

NYISO Carbon Charge Proposal for: Wholesale Suppliers Subject to the Carbon Charge and Applicable Carbon Emissions

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IPPTF

October 22, 2018, KCC, Rensselaer, NY

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Agenda

- **Prior presentations**
- **Presentation objective**
- **Resources subject to the carbon charge**
- **Applicable emissions**
- **Measuring emissions**

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Presentation objective

- Outline the wholesale suppliers that would be subject to the carbon charge
- Outline the emissions that would be subject to the carbon charge
 - Discuss how the NYISO proposes to measure emissions

Select relevant prior IPPTF materials and presentations

- All materials available on the NYISO website
 - http://www.nyiso.com/public/committees/documents.jsp?com=bic_miwg_ipptf
- **April 16, 2018 IPPTF**
 - The Mechanics of Integrating a Carbon Charge into NYISO Energy Market Operations. NYISO.
- **April 23, 2018 IPPTF**
 - Carbon Pricing Straw Proposal. NYISO.
- **May 14, 2018 IPPTF**
 - Carbon Pricing Straw Proposal Overview. NYISO.
- **May 21, 2018 IPPTF**
 - Applicable New York Wholesale Electricity Supplier Emissions. NYISO.
- **June 18, 2018 IPPTF**
 - Emissions measurements and reporting. EEANY.
- **July 16, 2018 IPPTF**
 - Emissions Reporting, Billing, and Bilateral Transactions. NYISO.
- **August 6, 2018 IPPTF**
 - Carbon Pricing Draft Recommendations. NYISO.

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Wholesale suppliers subject to the carbon charge

Wholesale suppliers subject to the carbon charge

- **All NYCA wholesale suppliers would pay the carbon charge on applicable carbon emissions**
 - Applicable emissions are discussed on later slides
- **All external transactions would be subject to the carbon charge**
 - As discussed during the 10/15 IPPTF meeting materials

Applicable emissions subject to the carbon charge

Applicable NY wholesale supplier emissions

- **Emissions tied directly to providing wholesale electric market services, including energy and ancillary services**
 - Emissions will include those associated with startups, no-load levels, and generation that receive wholesale market compensation
- **“Burner tip” CO₂ emissions**
 - Not covered: upstream/fugitive CO₂ emissions, other greenhouse gas emissions (methane, nitrous oxide, etc.)
- **Emissions from Clean Energy Standard eligible wholesale suppliers are not subject to the carbon charge**
 - Clean Energy Standard Order, Appendix A
 - <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB3777382-228F-4268-A674-6B5B93B8614B%7d>
- **Emissions associated with participation in the SCR, EDRP, DADRP, and DSASP programs are not subject to the carbon charge**

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Cogeneration emissions

- Cogeneration resources produce both wholesale electricity market products and heat and/or steam
- Emissions associated with heat and steam sales fall outside the scope of a wholesale electric sector carbon charge
- Cogeneration resources will report emissions associated with the provision of wholesale energy and ancillary services (excluding emissions associated with heat and steam sales)
 - These resources will be expected to work with NYISO to establish a reference emissions allocation method

Behind-the-Meter Net Generation Resources

- **Tariff defined BTM:NG Resources are eligible to concurrently serve Host Load and participate in the wholesale markets**
- **Emissions associated with serving Host Load fall outside the scope of a wholesale electric sector carbon charge**
- **BTM:NG Resources will report emissions associated with the provision of wholesale electric energy and ancillary services (i.e., ‘net generation’)**
 - These resources will be expected to work with NYISO to establish a reference emissions allocation method

Distributed Energy Resources

- DER aggregators will report emissions associated with the provision of wholesale energy and ancillary services (i.e., ‘net generation’)
 - These resources will be expected to work with NYISO to establish a reference emissions allocation method

SCR/EDRP/DSASP/DADRP Programs

- **Emissions pursuant to participation in these programs will not be charged for carbon**
 - Resources in these programs infrequently produce energy using emitting resources
 - About 90% of all program MWs are pure load reduction with no local generation
 - There have been few SCR calls in recent years
 - As a bounding analysis, we use the most recent NYCA-wide SCR/EDRP event, which occurred 8/12/2016. Average SCR response was 969.4 MW and average EDRP response was 12.6 MW for the 5 hour event, totaling 4,910 MWh. Assuming 10% local generation at a high heat rate unit (13 MMBtu/MWh, or 0.75 tons CO₂/ MWh on natural gas), there was the potential for 368 tons of CO₂ emissions, or ~\$18,000 in carbon charges.
 - Collecting data from these resources would create potentially sizable new reporting requirement for the resources with few resultant carbon charges returned to loads

Data from NYISO 2016 Annual Report on Demand Response Programs, page 19

http://www.nyiso.com/public/webdocs/markets_operations/market_data/demand_response/Demand_Response/Reports_to_FERC/2017/NYISO%202016%20Annual%20Report%20on%20Demand%20Response%20Programs_Final.pdf

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Reviewing emissions

- **The NYISO will have internal processes to verify supplier emissions as reasonable and accurate**
 - Cogeneration, BTM:NG, and DER Resources in particular, will be required to submit data and/or methods to the NYISO such that the NYISO can verify the emissions associated with wholesale energy and ancillary service sales
 - NYISO intends to review supplier methods for determining wholesale electric emissions versus those allocated to exempt categories (e.g., heat/steam)
- **Inaccurate, insufficient, or untimely data submissions will be subject to penalties**
 - Penalties will be administered consistent with the existing penalty review process

Emissions reporting timeline and settlements

Carbon charges on bills and invoices

- Carbon charges will be applied to each supplier bill and invoice
- NYISO will establish specific time periods for suppliers to submit the required emissions data, consistent with the existing billing process
 - Initial emissions estimates will be automatically populated for the supplier, unless the supplier provides those data
 - Automatically populated data will be based on the approved carbon component of the supplier's NYISO Reference Level
 - Suppliers will be required to submit emissions true-ups within 60 days of the initial invoice (e.g., by mid-March for the January Billing Month)
 - This timeline will allow true-ups to appear on the 4 month invoice
 - There will be a mandatory penalty for failure to submit emissions true-ups within 60 days of the initial invoice
 - Suppliers will be able to further true-up emissions data after the 4 month invoice
 - Suppliers will be able to provide additional true-ups after the 4 month invoice
 - No additional true-ups will occur after the final bill closeout (e.g., the October invoice for the January Billing Month)
- These emissions data submission and finalization timelines align with current final bill closeout timeline
- Suppliers will submit hourly emissions

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Feedback?

- Questions and/or comments can be sent to IPP_feedback@nyiso.com

The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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