ENVIRONMENTAL ENERGY ALLIANCE OF NEW YORK

PO Box 87
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June 27, 2018

Submitted to the New York Independent System Operator
via E-Mail to IPP_feedback@nyiso.com

Re: Emissions measurements and reporting

I am writing on behalf of the Environmental Energy Alliance of New York, LLC ("the Alliance"; see list of generating company members highlighted below on this page) to provide our suggestions related to the measurement, reporting and reconciliation of carbon emissions necessary for carbon pricing in the New York Independent System Operator (NYISO) market. Alliance members own and operate electric generating and transmission and distribution facilities located throughout New York State and, in some instances, across the nation and the globe. The operations of Alliance members contribute to the reliability of the State's electric grid and to the economic well-being of New York State.

Existing Emissions Reporting Requirements

A majority of electric generating units report hourly emissions to the US Environmental Protection Agency (EPA) 30 days after the end of each quarter. Emissions measurement and monitoring procedures are prescribed in accordance with 40 CFR Part 75 and a Continuous Emissions Monitoring System (CEMS) is used at most facilities. EPA developed and refined the 40 CFR Part 75 monitoring and reporting requirements over many years through extensive analysis, comment and rulemaking.[1] The regulation provides for consistent reporting among all emissions sources, and includes third-party verification of equipment performance (e.g., a requirement to conduct a Relative Accuracy Test Audit which compares data from a facility CEMs to independent Reference Method test results). The costs incurred by the regulated community to meet the existing reporting requirements are substantial. In 1999, EPA "projected annual cost burden resulting from the collection of information is $192,483,642."[2]

This monitoring system is the total equipment necessary to determine gas concentration or emission rate using either pollutant analyzer measurements in coordination with stack gas flow monitors, or a fuel flow monitoring system and a computer program to produce emission totals in accordance with EPA proscribed

[1] *See*, 58 FR 3701, Jan. 11, 1993; 58 FR 15716, March 23, 1993; 60 FR 26516, 26566, May 17, 1995; 62 FR 55487, Oct. 24, 1997; 64 FR 28588, May 26, 1999; 67 FR 40476, June 12, 2002

[2] Acid Rain Program; Continuous Emission Monitoring Rule Revisions, 64 FR 28564-01.

methodologies. The system also has rigorous quality assurance and quality control (QA/QC) requirements that are mandated by the regulation and are part of the final true-up for every quarterly report.

The 40 CFR Part 75 monitoring methodologies are designed to provide consistency among all the regulated entities and accuracy for emissions trading programs. For estimating CO_2 emissions, the CEMS uses two main methods: one (40 CFR Part 75 Appendix G) uses heat input with an associated mass factor and the other (40 CFR Part 75 Appendix F; formula F-13) relies on the diluent monitor and stack flow measurement. Both methods report total emissions for all modes of operation and for all conditions of combustion (they do not, however, identify differentiated emissions associated with providing a thermal host or emissions associated with unit startup or shutdown when there is no load. EPA, under regulatory authority of 40 CFR Part 75, requires strict QA/QC requirements for all instrumentation (analyzers, fuel flow meters, etc.) that must be performed on a daily, quarterly, semi-annual or annual basis. All hourly emissions data are submitted to the EPA; the EPA replicates every calculation and any discrepancies are flagged and must be corrected. For example, if the total quarterly CO_2 emissions reported differ by 0.1 ton from the EPA calculation, the submitted data must be reviewed and amended. Given the large volume of hourly emissions data and the number of sources reporting to EPA, it is possible final reconciliation of a quarterly emissions report may require up to two months following the end of a quarter.

Emissions data for some additional units, that are not required to report CO_2 emissions under 40 CFR Part 75, can be found in annual emissions statements submitted to the New York State Department of Environmental Conservation (DEC). DEC regulations require reporting of CO_2 emissions under 6 N.Y.C.R.R. Subpart 202-2. The Subpart 202-2 regulations apply to facilities that meet certain emission thresholds that vary in nonattainment and attainment areas. 6 N.Y.C.R.R. § 202-2.1; 6 N.Y.C.R.R. § 231-13 (reporting thresholds). Subpart 202-2.4 require facilities to "utilize the method which results in the best possible emission estimate" and sets out a hierarchy, from continuous emissions monitoring systems to manufacturer's guarantee. 6 N.Y.C.R.R. § 202-2.4(d). As with 40 CFR Part 75, data substitution procedures are also specified. 6 N.Y.C.R.R. § 202-2.4(f). The Subpart 202-2 emission statements are submitted on or before April 15 of each year for the previous calendar year. 6 N.Y.C.R.R. § 202-4(a). The data are used, for among other purposes, for submission to EPA as part the National Emissions Inventory. Both 40 CFR Part 75 and 6 N.Y.C.R.R. Subpart 202-2.4 include certification requirements and are subject to enforcement.

