### Department of Water and Power



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December 15, 2010

Clerk of the Board Air Resources Board 1001 I Street, 23<sup>rd</sup> Floor Sacramento, CA 95814

Subject:

Comments on Proposed Amendments to the "Regulation for the

Mandatory Reporting of Greenhouse Gas Emissions"

Ladies and Gentlemen:

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the proposed amendments to the California Air Resources Board (ARB) "Regulation for the Mandatory Reporting of Greenhouse Gas Emissions" (MRR) that were released for public review and comment on October 28, 2010.

LADWP reviewed the MRR from an implementation perspective as well as how the reporting regulation will interrelate with the ARB Cap-and-Trade Regulation and the AB32 Cost of Implementation Fee Regulation. These comments are based on the workability of the proposed requirements, as well as our real world experience with reporting and verifying greenhouse gas (GHG) emissions under the California Climate Action Registry, the existing ARB mandatory greenhouse gas reporting regulation, and many years of reporting emissions to the local air quality management district and U.S. Environmental Protection Agency (EPA).

Our main concerns with the proposed amendments to the MRR are summarized below:

- 1) <u>Enforcement</u>: we identified the following issues with the proposed enforcement language:
  - a. The proposed enforcement language would subject minor errors in the report that are found and corrected during the verification process to daily violations and penalties.

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- b. The proposed enforcement language would impose violations for "Each failure to measure, collect, record or preserve information...", even though section 95129 of the ARB MRR allows the use of missing data procedures when equipment fails to measure or record data.
- c. The proposed enforcement language appears to be inconsistent with the EPA MRR enforcement language with regards to data collection, records retention, and use of methodologies specified in the rule.
- d. There is overlap between the ARB MRR and ARB Cap-and-Trade Regulation proposed enforcement language, resulting in potential double violations and penalties for the same ton of emissions.
- 2) <u>Verification of Biomass-derived Fuels</u>: we identified the following issues with the proposed upstream verification requirements for biomass-derived fuels:
  - a. Requiring each purchaser of biomass-derived fuel to have their verifier conduct a site visit "to each biomass-derived fuel entity in the chain of custody for that fuel" will result in duplicative verification efforts, since multiple California entities may purchase biomass-derived fuel from the same supplier. Verification of biomass-derived fuels needs to be simplified and streamlined, and biomass-derived fuel suppliers should be treated as an Asset Controlling Supplier.
  - b. Requiring site visits to out-of-state landfills will add significant time and expense to the verification process.
  - c. Restricting biomass-derived fuels to only existing contracts (in place by January 1, 2010) and fuel suppliers will discourage the development of additional biomass-derived fuel sources. This is contrary to the policy objective to encourage the use of biomass-derived fuels to help reduce fossil GHG emissions.
  - d. The provision requiring the verifier to determine if anyone in the chain of custody of the biomass-derived fuel has applied for any type of offsets or credit for GHG reductions may be unnecessary, since there is no possibility of double counting the reduction (capture of the methane) credited under the ARB Livestock Manure (Digester) Project compliance offset protocol, and the beneficial use of the biomethane to displace fossil fuel for generating electricity or other purposes.

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> e. It is not feasible to require the verifier to determine that the biomassderived fuel was physically delivered to the reporting entity. If the biomethane is injected into the natural gas pipelines, it is impossible to track molecules of gas from the source to the point of combustion. Verifying that the biomethane was injected into the gas supply should be sufficient.

LADWP appreciated the opportunity to meet with ARB staff on November 17, 2010 to discuss our comments and concerns. Enclosed are our detailed technical comments on the proposed amendments to the ARB MRR.

We request that the Board ask staff to continue working with stakeholders and to make appropriate changes to the regulation to address and resolve these and other concerns.

Thank you for your consideration of these comments. If you need additional information, please contact Ms. Cindy Parsons at (213) 367-0636.

Sincerely,

Mark J. Sedlacek

**Director of Environmental Affairs** 

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CP:lr

Enclosure

c: Ms. Cindy S. Parsons

Los Angeles Department of Water and Power - Technical Comments on the Proposed Amendments to the California Air Resources Board "Regulation for the Mandatory Reporting of Greenhouse Gas Emissions" (October 28, 2010)

## Subarticle 1 General Requirements for Greenhouse Gas Reporting

**Section 95102: Definitions** 

A. The definitions of "Electricity Wheeled through California" and "Imported Electricity" should be revised to include simultaneous energy exchanges to be consistent with the AB32 Fee Regulation.

