using a mixture of biofuels and fossil fuels? For blended fuel facilities, GHG emissions from the fossil fuel and biofuel portions are calculated separately per the Registry's Power/Utility reporting protocol. Emissions from the fossil fuel portion are counted in total GHG emissions, but CO2 emissions from the biofuel portion are reported in a separate category and <u>not</u> included in the total GHG emissions.

How should non-cogeneration qualifying units using waste or renewable fuels calculate net emissions?

Net emissions = (CO2 sequestered) – (CO2 released by combustion)

Should non-cogeneration qualifying units receive a credit for being a qualifying facility?

Yes, renewable projects necessary to meet Renewable Portfolio Standard (RPS) goals should be excluded from having to meet the GHG Emissions Performance Standard (EPS).

LADWP has received renewable energy proposals that use biomass derived from wood waste and municipal solid waste. These examples of plants in the 20MW to 50MW range, while technically may be designed for baseload at >60% capacity factor, are important components in meeting LADWP's RPS goals and should be excluded from EPS regulations. These projects will be designed to meet best available emissions compliance technology. The RPS legislation clearly intended these types of renewable projects to be part of the California renewable energy portfolio, and they should not be excluded due to the new GHG EPS.

Question 4.7

If the CPUC adopts a CO2-only EPS in its regulations, either as a first step or as a reasonable approximation of electricity production GHG emissions, should the Energy Commission follow suit? Should the EPS be phased to address the other GHG emissions from electricity production at a later time? Should we develop a factual record of non-CO2 emission rates from electricity production to be able to set a CO2 and non-CO2 EPS?

LADWP Response:

The LADWP recognizes that SB 1368 intends to apply the EPS to all GHGs, but that the CPUC may adopt a C02-only EPS in its regulations. The LADWP recommends that the Energy Commission adopt a C02-only EPS at this time with the potential to phase in other GHGs under the EPS as protocols are developed to accurately quantify such emissions from the generation of electricity. The LADWP also recommends that the Energy Commission work closely with the Air Resources Board and California Climate Action Registry to ensure that such protocols are the same as what may be developed in relation to reporting protocols developed in relation to AB 32.

As mentioned in previous comments, the LADWP recommends that the Energy Commission adopt an EPS that is either phased in or tiered over time that starts at 1400 lbs/MWh and ramps down over time. A one-size-fits-all standard cannot effectively meet the intent of the legislation to encourage new long-term financial commitments to zero- or low-carbon generating resources without having unintentional consequences if not planned properly.

Question 4.8

Should the POU GHG standard be different than that adopted for the IOUs because of the added legal options to meet their requirement? How are the net emissions calculated in blended contracts?

LADWP Response:

The LADWP recommends that the Energy Commission take into consideration the vertically-integrated structure of POUs that are different from IOUs and other LSEs that are not required to manage generation, transmission and distribution resources. IOUs may not be concerned with firming intermittent resources as that is the responsibility of CAISO. For POU, from an operational perspective, it may be beneficial to have intermittent and/or energy limited renewable energy contracts firmed at the location by other generating resources where the renewable energy is generated. Some systems may not have adequate regulating capability and need to bundle the regulation with the renewable resource.

Additionally, it is very important to note that energy that is scheduled over the Pacific DC Intertie <u>must</u> be firm, as this transmission path currently is unable to allow for dynamic schedules due to the limitations of the DC control system. Wind generation fluctuates in output, so a contract that provides system backup to even out the fluctuation within an operating hour may be considered a blended contract. Before the operating hour, a firm schedule will be agreed upon. But, the wind may under produce from the agreed amount requiring the counterparty to make the contract whole from another resource. However, sometimes the wind generates more than what was agreed and the excess is banked for delivery at a later time.

It is anticipated that the under generation and over generation will net to zero by the end of the month. Contracts with netting provisions should be able to demonstrate that they qualify under SB1368 as meeting the EPS, especially if limits built into the contract minimize the net imbalance.

Question 4.9

If the power comes from a facility, does every unit on site have to meet the EPS? Does every unit at a facility have to meet the 60% capacity factor in order to be included in the EPS compliance calculations? If the power comes from a contract, does every unit or facility in the contract site have to meet the EPS?