Combined heat and power (CHP) units are a special case. A CHP uses only a portion of its heat input to generate electricity. Hence, only a portion of its CO_2 emissions are attributable to the generation when devising a carbon pricing scheme. Alliance members do not have CEMS that perform this attribution task on an automatic basis; data reporting will require manual calculations for each unit.

NYISO Proposal

We understand the NYISO proposes weekly emissions reporting followed soon thereafter with final reconciliation of data to correct any errors. The Carbon Pricing Straw Proposal (Proposal) states:

> All internal suppliers participating in the wholesale markets would self-report their carbon emissions to the NYISO through a new data submission process. Self-reported emissions and the

applicable carbon price would determine the carbon charges assessed in the NYISO settlements process. Just like today's NYISO settlements process, these settlements would be subject to true-ups as part of the normal billing processes.

We are concerned that if a carbon pricing initiative is to proceed, a weekly emissions reporting requirement will result in the use of data that is inconsistent with emissions data developed through the rigorous procedures employed by the existing reporting requirements and impose additional costs. As the implementation of the existing requirements show, the costs of developing reliable data are substantial. The logistics alone of developing a system to accept data from all sources in a consistent format and to accept regular updates to reconcile data reported to EPA and to NYISO is significant. Affected sources that have reported emissions data to the EPA for many years are very familiar with the reporting burden. Developing a reporting system that can accept hourly emissions data from every source in the system is a monumental task and integrating that with the NYISO carbon pricing system will be difficult.

The suggestion offered by London Economics International[3] to use the New York Generation Attribute Tracking System (NYGATS) or contracts to estimate emissions from imports is also a straightforward alternative for estimating emissions from native sources. We suggest the NYISO estimate emissions from all sources (both in-state and imported) using heat rate or MW to complete the calculations without the need for sources to assume additional reporting requirements. This approach will insure consistency with the data used for all affected sources. However, we do acknowledge this approach is problematic for dual-fueled units and cogeneration facilities so we recommend that an opt-in provision should be available to those sources who prefer to adjust weekly emissions. Furthermore, a weekly reporting requirement is a significant burden particularly for small companies with limited staff resources. For those companies with the interest and capacity to submit weekly data reports to the NYISO they could use the opt-in provision on a routine basis. For those that opt-in, dual-fueled or cogeneration, NYISO should specify "safe-harbor" calculation methodologies, which so long as such a methodology is employed the resulting estimates are considered reasonable and not subject to subsequent market mitigation.

While we appreciate the desire of the NYISO that reporting align with weekly billing cycles, most of our members prefer to have a single, validated data set of emissions accepted by the agencies. Given the lag time to validation of emissions data as explained in our discussion of the QA/QC routines in place, any weekly values submitted to the NYISO or calculated by the NYISO should be considered preliminary data. Consistency with the Regional Greenhouse Gas Initiative (RGGI) is particularly important because you have proposed to subtract the price paid for those same emissions under RGGI. Emissions data for RGGI CO_2 budget sources are recorded in the EPA's Clean Air Markets Division database in accordance with state CO_2 Budget Trading Program regulations and 40 CFR Part 75 and transferred to the RGGI tracking system on an automated basis. Using different emissions data from RGGI, while offsetting the charge purporting to account for the price already paid for those emissions, unnecessarily imposes an error in the calculation.

The Proposal also notes that "emissions would be subject to verification, for example, with emissions data from the U.S. EPA's Clean Air Markets Division database". Reconciliation of NYISO weekly estimates with

[3] Presentation to IPPTF on April 9, 2018; slide 10.

the EPA-accepted data cannot occur until two months after each quarterly report to EPA. The EPA process to insure complete traceability and no missing data requires post-processing and EPA review and approval takes time. Furthermore, given that lower emitting sources only report on an annual basis and likely represent only a small percentage of the emissions inventory, final settlement of these sources for billing purposes is best scheduled on an annual basis and consistent with their existing reporting requirements.

We also suggest that the definition of affected sources should only include those that generate electricity that is provided to the grid for sale. Further clarity on affected sources recommended for inclusion is necessary.

Please contact me if you require additional information.

Sincerely,

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