Data reported under the California Air Resources Board (ARB) "Regulation for the Mandatory Reporting of Greenhouse Gas Emissions" (MRR) needs to be collected in a manner that is consistent with its intended use. For example, data reported under the MRR will be used to assess AB32 fees under the AB32 Cost of Implementation Fee Regulation (Fee Regulation), and used to determine each entity's compliance obligation under the proposed "California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Regulation).

When developing the Fee Regulation, ARB staff recognized that simultaneous energy exchanges (power transactions in which imported power is simultaneously exchanged for exported power) were functionally equivalent to wheeling electricity through California. In order to avoid charging AB32 fees on electricity that merely passes through California, the Fee Regulation excluded both wheeled power and simultaneous energy exchanges from its definition of "Imported Electricity". To be consistent with the Fee Regulation and to facilitate the calculation of AB32 fees, the MRR should be revised such that simultaneous energy exchanges are reported in the wheeled power category rather than as a separate import and export.

Therefore, the definitions of "Electricity Wheeled through California" and "Imported Electricity" in section 95102 of the MRR should be revised to include simultaneous energy exchanges as follows:

95102(a)(104) "Electricity wheeled through California" means electricity that is generated outside the state of California and delivered into California with final point of delivery outside California, including power transactions in which imported power is simultaneously exchanges for exported power.

95102(a)(170) "Imported Electricity" means electricity generated outside the state of California and delivered to serve load inside the state of California.

. . .

Imported electricity does not include electricity wheeled through California, which is electricity that is delivered into California with final point of delivery outside California as defined in section 95102(a)(104).

#### Section 95107: Enforcement

#### A. Original enforcement language in 95107(a) should be retained.

One of the proposed amendments to the MRR is to delete the existing language in Section 95107(a) of the MRR which states:

#### Existing section 95107(a):

"Knowing submission of false information, with intent to deceive, to the Executive Officer or verification body, shall constitute a single, separate violation of the requirements of this article for each day after the information has been received by the Executive Officer."

and replace it with the following:

#### Revised section 95107(a):

"Each day or portion thereof that any report required by this article remains unsubmitted, is submitted late, or contains information that is incomplete or inaccurate within the level of reproducibility of a test or measurement method is a separate violation. For purposes of this section, "report" means any emissions data report, verification statement, or other record required to be submitted to the Executive Officer by this article."

It is appropriate that the enforcement structure should treat knowing submission of false information differently than minor unintentional mistakes. Knowing or intentional submission of inaccurate information should be subject to a greater penalty. Minor, unintentional errors should not be subject to the same enforcement penalties.

However, the proposed replacement language would eliminate this important distinction. The original language in Section 95107(a) should be retained to ensure that submission of false information is treated differently than unintentional minor reporting errors.

### B. Reports should be considered accurate if they do not contain a material misstatement.

It appears the language added to revised section 95107(a) seeks to establish a standard for determining whether a report contains information that is inaccurate. However, the proposed terminology "...within the level of reproducibility of a test or measurement method..." is not defined in the MRR nor explained in the Initial Statement of Reasons, and the ARB reporting staff was unable to provide clarification of how this would be applied in practice.

Rather than rely on uncertain language that is subject to interpretation, a better approach would be to determine the accuracy of a report based on a standard that is well defined and can be applied to all types of reports. A report should be considered accurate if it does not contain a "material misstatement" as defined in section 95102(a)(194). This would

ensure the report is at least 95% accurate, which is the accuracy requirement that must be met in order to receive a positive verification statement. Minor errors or non-conformances in a report that do not constitute a material misstatement should not be considered violations.

LADWP recommends that "material misstatement" should be the standard for determining whether or not a report is accurate. This section should be revised as follows:

Each day or portion thereof that any report required by this article remains unsubmitted, is submitted late, or contains <u>material misstatements</u>, or fails to <u>disclose material information</u> information that is incomplete or inaccurate within the level of reproducibility of a test or measurement method is a separate violation. For purposes of this section, "report" means any emissions data report, verification statement, or other record required to be submitted to the Executive Officer by this article.

## C. Minor errors in a report that are identified and corrected during the verification process should not be considered violations.

As currently drafted, section 95107(a) would impose daily penalties for incomplete or inaccurate reports starting the first day after the reporting deadline. However, imperfect reports are inevitable, particularly in the early years of reporting. ARB should make allowance for circumstances beyond the reporter's control that may result in a report that is not perfect, despite a reporter's best efforts to prepare and submit a complete and accurate report by the reporting deadline.