LADWP Response:

SB 1368 did not take into account the fact that some powerplants may have both baseload units and peaking or intermediate units located on the same site. As a result, the literal interpretation of SB 1368 would make one believe that peaking units should be captured under the emissions performance standard by the fact that they are located as part of the same power plant. In fact, SB 1368 clearly applies an EPS only to baseload units. The LADWP recommends that the regulations be clarified to reflect such combined unit "arrangements" and apply the EPS to all <u>baseload</u> units at a power plant, and not to all units (including non-baseload units) at a power plant. Therefore, the underlying baseload units behind a contract should conform to this standard, but not underlying non-baseload units of a contract.

Question 4.10

What should be included in the net emissions calculations for "growing, processing and generating electricity from the fuel source"? Should the landfill gas net emissions calculations include GHG sources such as diesel used to dump, compact and cover the municipal solid waste?

LADWP Response:

The State should ensure that the adoption of an EPS does not conflict with efforts of utilities to increase renewables in their resource portfolio. In as much as biomass, biogas, and landfill gas are fuel sources related to a renewable resources under an Renewable Portfolio Standard, the LADWP recommends that they be considered "in compliance" with an EPS.

Question 4.13

Is this a basis for having a case-by-case review of financial commitments that might be made for reliability and/or consumer cost considerations?

LADWP Response:

The LADWP recommends that the CEC provide clear guidance on the EPS to ensure compliance and avoid misinterpretation. A case-by-case review of financial commitments poses many problems for POUs in terms of delaying final approvals by the local decision making body and, thereby, risking the potential loss of energy procurement contracts that have been negotiated. The LADWP recommends that CEC develop an EPS guidance document and update that guidance annually to ensure that misinterpretation of the regulation is minimized. The LADWP also recommends that POUs have the opportunity as deemed necessary to seek timely guidance from the CEC to ensure that concerns that arise related to reliability and consumer costs may be raised and fully explored with CEC as warranted.

Chapter 5: Compliance & Enforcement Alternatives

Question 5.1

Are there additional attributes of a compliance mechanism that should be considered?

LADWP Response:

The LADWP recommends that the compliance mechanism adopted by the Energy Commission provide for effectiveness, transparency, certainty and administrative ease. The LADWP fully supports self-certification as the most effective, transparent, certain, and administratively simple means of ensuring compliance with the EPS. It is critical that the POU be able to quickly and sufficiently determine compliance or noncompliance of a new financial commitment in a timely manner without the additional burden of a gateway review by the Energy Commission that may take several months and data requests before a determination is made. Approval delays have the potential risk of closing windows of opportunity with contracting entities, particularly in the realm of renewable energy contracts. Such delays will have impacts on costs of a POU to secure generation resources economically.

Question 5.2

Is this typology sufficient? Are there other approaches to compliance and verification that should be discussed?

LADWP Response:

The LADWP recognizes that SB 1368 places the Energy Commission in a unique role in relation to POUs that have an established governing structure at the local level. The LADWP is not aware of other approaches outside of self-certification that would provide greater effectiveness, transparency, certainty and administrative ease. As mentioned in response to question 5.4, the LADWP supports efforts to inform the public of upcoming actions to be taken up by a POU that are subject to an EPS, and recommends that POUs and the Energy Commission post such information and links on their respective websites. POUs may also make such information available in bill inserts.

Question 5.3

Are there potential problems with self-certification that are not considered above?

LADWP Response:

As previously mentioned in LADWP's preliminary comments and in oral testimony at the CEC workshop on December 8, 2006, LADWP believes self-certification is the preferred and most effective means of compliance with SB 1368. The LADWP does not support a

gateway review mechanism.

Question 5.4

Are there existing models of self-certification from other industries that should be considered?

LADWP Response:

Examples of other self-certification including, but are not limited to 1) FERC reliability rules, 2) reporting under the State RPS, and 3) WECC regulations. To ensure increased transparency, the LADWP recommends that the State maintain a posting of upcoming actions related to new financial commitments for electricity procurement that are being taken up by utilities subject to SB 1368. The LADWP additionally supports the publishing of such information on a utility's bill insert, similar to the requirement to post a utility's Power Content Label.

Question 5.5

Even given self-certification, is there a need for a mechanism that audits compliance filings? If so, what auditing mechanism (e.g., data requests from Energy Commission staff, independent auditing) would be appropriate?

