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July 28, 2009

Ms. Manpreet Mattu  
Office of Climate Change  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

Dear Ms. Mattu:

Subject: Los Angeles Department of Water and Power (LADWP) Comments on the June 5, 2009  
Workshop on "Reporting and Verification in a Cap-and-Trade Program"

LADWP participated in the June 5, 2009 workshop on Reporting and Verification in a Cap-and-Trade Program, and appreciates the opportunity to provide additional comments regarding this topic.

As a Charter Member of the California Climate Action Registry (California Registry), LADWP has gained a great deal of valuable experience reporting and verifying greenhouse gas (GHG) emissions inventories with the California Registry. In addition, this year LADWP prepared and submitted our first GHG emissions reports to the California Air Resources Board (ARB) under the "Regulation for the Mandatory Reporting of Greenhouse Gas Emissions" (Mandatory Reporting Regulation).

Based on our experience with GHG emissions accounting and reporting and our perspective with regards to electric utility operations, LADWP respectfully submits the enclosed comments and recommendations regarding reporting and verification for your consideration.

If you have any questions regarding these comments or would like additional information, please contact Ms. Cindy Parsons at (213) 367-0636.

Sincerely,

James H. Caldwell Jr.  
Assistant General Manager  
Environmental Affairs

CP:sc

Enclosure

c/enc: Richard Bode (ARB)  
Doug Thompson (ARB)  
Pam Burmich (ARB)  
Cindy S. Parsons

Send Via Email:

[www.arb.ca.gov/capandtrade/comments.htm](http://www.arb.ca.gov/capandtrade/comments.htm)

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**Los Angeles Department of Water and Power (LADWP)  
Informal Comments on the June 5, 2009, California Air Resources Board workshop  
"Reporting and Verification in a Cap-and-Trade Program"**

**1) Need to clarify the Mandatory Reporting Regulation and harmonize the data collection structure with the intended use of the data**

Since data collected under the Mandatory Reporting Regulation will be used for compliance with future GHG emission regulations and potential cap-and-trade programs, it is essential that the reporting requirements be crystal clear and the data collection structure be adequate to properly account for California GHG emissions and avoid the double counting of emissions.

ARB's Mandatory Reporting Regulation was developed and adopted in 2007, prior to overall design of California's GHG regulatory program under the California Global Warming Solutions Act of 2006 (AB32). Now that ARB has adopted the AB32 Scoping Plan and has a better understanding of how data collected under the Mandatory Reporting Regulation will be used, it is time to revisit the reporting regulation to ensure the data collection structure is compatible with the intended use of the data under California's AB32 program as well as the regional Western Climate Initiative and federal GHG regulatory programs.

For example, ARB's *AB32 Cost of Implementation Fee Regulation* will be the first regulation to utilize data collected under the Mandatory Reporting Regulation. During the rulemaking process, it became apparent that the way in which Energy Exchange transactions are reported will result in the double counting of this electricity for purposes of assessing fees. To resolve this issue, we recommend that ARB revise the electricity transaction data collection structure in the Mandatory Reporting Regulation to distinguish energy exchanges from regular electricity purchases and sales (see comment 2). This modification should be made as soon as possible, so that the 2009 data reported in 2010 will be reported properly to avoid the double assessment of AB32 fees on exchanged energy.

In addition, now is a good time to revisit the reporting regulation and clarify the reporting requirements based on lessons learned during the first round of reporting. ARB should address and resolve the ambiguities and issues identified with the reporting requirements in preparation for the second round of reporting in 2010.

**2) Energy Exchanges should be reported in a separate category**

Energy exchanges are agreements between two electricity providers to trade energy. There are a variety of reasons for exchanging energy, including stranded generation, transmission curtailments, the opportunity to reduce transmission losses, and other operational reasons. Energy exchanges may occur simultaneously (receive energy at one point and deliver energy at a different point), or involve a time delay between receipt and return of the energy. Exchanges increase operational efficiency and create environmental benefits through "supply side conservation". Other benefits of energy exchanges include optimizing the use of generating resources and transmission capacity, avoiding the construction of additional generating capacity to serve peak demand, and helping to keep the cost of electricity affordable for ratepayers.