#### For example,

- a. If the reporter has trouble uploading the transactions data into the GHG Reporting Tool, they may not be able to submit and certify the submission by the reporting deadline.
- b. If renewable energy purchases are not reconciled by the reporting deadline, the reporter may need to report "preliminary" data, then enter the final numbers as a correction during the verification process.
- c. Data entry errors (i.e., forgetting to convert fuel usage into the correct units)

Given the fact that the reporting process includes an intermediate verification step to ensure the report is complete and accurate and to identify and correct any errors, it seems reasonable that errors found and corrected during the verification process should <u>not</u> be subject to enforcement and penalties. Any changes made to the report during the verification process are fully documented.

Since compliance obligations will be assessed only after the emissions have been verified, it is reasonable that minor reporting errors or non-conformances that are <u>not</u> material misstatements and <u>are</u> corrected during the verification process according to section 95131(b)(10) should not be treated as violations.

D. Use of Missing Data Substitution Procedures should not constitute a violation, and enforcement language regarding data collection, records retention and use of specified methodologies should be harmonized with enforcement language in the EPA MRR.

Section 95107(d) of the ARB MRR states that "Each failure to measure, collect, record or preserve information needed for the calculation of emissions ... constitutes a separate violation of this article." In effect, this language would require 100 percent of fuel data to be measured and recorded, and would <u>not</u> allow for the use of missing data procedures. Missing data procedures exist because it is not always possible to measure and record data, due to reasons such as equipment failure, maintenance, etc. See excerpts below from the Code of Federal Regulations, Title 40, Part 75 regarding Missing Data Substitution Procedures:

#### **Subpart D—Missing Data Substitution Procedures**

#### § 75.30 General provisions.

- (a) Except as provided in §75.34, the owner or operator shall provide substitute data for each affected unit using a continuous emission monitoring system according to the missing data procedures in this subpart whenever the unit combusts any fuel and:
- (2) A valid, quality-assured hour of flow data (in scfh) <u>has not been measured and recorded</u> for an affected unit from a certified flow monitor, or by an approved alternative monitoring system under subpart E of this part; or

Therefore, Section 95107(d) should be modified so that the use of the missing data procedures provided for in Section 95129 of the ARB MRR does not constitute a violation.

In addition, Section 95107(d) should be harmonized with the enforcement language in section 98.8 of the EPA MRR.

#### **EPA MRR**

#### § 98.8 What are the compliance and enforcement provisions of this part?

Any violation of any requirement of this part shall be a violation of the Clean Air Act, including section 114 (42 U.S.C. 7414). A violation includes but is not limited to failure to report GHG emissions, failure to collect data needed to calculate GHG emissions, failure to continuously monitor and test as required, failure to retain records needed to verify the amount of GHG emissions, and failure to calculate GHG emissions following the methodologies specified in this part. Each day of a violation constitutes a separate violation.

LADWP recommends the following revisions to Section 95107(d) to resolve the issue with use of missing data procedures and to harmonize the enforcement language with Section 98.8 of the EPA MRR.

Each failure to measure, collect data needed to calculate emissions, monitor and test as required, retain records needed to verify emissions, or to calculate emissions following the methodologies specified in this article, record or preserve information needed for the calculation of emissions as required by this article or that this article otherwise requires be measured, collected, recorded or preserved constitutes a separate violation of this article.

#### E. Overlapping enforcement provisions and penalties should be eliminated

ARB needs to coordinate the enforcement language among the AB32 regulations to avoid overlapping enforcement provisions that may result in double violations and penalties under different sections of the rules for the same error or deficiency.

For example, a single reporting error (under-reporting of emissions) would be subject to penalties under 3 different enforcement provisions:

- Per-ton penalties under Section 95107(c) of the MRR for each metric ton of CO2e emitted but not reported.
- Per-day penalties under Section 95107(a) of the MRR for each day the report was incomplete or inaccurate.
- Per-ton, per-day penalties under the Cap-and-Trade Regulation.

Section 95107(c) of the MRR overlaps with both Section 95107(a) of the MRR as well as the Cap-and-Trade regulation, creating a double compliance burden:

- Assessing penalties under MRR Section 95107(c) for emissions not reported overlaps with per-ton penalties under the Cap-and-Trade regulation if compliance instruments are not surrendered for the same emissions (emissions not reported ~ compliance instruments not surrendered).
- Assessing penalties under MRR Section 95107(c) for emissions not reported overlaps with per-day penalties for submitting an incomplete report under MRR Section 95107(a) (emissions not reported ~ incomplete report)

ARB should review and streamline the enforcement and penalty provisions in the AB32 regulations, and eliminate overlapping enforcement provisions that result in the imposition of multiple violations for the same deficiency. Since Section 95107(c) overlaps with two other enforcement provisions, it should be deleted to eliminate the double compliance burden.