LADWP Response:

The LADWP already submits annual GHG emissions reporting to the California Climate Action Registry that is then subject to third-party verification/certification. The LADWP recommends that the Energy Commission accept this certified GHG emissions reporting as sufficient verification of compliance with SB 1368 and not require additional auditing that is duplicative of on-going CCAR reporting. Additionally, the LADWP recommends that when voluntary reporting is made mandatory under AB 32 that the GHG report submitted to ARB be considered sufficient verification of compliance with SB 1368.

Question 5.6

Should prior review and approval be required of all procurement that is subject to the standard?

LADWP Response:

As previously stated, the LADWP opposes prior review and approval by the Energy

Commission of energy procurement contracts subject to the EPS.

Question 5.7

How could prior review and approval be structured so as to minimize delays? How can it best be meshed with existing reporting to the Energy Commission by the POUs and the Energy Commission's decision-making processes?

LADWP Response:

As previously stated, the LADWP opposes prior review and approval by the Energy

Commission of energy procurement contracts subject to the EPS.

Question 5.8

Does a preferred standard require performance monitoring for the purpose of assessing compliance for certain resources? What types of resources? What data might be needed to evaluate the compliance of these resources?

LADWP Response:

LADWP recommends that performance monitoring be provided for through annual

reporting of GHG emissions to the CCAR and later the ARB under AB 32.

Question 5.9

Is self-certification a reasonable option for new construction, repowerings and purchases of existing facilities? If so, what if any actions on the part of the POU would constitute self-certification? Is there a (legal) need for a certificate filing?

LADWP Response:

The LADWP recommends that self-certification be imbedded into the existing approval

process of a POU (i.e. Board and/or City Council).

Question 5.10

If there are multiple sources of data that can establish eligibility under the standard, should the Energy Commission specify which data are required or preferred?

LADWP Response:

Please see LADWP's response to question 3.13 (second question).

Question 5.11

Are there specific circumstances under which self-certification may not be an appropriate compliance mechanism for these resources? Are there instances when there may not be sufficient data filed with the Energy Commission or local permitting authorities, or otherwise available so as to allow for self-certification? For example, can filings with AQMDs misleadingly indicate that (a) the facility should be subjected to the EPS screen when it actually shouldn't, or (b) fails to meet the pass the EPS screen when it actually does so? If so, are there other data to support self-certification or would a review mechanism be necessary?

LADWP Response:

Please see LADWP's response to question 3.13 (second question).

Question 5.12

Is self-certification sufficient for unit-contingent contracts where historical emissions data is readily available? If not, what financial or performance data should be submitted as part of the compliance and verification process?

LADWP Response:

The LADWP does not currently have any long-term unit-contingent contracts *outside* of our renewable energy procurement contracts. EIA-submitted data should be all that is necessary for verification of existing units. For new units, the LADWP recommends that the related energy procurement contract include specific boilerplate language that requires the vendor provide energy that meets the GHG emissions performance standards established under SB 1368.

Question 5.13

Should the Energy Commission maintain a list of existing facilities that meet the EPS for the purpose of determining the eligibility of resources? Should the list also include those facilities that do not meet the EPS given available data?

LADWP Response:

The LADWP agrees that a list of existing facilities that meet the EPS would streamline the process of determining whether a resource is eligible. However, the LADWP recommends that if such a list is developed that it be dynamic and be subject to regular review and approval by the Energy Commission to ensure that any new emissions data is incorporated in a timely manner.

Question 5.14

If data is unavailable, e.g., a contract is signed with an existing unlisted unit whose thermal load is unknown, how should a determination be made?

LADWP Response:

The LADWP does not anticipate the above stated scenario. Once the EPS is adopted, the LADWP proposes to incorporate contract language that will ensure that an energy supplier meets compliance with the standard. Should the energy supplier be found in non-compliance during the contract period, the LADWP would require corrective actions be taken immediately.

Question 5.15

If a facility is undergoing/has undergone modifications (to allow it to meet an emissions standard), and if publicly available data does not show how modifications will change historical emissions sufficiently to meet the EPS, how should a determination be made?

LADWP Response:

The LADWP recommends that boilerplate contract language be developed and included on all new long-term contracts for energy procurement that hold the vendor liable for meeting the EPS. Such boilerplate language may also include a requirement that the vendor calculate and submit auditable emissions data to the purchaser of the electricity that verifies and demonstrates compliance with the EPS.