Currently, ARB's Mandatory Reporting Regulation requires California Retail Providers to report energy exchanges as a separate purchase and sale, with no linkage between the two sides of the exchange. Reporting an exchange in this manner will result in double counting if the exchange involves importing and exporting of energy, and if California imposes a GHG emissions compliance obligation on the imported energy as well as on the in-state generation or system energy that is returned.

For example,

- If the exchange is simultaneous and the imported energy equals the exported energy, actual in-state generation will remain the same whether or not the exchange takes place, and counting the import side would result in assessing a California GHG emissions compliance obligation on energy that was neither generated nor consumed in California. This type of exchange is analogous to wheeling of electricity through California, and results in no additional in-state generation or GHG emissions. The difference between simultaneous exchanges and wheeled power is that in an exchange, title to the power changes hands, whereas title does not change hands when power is wheeled.
- If the exchange is non-simultaneous, actual in-state generation is reduced by the amount of the import (i.e., the import side of the exchange offsets generation of the same amount of electricity in-state), and the energy is later returned from either in-state generation or system power (i.e., the generation that would have occurred to serve California load in the absence of the exchange). The GHG emissions for the returned (offset) energy are already being captured through mandatory reporting to ARB by in-state generating facilities and energy imports by retail providers and marketers. If the return energy comes from the same generating resources that were backed down due to the import, the exchange results in no additional GHG emissions than would otherwise have occurred. If the return energy comes from different generating resources, the compliance obligation (if any) should only be on the difference in emissions.

These examples illustrate how exchanges can result in "net zero" transactions (energy in = energy out) that neither increase nor decrease California GHG emissions. Counting GHG emissions on both sides of an energy exchange would treat a "net zero" transaction as equal to an export (clearly an illogical result), incorrectly inflate California's GHG emissions inventory, and result in two GHG emission compliance obligations on energy that should be counted only once. In addition, imposing two GHG emission compliance burdens on California Retail Providers and ratepayers could discourage retail providers from doing energy exchanges and eliminate the environmental and operational benefits that exchanges provide, which would be bad policy.

To fix this double-counting issue, energy exchanges should be reported as linked transactions in a separate "Exchanges" category to distinguish them from regular energy purchases and sales. Reporting exchanges as linked transactions will enable calculation of the net difference between the in-flow and out-flow so that exchanges can be properly treated as "net zero" (or net difference) transactions for purposes of California GHG emissions compliance. To accomplish this, LADWP recommends the following amendment to the Mandatory Reporting Regulation:

Mandatory Reporting Regulation section 95111(b)(1)(A)

9. Energy Exchanges. Specify Report energy exchanges by counterparty, aggregated on an annual basis as follows: 1) electricity received under exchange agreements (as measured at the point of receipt), as purchases and 2) electricity delivered under exchange agreements (as measured at the point of delivery), as wholesale sales. The retail provider or marketer shall retain, for purposes of verification, exchange agreement contracts, NERC e-tags, settlement data, or other information to confirm the transactions. Energy exchanges in which both the point of receipt and the point of delivery are outside California shall be exempt from this requirement.

**3) Renewable biogas transported through natural gas pipelines - alternate method for quantifying and reporting fuel usage when separate meter data is not available**

Renewable biogas that was generated at landfills and manure digesters may be injected into natural gas pipelines and transported to end users such as electric generating facilities. Since the renewable biogas is delivered through the natural gas pipeline, there is no separate fuel meter at the facility to measure the quantity of biogas received, therefore an alternate method is needed to quantify and report the amount of biogas consumed by the facility. LADWP recommends that section 95103 of the Mandatory Reporting Regulation be amended to allow the use of fuel purchase contracts to report the quantity of renewable biogas delivered through natural gas pipelines as follows:

Mandatory Reporting Regulation section 95103(a)

(2) Stationary Sources. The operator shall identify, calculate, and report CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, SF<sub>6</sub>, HFC and PFC emissions from stationary combustion, process, and fugitive sources at the facility as specified in sections 95110 through 95115. The operator shall calculate and report each GHG separately from each fuel type used. The operator shall monitor and report fuel consumption for the facility, and for each process unit or group of units where fuel use is separately metered. If mixed fuels are delivered to the facility through a single fuel meter, such as landfill gas or biogas delivered through natural gas pipelines, the facility may use fuel purchase contracts to determine and report the quantity of each fuel type consumed by the facility.