Each metric ton of CO2e emitted but not reported as required by this article is a separate violation.

## Subarticle 2 Reporting Requirements and Calculation Methods for Specific Types of Facilities, Suppliers, and Entities

#### Section 95111. Electric Power Entities

#### A. Section 95111(g)(5) should be clarified or deleted

The language does not specify whether a compliance obligation ("emissions penalty") will be imposed upon the owner of a high-emitting out-of-state generating resource if the owner imports < 90% of the owner's share of the electricity from the generating resource into California, and the remainder is sold to another party out of state.

This section should be deleted because electricity generated outside of California that is <u>not</u> imported into California is not a California greenhouse gas emission and is not subject to reporting under AB32 section 38530 (Mandatory Greenhouse Gas Emissions Reporting).

AB32 section 38530 (2): <u>Account for greenhouse gas emissions from all electricity</u> <u>consumed in the state</u>, including transmission and distribution line losses from electricity generated within the state or imported from outside the state...

#### B. Section 95111(g)(6) should be deleted

The language does not specify whether a compliance obligation will be imposed upon electricity imported from a zero GHG emission generating resource that does not meet one of these conditions.

In 2017, the shares of Hoover Dam will be redistributed, changing the share of all the existing participants and adding new participants. As a result, all of the participants in Hoover would no longer be able to claim condition (A).

Applying a default emission factor to electricity from zero GHG emitting resources is false and inaccurate. In addition, applying default emissions to some zero GHG emitting generating resources while attributing zero emissions to other zero GHG emitting generating resources is inconsistent, which violates section 38530(b)(4) of AB32 which states the reporting regulation shall "Ensure rigorous and consistent accounting of emissions..."

Furthermore, this provision contradicts several of the stated Objectives of the Proposed Regulation and Revisions on page iii of the ISOR:

- collect data that are sufficiently <u>rigorous and consistent</u> to support GHG capand-trade and other ARB programs;
- harmonize California reporting requirements with U.S. EPA reporting requirements to simplify and streamline GHG reporting;

The U.S. EPA reporting rule does not apply default emissions to zero GHG emissions generating resources.

This provision should be deleted because it does not fall under the AB32 definition of statewide greenhouse gas emissions, and therefore is not subject to reporting under AB32 section 38530 (Mandatory Greenhouse Gas Emissions Reporting).

AB32 section 38505 (m): "Statewide greenhouse gas emissions" means the total annual emissions of greenhouse gases in the state, including all emissions of greenhouse gases from the generation of electricity delivered to and consumed in California, accounting for transmission and distribution line losses, whether the electricity is generated in state or imported.

# Subarticle 4 Requirements for Verification of Greenhouse Gas Emissions Data Reports; Requirements Applicable to Emissions Data Verifiers

#### Section 95130. Requirements for Verification of Emissions Data Reports

A. Upstream verification of biomass-derived fuel needs to be simplified and streamlined; suppliers of biomass-derived fuel should not be subject to multiple verification site visits; and verification should be limited to entities holding title to the fuel.

As currently drafted, section 95131(i)(2) would require each purchaser of biomass-derived fuel to have their verifier "make one site visit, during each year full verification is required, to each biomass-derived fuel entity in the chain of custody for that fuel". This will result in duplicative verification efforts, since multiple California entities may purchase biomass-derived fuel from the same supplier.

LADWP purchases biomethane from 2 different suppliers, but the biomethane comes from landfills located across the country including Arkansas, Louisiana, Texas, Ohio, Kansas, Pennsylvania, and Tennessee. Requiring our verifier to visit each out-of-state fuel supplier and landfill for "upstream verification" of the biomethane production would add significant time and expense to the verification process.

LADWP requests that ARB simplify and streamline the upstream verification requirements for biomass-derived fuels, and recommends that suppliers of biomass-derived fuels be treated as an "Asset Controlling Supplier" to minimize duplicative verification efforts and reduce the additional verification burden. In addition, verification activity should be limited to entities that hold title to the fuel; entities involved solely in transmission of the gas should not be subject to verification. Therefore, references to "chain of custody" for the fuel should be changed to "chain of title" for the fuel.

#### B. Contract eligibility requirements for biomass-derived fuels are too restrictive

The biomass-derived fuel contract eligibility requirements in section 95131(i)(2)(A) are too restrictive. Imposing an emissions compliance obligation on contracts that don't meet one of these conditions would discourage the development of additional biomass-derived fuel

sources to help reduce fossil GHG emissions. This provision is contrary to the policy objective to encourage the beneficial use of biomass-derived fuels and should be deleted. Using biomass-derived fuels to generate electricity displaces the equivalent MMBtu of natural gas that would otherwise have been used to generate the electricity, resulting in a net environmental benefit and reduction in fossil GHG emissions.