Question 5.16

If the emissions content of system power is based on geographic considerations, what information could be used to assign energy from unspecified sources to a geographic region? How could this information be reported or verified?

LADWP Response:

This information can be compiled using Energy Information Administration (EIA) data for each geographic region. However, regions are not identified on energy tags as sources. It would be more verifiable to compile information for systems and facilities to match the sources shown on the tags. The overall accounting and compliance demonstration would have a paper/electronic trail from the contract to the scheduling and flow of energy with sources clearly identified so that published emission rates could be applied.

Question 5.17

How should the compliance of such contracts be assessed? If contracts which provide unspecified power are deemed non-compliant, should inclusion of a clause in the contract which limits the share of energy that may come from unspecified or ineligible sources qualify the contract for treatment as unit-contingent?

LADWP Response:

LADWP does not believe that unspecified power, unto itself, should deem a contract non-compliant. Unspecified power should be considered system power with a system GHG emissions metric used for calculation purposes. Boilerplate contract language can limit the amount of system power provided so that the contract maintains compliance with the EPS by restricting overall blended GHG emissions (measured in pounds per megawatt hour) below the standard.

Question 5.18

Are there mechanisms that can be effectively used as part of a compliance and verification process to demonstrate that a seller is providing energy solely or primarily from eligible powerplants, even if the contract does not specifically require that he do so?

LADWP Response:

The LADWP recommends that the CEC provide POUs with specific contract language that is to be included in all new long-term contracts for electricity procurement that includes specific verification requirements of the vendor.

Question 5.19

Is self-certification a suitable compliance mechanism for all blended contracts? If not, what types of blended contracts might require another mechanism?

LADWP Response:

LADWP maintains that self-certification is adequate and appropriate based on publicly available data or firm contract commitments.

Question 5.20

Is it necessary or desirable to specify a minimum "renewable share" of blended contracts that include system power?

LADWP Response:

LADWP believes that a minimum renewable share is appropriate, but it should not necessarily be a fixed number. Instead, it should be one that is calculated such that compliance with the EPS is maintained.

Question 5.21

What information might be necessary to verify the eligibility of a blended contract and how can it be secured/provided?

LADWP Response:

The LADWP recommends that a blended contract should specify the maximum amount of net imbalance energy on a monthly basis and the type of back-up energy used for making up the imbalance. The maximum amount should be based on a calculation such that the compliance standard is maintained.

Question 5.22

What should the Energy Commission's position be on this issue relative to POU procurement practices? Are regulatory provisions needed to prevent back-to-back contracts for the same resource of less than five years? Are there circumstances under which such contracts are justified? If so, how should a determination be made?

LADWP Response:

Short term procurement of one year or less is necessary to respond to changes in system conditions such as load estimates, planned and unplanned outages, and other system commitments. Since short term decisions on these agreements occur at different times, there is typically not going to be any similarities between contracts as price, term, quantity, delivery location, supplier, and product type may vary. The regulating agencies, in LADWP's case the Board of Water and Power Commissioners and the Los Angeles City Council, can self-certify that a short-term contract is not purely an extension of a prior contract by comparing the terms and conditions.

Chapter 6: Enforcement Options

Injunctive relief should be the CEC's sole and exclusive enforcement tool

The principal question with respect to enforcement is whether the CEC's enforcement options include the imposition of a penalty upon a POU. The LADWP submits that the CEC may not impose penalties, because SB 1368 does not expressly provide for such penalties. In reviewing the legality of an administrative regulation, courts will look to whether the regulation is "within the scope of the authority conferred" and is "reasonably necessary to effectuate the purpose of the statute." *Agricultural Labor Relations Board v. Superior Court of Tulare County* (1976) 16 Cal.3d. 392. Despite its clear ability to do so, the State Legislature in SB 1368 did not confer upon the CEC the authority to impose penalties upon POUs. In addition, no such authority is found in the Warren-Alquist Act, enabling the agency to adopt regulations. Thus, the ability to impose a penalty is not conferred by SB 1368 itself nor the legislation that created the CEC.