**4) Emissions from biomass-derived fuels should be considered "carbon neutral"**

In order to meet California's 33% Renewable Portfolio Standard, California electric utilities need as many renewable generation options as possible to meet that goal. LADWP encourages ARB to consider emissions from renewable fuels as "carbon neutral" and not subject to fees or GHG emissions compliance obligations under AB32. Adopting such a policy will encourage investment in landfill gas-to-energy and other projects that use biomass or biogas to displace the use of fossil fuels to generate electricity, thereby reducing fossil GHG emissions. Any fuel that is considered eligible for compliance with California's Renewable Portfolio Standard should also be considered carbon neutral by ARB, to ensure consistency in policy objectives and harmony between California regulations.

In addition, since no technology currently exists to reduce GHG emissions from existing fossil fuel fired power plants, fuel switching to biomass and biogas can reduce fossil GHG emissions from these sources and help California meet its GHG emission reduction goal.

**5) Reporting electricity received from specified sources - quantity of electricity should be as measured at the point of receipt rather than "as measured at the busbar"**

The Mandatory Reporting Regulation is inconsistent in how electricity received from specified and unspecified sources is reported:

- For specified sources, report the quantity of electricity as measured at the power plant's busbar (substation).
- For unspecified sources, report the quantity of electricity at the first point of receipt for which the reporter has information.

LADWP recommends that, for consistency and accuracy, the quantity of electricity received from both specified and unspecified sources should be reported as measured at the first point of receipt.

Contracts to purchase electricity from specified generating facilities vary as to the point of delivery to the recipient. Below are some examples showing the range of possibilities:

- Typical Arrangement: The electricity is delivered to the recipient at the power plant's busbar, or at the end of a radial line from the busbar.
- Re-delivery Contracts: Due to the intermittent nature of wind power, the contract may include "shaping" of the electricity by another party before it is delivered to the recipient. With this type of contract, the intermittent wind power is absorbed into an intermediary's system, and then re-delivered at a constant rate to the recipient at a trading hub. In this case, there is no direct transmission path between the wind farm and the point of receipt, therefore calculation of upstream line losses could be difficult.
- Unbundling and Rebundling of Renewable Energy Credits (RECs): If the contract involves unbundling and rebundling of RECs by the counterparty as the California Energy Commission Renewable Eligibility Guidelines currently allow, the point of receipt for the electricity may be hundreds of miles away from the actual point of generation. For example, a southern California retail provider purchases renewable energy from a wind farm in Wyoming. To minimize the transmission losses, the contract allows for the RECs to be unbundled from the wind energy and rebundled with brown energy at the Palo Verde trading hub in Arizona, then delivered to the recipient at Palo Verde.

In recognition of the variety of delivery points for specified energy contracts, LADWP recommends that the Mandatory Reporting Regulation be amended to report electricity received from specified generating facilities as measured at the first point of receipt rather than "as measured at the busbar".

Mandatory Reporting Regulation section 95111(b)(1)(A)

2. For electricity from specified sources, specify the amount of electricity as measured at the first point of receipt for which the reporting entity has information.

This would eliminate the inconsistency in how electricity received from specified and unspecified sources is reported, and take the guesswork out of estimating upstream line losses if the contract specifies a point of delivery other than the busbar.

#### **6) Threshold for Reporting Electricity Transactions**

ARB should establish a minimum reporting threshold of one megawatt-hour (MWh) for electricity transactions. Electricity purchases below one MWh should be considered de minimis and not subject to reporting. For example, local electric utilities are required to purchase surplus generation from customers with on-site generation (such as solar panels, microturbines, etc). In some cases, the customer consumes most of their on-site generation, and sells only a small quantity (less than one MWh) of surplus electricity to the local electric utility over the course of a year. Since ARB's reporting software requires the data for electricity transactions to be in whole numbers, it automatically defaults to zero for any data less than one MWh, therefore the minimum reporting threshold should be set at one MWh. LADWP recommends the Mandatory Reporting Regulation be amended as follows:

Mandatory Reporting Regulation section 95111(b)(1)(A)

6. Retail providers shall aggregate and specify electricity transactions by counterparty; electricity transactions totaling less than one MWh per year should not be reported;

#### **7) Potential for double counting of emissions between facility reporting and upstream reporting of transportation fuels and natural gas**

Currently, facilities subject to the Mandatory Reporting Regulation have to report fuel usage and emissions from their large emission sources as well as other small on-site combustion sources such as emergency back-up fire pumps, emergency water pumps, building heaters and water heaters that are not specifically exempt from reporting. Facilities also have the option to voluntarily report emissions from mobile sources such as vehicles.

