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November 15, 2013

Mr. Richard Bode, Chief Emissions Inventory Branch California Air Resources Board 1001 I Street Sacramento, CA 95812

Dear Mr. Bode:

Subject: Comments on the Proposed Amendments to the Regulation for the

Mandatory Reporting of Greenhouse Gas (GHG) Emissions

Released October 28, 2013 for 15-day Public Review and Comment

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the proposed 15-day changes to the amendments to the California Air Resources Board (ARB) Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Regulation or MRR) that were released on October 28, 2013.

LADWP supports the proposed 15-day changes that ensure new requirements for Asset Controlling Supplier power and other specified imports are applied prospectively and not retroactively, and supports removal of the proposed requirements for system power that would have created uncertainty in the wholesale electricity market.

LADWP is very concerned about the proposed 15-day change to restore the phrase "at the time the power was directly delivered" in section 95111(g)(1)(N). LADWP's concerns regarding this proposed change are explained below.

The ramifications of retaining the phrase "at the time the power was directly delivered" in §95111(g)(1)(N) are not clear.

- (g) Requirements for Claims of Specified Sources of Electricity and for Eligible Renewable Energy Resources in the RPS Adjustment.
 - (1) Registration Information for Specified Sources and Eligible Renewable Energy Resources in the RPS Adjustment. The following information is required:
 - (N) For verification purposes, retain meter generation data to document that the power claimed by the reporting entity was generated by the facility or unit at the time the power was directly delivered.

During verification of the 2012 reports in 2013, it was unclear how this section of the rule should be interpreted and applied. Since it is under "Registration Information for Specified Sources and

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Eligible Renewable Energy Resources in the RPS Adjustment, it would appear the reporter only needs to retain the data and make it available to the verifier.

However, based on recent discussions with ARB staff, LADWP is concerned about what reporters and verifiers may be expected to do with the hourly meter data. ARB's current thinking is the meter data should be used to subdivide hourly data into specified and unspecified. This would be done by comparing hour-by-hour generating facility meter data with delivered electricity (NERC e-tag) data, and claim the lesser of the two for each hour as specified and the difference as unspecified.

This interpretation is concerning for the following reasons:

- It is too narrowly focused on the accuracy of hourly data rather than the accuracy of annual data for an annual report.
- Performing an hour-by-hour analysis for every specified import and renewable energy resource in the RPS Adjustment would significantly increase the reporting and verification burden, but the end result would not be significantly different than reporting whole e-tag data.
- It appears to conflict with the reporting requirements in 95111(a) that require Electric Power Entities to report delivered electricity, which is e-tag data not meter data.
- In some cases, taking this approach would actually be detrimental and make the report less accurate by understating the amount of electricity imported from the specified source on an annual basis.

The original September 4, 2013 amendment to delete "at the time the power was directly delivered" from 95111(g)(1)(N) was beneficial because it would have allowed flexibility for the verifiers to exercise their professional judgment and choose a verification approach that is appropriate to each particular case or situation. Retaining this phrase limits what approach the verifiers can use to verify specified imports and the RPS Adjustment in the annual report.

Requirements in the reporting regulation should not be overly restrictive.

LADWP evaluated two different verification approaches using generating facility meter data to verify the accuracy of specified imports based on e-tag data.

Method 1 (Hour-by-Hour Comparison): Align and compare hourly generating facility meter with hourly e-tag data, select the lesser of the meter or e-tag data for each hour and sum the results.

Method 2 (Monthly/Annual Comparison): Compare the entity's share of the facility net generation meter data with the specified import (based on e-tag data) on a monthly and/or annual basis, and calculate the deviation. If the deviation between the entity's share of the facility net generation and the delivered electricity is less than five percent on an annual basis, this should satisfy the five percent accuracy requirement in the MRR.

Findings and Results

The Method 1 approach was a complex and labor intensive process. In order to compare hourly meter and e-tag data, the raw data needed to be summed, transposed, and shifted to adjust for time zone differences. There were multiple opportunities for making errors while preparing and

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aligning the data for the hour-by-hour comparison. After all that work, the difference was less than significant (1.63%).

The Method 2 approach was much simpler. This approach used monthly meter data reported by the generating facility and monthly subtotals of the e-tag data. Very little data preparation was needed to set up the meter and e-tag data monthly/annual comparison and calculate the deviation. Since this method did not require summing of hourly MWh from multiple e-tags or shifting meter data to adjust for time zone differences, there was much less chance of making errors. The annual deviation between the meter and e-tag data was less than significant (1.59%)

For the sample month to which the Method 1 hour-by-hour comparison was applied, the generating facility meter data was 1.84% higher than the sum of the MWh on the e-tags, which was 1.63% higher than the sum of the lesser of the meter or the e-tag data for each hour. Generating facility meter data may not reflect station service, transformer or line losses. The 1.84% difference between the generating facility meter and the e-tag data represents the line losses from the generating facility to the first point of receipt.

The Method 1 approach would be difficult for the verifier to determine with reasonable assurance that the sum of the "lesser of the meter or e-tag for each hour" is accurate on an annual basis. The verifier can review the process and do spot checks of the hourly data, but given the potential for making errors while preparing the data for comparison, the only way to know for sure that the result is accurate would be to review and/or replicate the hour-by-hour analysis. The Method 2 approach would be fairly easy to verify by reviewing monthly generation reports from the generating facility and re-running the query of the e-tag database.

Conclusions

Comparing hourly generating facility meter data vs delivered energy (e-tag data) and selecting the lesser of the two for each hour is a very complex and labor intensive process that produces a less than significant difference that is well below the five percent accuracy threshold. Therefore, the extra labor required to perform this hour-by-hour analysis does not add value.

The Method 1 approach to verifying specified imports by comparing hourly meter and e-tag data has limited usefulness – it can be applied only in cases where the entity receives a fixed percentage of the facility net output for every hour throughout the year. This approach does not work in cases where the electricity delivered to the entity does not reflect a fixed percentage of the generating facility net output for every hour. Therefore, this approach cannot be applied across the board for verifying all specified imports and the RPS Adjustment.

The Method 2 approach to verifying specified imports by comparing the entity's share of the annual generating facility net output (meter data) with electricity delivered to the entity (e-tag data) is a much simpler approach that is just as effective and requires much less labor than the hour-by-hour approach. This approach can be tailored to apply to a wide variety of electricity import arrangements, including cases where electricity delivered to the entity does not reflect a fixed percentage of the generating facility net output for every hour. This approach enables the verifier to review the overall disposition of the electricity from the specified source belonging to the reporting entity.

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LADWP believes Method 2 is a reasonable approach for verifying the annual specified imports are not over or under stated in the annual report. Therefore, LADWP recommends the phrase "at the time the power was directly delivered" be deleted because it is overly restrictive and does not allow sufficient latitude for the verifiers to use an alternative verification approach such as Method 2.

In closing, LADWP appreciates this opportunity to comment and looks forward to working with ARB staff and other stakeholders to discuss and resolve this important issue. If you have any questions or require additional information, please contact me at (213) 367-0403 or Ms. Cindy Parsons (213) 367-0636.

Sincerely,

Mark J. Sedlacek

Director of Environment and Efficiency

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c: Mr. Richard Bode, ARB Mr. David Edwards, ARB Mr. Wade McCartney, ARB Ms. Renee Lawver, ARB

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