Additionally, penalties are not "reasonably necessary to effectuate the purpose of the statute." The CEC has available to it the equitable remedy of an injunction, namely a writ of mandate, to compel compliance by the POU. *Code of Civil Procedure* Section 1085 expressly provides that any party with a beneficial interest can seek a writ of mandate to enjoin the violation of state law. The issuance of a writ of mandate is permitted to compel the performance of an act that the law specially enjoins and the writ will lie where a petitioner has no plain, speedy, and adequate alternative remedy...[and] is available to correct an abuse of discretion. *Kong v. City of Hawaiian Gardens Redevelopment Agency* (2002) 101 Cal. App.4th 1317. Clearly, any facility or contract approved by a POU that violates the rules promulgated pursuant to SB 1368 would be an abuse of discretion and, as such, subject to a writ of mandate.

On a practical level, moreover, a POU already faces extreme financial risks if it constructs a facility or enters into a long-term procurement contract that violates an emissions performance standard or other provision of the Public Utilities Code. Any

"new ownership investment" such as the construction of a new generating facility involves millions of dollars in investment and/or debt on the part of the POU. Losing this huge investment because a new facility is found to violate state emissions rules represents an intolerable risk to any POU and a catastrophic financial loss. In addition, the POU also would be faced with the burden of finding replacement energy for any new facility found to be in violation. Similar dire and catastrophic consequences face any POU that enters into a long-term procurement contract that does not comply with emissions regulations. The financial harm that would be visited upon a violating POU and a resulting injunction is so grave as to virtually guarantee that the emissions rules developed from this proceeding will be strictly observed. Providing the CEC with the ability to "pile on" with additional penalties would likely not further serve any purpose of deterrence or punishment. Injunctive relief should be the sole and exclusive enforcement mechanism.

Question 6.1

Is there agreement that an enforcement mechanism should be identified in the regulations?

LADWP Response:

Yes. But as noted above, injunctive relief should be the sole enforcement mechanism identified in the regulations. Additionally, the LADWP urges that before seeking injunctive relief, the CEC provide the POU a reasonable opportunity to cure.

Question 6.2

Are there any other options for enforcement under this scenario?

LADWP Response:

Title 20, section 1230 et seq. (complaint and investigation procedure) contemplate investigation and enforcement of provisions relating to power plant siting and site certification. Given that SB1368 does not authorize penalties, utilizing the complaint and investigation procedure as articulated in Title 20 section 1230 et seq. may not be warranted. If a complaint and investigation process is used, it should not include a penalty.

Question 6.3

Are there any other options for enforcement under this scenario?

LADWP Response:

Any additional enforcement mechanisms should be specifically tailored to POUs. One additional mechanism that might provide such tailoring is an order to show cause (OSC) procedure whereby a POU found to be noncompliant would be provided a written statement by the CEC and given an opportunity to respond and provide evidence at a hearing before the CEC. Such a mechanism should provide procedural due process safeguards for the affected POU.

Questions 6.4

Are penalties the right approach? If so, what types of penalties would be appropriate?

LADWP Response:

No. As discussed above, penalties were not authorized by the Legislature.

Question 6.5

Are there any other approaches to quickly correct a noncompliant contract?

LADWP Response:

Unknown at this time.

Question 6.6

Does after-the-fact enforcement satisfy the Statute's goals of reducing California's exposure to costs associated with future regulation of greenhouse gases and "potential exposure of California consumers to future reliability problems in electricity supplies?"

LADWP Response:

Yes, if the enforcement is limited to injunctive relief. As noted above, injunctive relief, such as a writ of mandate, provides a powerful and effective enforcement tool.

Question 6.7

Are penalties an appropriate initial enforcement mechanism? If so, what types of

penalties could serve as an effective deterrent under this scenario? Is it possible to fully correct an investment in a noncompliant facility after it has been made? If so, how?

LADWP Response:

For the reasons stated above, penalties are not an appropriate enforcement mechanism.

Thank you for the opportunity to provide additional comments on the implementation of SB 1368 Emission Performance Standard. The LADWP recognizes that the rulemaking schedule imposed by SB 1368 provides a very limited opportunity to fully and adequately explore and address critical issues and conflicts that have been raised by various parties, and that such conflicts may ultimately be resolved only through cleanup legislation. The LADWP is available to discuss and provide any necessary clarification of our comments, and work with the Energy Commission and staff to ensure that the EPS meets the intent of SB 1368, while minimizing negative impacts to system reliability and unnecessary cost to ratepayers. The LADWP supports the establishment of an effective Greenhouse Gas Emissions Performance Standard and appreciates the efforts of CEC staff to carefully address the issues raised above.

Respectfully Submitted,

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