The AB32 Scoping Plan calls for the addition of transportation fuels and natural gas to the compliance program starting in 2015. When that occurs, the same fuels (natural gas and diesel) consumed and reported by the facilities will also be reported upstream by the fuel suppliers, resulting in double reporting and potential double counting of the same emissions.

To simplify the reporting and reduce the potential for double counting, LADWP recommends that ARB consider limiting the emission sources reported by the facilities to only large emission sources and those not captured under the upstream reporting. To accomplish this, the list of equipment exempt from the Mandatory Reporting Regulation should be expanded to include small emission sources that will be captured under the upstream reporting of transportation fuels and natural gas, such as emergency fire pumps, emergency water pumps, furnaces, building heaters, water heaters, autoclaves, steam cleaners, etc.

Doing so will also remove inconsistencies in the treatment of similar emission sources. For example, section 95101(c) of the reporting regulation exempts emergency generators from reporting. However, other emergency engines such as water pumps and fire pumps with similar hours of operation and emissions are not exempt from reporting, even though they are also designated as emergency backup engines in their permit-to-operate issued by the local air quality management district. Therefore, if a facility subject to the Mandatory Reporting

Regulation has both an emergency generator and an emergency water or fire pump on site, they have to quantify and report emissions from the emergency water pump or fire pump but not the generator. To resolve this inconsistency, LADWP recommends that all types of emergency backup engines should be exempt from reporting.

#### **8) Process for correcting and submitting a revised annual GHG report**

ARB should recognize that even with a facility's best efforts to submit a complete and accurate annual GHG emissions report, corrections may be needed if the data used to prepare the report is subsequently revised (such as due to settlement of electricity purchase transactions), or if calculation or data entry errors are identified during the audit and verification process. LADWP recommends that ARB provide an administrative process for reporters to submit a revised version of their annual GHG emissions report to ensure that the data used for compliance is as accurate as possible.

#### **9) Tiered approach to GHG reporting and verification enforcement**

LADWP encourages ARB to consider adopting a tiered approach to enforcement, similar to the approach recommended to the U.S. Environmental Protection Agency (EPA) by Jerry Worsham at the EPA Mandatory GHG Reporting Rule public hearing on April 16. His recommendation was to adopt a flexible enforcement policy that employs a range of enforcement actions commensurate with the nature of the violation, starting with Warning Letters or Notices-to-Correct for minor deficiencies and reporting errors, and escalating up the scale of enforcement actions and penalties for more serious violations. Considering the complexity of GHG emissions reporting and verification, this seems like a reasonable approach that could be utilized by ARB to obtain complete and accurate data for administering the AB32 program (which is really the objective of the reporting regulation), without penalizing reporters for honest errors or corrections resulting from the verification process.

#### **10) Need for clarification and interpretation of the reporting requirements, and an administrative process to resolve different interpretations of the reporting regulation**

Ambiguity in the reporting regulation language can lead to different interpretations of the reporting requirements. For example, section 95111(b)(1)(A)(2) of the Mandatory Reporting Regulation states "For electricity from specified sources, specify the amount of electricity as measured at the busbar." This can be interpreted several ways:

- Does this mean report the total MWh received at the busbar, regardless of whether the electricity is subsequently delivered for consumption in California or sold out-of-state?
- or
- Does this mean report only the MWh actually imported for consumption in California, as measured at the busbar?

LADWP recommends that ARB provide clarification and interpretation of the reporting regulation, as well as post responses to questions and comments received during the first round of reporting on the GHG Reporting website. This will provide a common interpretation of the reporting requirements for use by reporters, verifiers and ARB's Enforcement Division.

In addition, ARB should provide an administrative appeals or mediation process to resolve differing interpretations of the reporting regulation.