Please see SCPPA's comments for suggested revisions to address this issue.

## C. Beneficial re-use of biomass-derived fuels should be considered carbon neutral, regardless of offsets

Section 95131(i)(2)(B), which requires the verifier to determine whether anyone in the chain of custody of the biomass-derived fuel has applied for offsets or other credit for GHG reductions, may be unnecessary since there is no overlap (double counting) between the reduction credited under the offset protocol and the reduction achieved by displacing fossil fuel through the beneficial re-use of bio-fuels for generating electricity.

Combustion of methane from landfills and dairy digesters to generate electricity should be considered carbon neutral and not subject to a compliance obligation under the cap & trade program.

There is <u>no potential</u> for double counting of offsets and combustion of biomass-derived fuels under the CARB cap & trade program for the following reasons:

- a. The only offsets acceptable for compliance use in the CARB cap & trade program are those generated under protocols adopted by CARB as part of the cap & trade rulemaking.
- b. The only offset protocol being adopted by CARB relating to the capture of methane is the Livestock Manure (Digester) Projects protocol. CARB is not adopting any other offset protocols relating to biomass-derived fuels.
- c. There is no protocol for generating offsets from the capture of methane from landfills.
- d. The "Livestock Manure (Digester) Projects" protocol creates offsets (GHG emission reduction credits) for the capture and destruction of methane that would otherwise have been emitted to the atmosphere. The Livestock Manure (Digester) Projects protocol does <u>not</u> give credit for CO2 emission reductions from the beneficial re-use of the methane to generate electricity, which displaces an equivalent amount (MMBtu) of fossil fuel (natural gas) that would otherwise have been used to generate that electricity (see excerpts below).

Excerpts from <u>Staff Report and Compliance Offset Protocol for Livestock Manure</u> (<u>Digester</u>) <u>Projects</u> (http://www.arb.ca.gov/regact/2010/capandtrade10/cappt4.pdf):

<u>Staff Report, Quantification Methodologies (page 6)</u>: Because of the uncertainty in the calculation methodologies for determining nitrous oxide (N2O) emissions associated with projects, these emissions or emission reductions are not included in the current offset protocol. In addition, *the use of biogas for producing power for the electricity grid or* 

electricity for on-site use, thereby displacing fossil-fueled power plant GHG emissions, is considered a complementary and separate GHG project activity and is not included within the offset protocol accounting framework.

Compliance Offset Protocol for Livestock Manure (Digester) Projects, 4. The GHG Assessment Boundary – Quantification Methodology (page 6): This protocol does not account for carbon dioxide emission reductions associated with displacing grid-delivered electricity or fossil fuel use.

## D. It is infeasible to verify that biomethane injected into natural gas pipelines was received by the reporting entity

Section 95131(i)(2)(E) would require the verifier to "track the exact amount of fuel indentified in contracts or invoices from the producer to the reporting entity, and have reasonable assurance that the reporting entity is the only customer receiving that fuel." It is not feasible for the verifier to track bio-gas that is injected into natural gas pipelines and determine that the reporting entity physically received the gas. Once biomethane is injected into the natural gas pipelines, it mixes with gas from other sources. It is impossible to track molecules of gas from the source to the point of combustion. The fact the biomass-derived gas was purchased and injected into the natural gas pipeline should be recognized as sufficient to claim credit for displacement of fossil natural gas at the point of consumption.

Ensuring that the amount of biomass-derived fuel is not double-counted (or sold to multiple entities) is covered under 95131(i)(D) (see below):

(D) The verification team shall determine that an entity's total volume of biomass-derived fuel transferred to all customers in a calendar year does not exceed the entity's purchases and production of biomass-derived fuels during that year.

Therefore, Section 95131(i)(2)(E) should be deleted.

For the same reasons, section 95131(i)(4) should be revised as follows:

To verify that the amount of biomass-derived fuel reported by a reporting entity is free of a material misstatement, the verification team shall determine whether there is reasonable assurance that the amount of biomass derived fuel purchased was actually produced and delivered, or injected into a transmission pipeline to the reporting entity, and any errors, omissions, or misreporting of the biofuels emissions do not result in a material misstatement. To assess conformance with this article, the verification team shall review the methods and factors used to calculate and report biomass-derived fuel amounts for adherence to the requirements of this article.