

NEW YORK STATE
PUBLIC SERVICE COMMISSION

Matter 17-01821 – In the Matter of Carbon Pricing in New
York Wholesale Markets

PROPOSAL OF INDEPENDENT POWER PRODUCERS
OF NEW YORK, INC. FOR INTEGRATING CARBON
PRICING INTO THE WHOLESALE ENERGY MARKET

Dated: November 30, 2017

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On October 19, 2017, the New York State Public Service Commission (“Commission”) issued a notice soliciting “detailed proposals for integrating carbon pricing into the wholesale energy market to further New York State’s energy policy goals.”¹ Pursuant to the Notice, Independent Power Producers of New York, Inc. (“IPPNY”)² hereby offers its proposal to integrate the cost of reducing carbon dioxide (“carbon”) emissions into wholesale energy prices. As discussed below, IPPNY strongly supports and hereby proposes the carbon pricing concept that The Brattle Group analyzed in its August 10, 2017 report which would add a carbon value to resources’ commitment and dispatch costs based on their carbon emission rate and a price-per-ton established by the Commission (the “Carbon Price”).³ Attribute pricing is not a new concept in the wholesale market, and a Carbon Price is consistent with, and would help maintain, the competitive wholesale market structure because it would provide value within the market for services that power plant owners provide – in this case, emission reduction benefits.

IPPNY is a not-for-profit trade association representing the independent power industry in New York State. Its members include nearly 75 companies involved in the development and

¹ Matter 17-01821, *In the Matter of Carbon Pricing in New York Wholesale Markets*, Notice on Process, Soliciting Proposals and Comments, and Announcing Technical Conference (Oct. 19, 2017) (“Notice”).

² IPPNY’s comments do not necessarily represent the positions of each of its members.

³ Samuel A. Newell *et al.*, The Brattle Group, *Pricing Carbon into NYISO’s Wholesale Energy Market to Support New York’s Decarbonization Goals* (Aug. 10, 2017) (“Brattle Report”).

operation of electric generating facilities and the marketing and sale of electric power in New York. IPPNY's members include suppliers and marketers that participate in the NYISO's energy, capacity, and ancillary services markets. IPPNY's members generate over 75 percent of New York State's electricity using a wide variety of generating fuels and technologies including cogeneration, nuclear, hydro, coal, wind, oil, and natural gas. As the trade association representing wholesale energy suppliers in New York for more than thirty years, IPPNY's mission statement has been to advocate for the continued development and enhancement of reliable and efficient competitive electricity markets, while building consensus among all private and public sector interests involved in the development of such markets.

IPPNY has been a strong supporter of the Commission's Clean Energy Standard ("CES") and goals of reducing carbon emissions in a manner that is consistent with, and does not undermine, wholesale competitive electricity markets. IPPNY appreciates the Commission's examination of proposals to harmonize New York State public policy goals with New York's competitive wholesale electric markets, as this matter has far-reaching importance to the State's electricity consumers and market participants in the wholesale and retail electricity markets.

While IPPNY supports New York State's emissions reduction aspirations, IPPNY is concerned that, if those goals are pursued and achieved primarily outside of the wholesale electricity markets, such markets may be put at risk. New York's requirement that retail consumers, through their retail electricity rates, pay a much higher price for low-carbon energy sources than is reflected in the competitive wholesale electricity market price results in New York public policy selecting certain types of resources that would not otherwise be signaled by the current wholesale electricity market construct. This approach imposes additional costs on consumers while at the same time suppressing wholesale market prices below efficient levels.

For the NYISO's competitive electricity and capacity markets to succeed in driving needed investment, investors of merchant generation must be able to reasonably rely on market price signals that properly reflect the costs of new entry ("CONE") over the lifetime of the investment. If State policies are not integrated into wholesale markets and State-sponsored, technology-specific payments to existing and new capacity continue to distort market price signals, owners and developers of merchant generation needed to satisfy reliability needs may also demand regulated, long-term contracts and subsidies. Integrating a Carbon Price into the wholesale competitive market would signal the need for investment in the technologies that are required to achieve the State's energy goals while ensuring the continued efficient functioning of the wholesale electricity market.

The Carbon Price

The Commission's carbon reduction goals can be satisfied most efficiently, fairly and at least cost to consumers by integrating the cost of carbon emissions into wholesale energy prices through a Carbon Price. Implementing a Carbon Price would provide a single market signal for reducing carbon emissions by internalizing a consistent value for carbon into wholesale energy prices. As noted above, attribute pricing is not a new concept in the wholesale market, as the market already values ancillary services such as regulation, voltage support, and black start capability, which are critical services necessary to support the transmission of capacity and energy from generation resources to consumers. A Carbon Price is consistent with such attribute pricing because it would provide value within the market for the emission reduction benefits of generation resources. Under this approach, generators' emission reduction benefits would be valued by adding a State-defined value of carbon to carbon-emitting resources' bids into the New York Independent System Operator, Inc.'s ("NYISO") energy market. The NYISO would

thereby incorporate the full carbon value in its economic commitment and dispatch decisions, which would be included in the wholesale energy prices that all zero-emitting resources would be paid. Carbon emitting resources would be paid the wholesale energy price less the additional value of carbon for the unit's generation. The avoided payment to carbon emitting resources would result in a "pool" of money that could be allocated as deemed appropriate.

Such a market-based approach would support the State's public policy of valuing carbon emissions in a manner that is efficient, cost-effective, non-discriminatory, and aligns well with the market construct employed at the retail level. It would reduce carbon emissions from the entire generation portfolio and provide market signals for current facilities to make efficiency improvements that reduce their emissions of carbon per megawatt hour below their historical emissions levels. For example, the NYISO's energy markets already properly allow market participants to reflect the cost of Regional Greenhouse Gas Initiative ("RGGI") carbon emission allowances into their marginal cost of energy production, providing some relative benefit to low or zero-emission energy sources. The Carbon Price approach establishes a visible value for low or zero-emission sources, creating an efficient and cost-effective means to factor the cost of emissions into economic decision-making in ways that spur innovation, minimize the cost of controlling emissions, maintain electricity system reliability, and work in harmony with the least-cost dispatching principles that are critical to the operation of the wholesale competitive electricity markets.

If the full value of carbon was incorporated into NYISO commitment and dispatch signals, it would provide a better representation of the carbon impact of different resources based upon the actual benefits of their location and generation profile, resulting in more efficient carbon emission displacement than is currently the case. It would provide more accurate prices

that better signal the need for merchant transmission investment in the appropriate locations. There would also be savings to consumers from a reduction in the expected costs of renewable energy credit (“REC”) and zero-emission credit (“ZEC”) payments. For example, it is possible that ZECs could be phased-out, while allowing nuclear units to remain economic, because incorporating the full cost of carbon into the dispatch, if done correctly, could reduce the ZEC price to zero under the formula for calculating ZEC payments adopted by the Commission.

The inclusion of a higher value of carbon would also send signals regarding the replacement of less efficient carbon-emitting resources with more efficient resources, encouraging new renewable expansion and promoting new technologies, thereby further contributing to the State’s goals. This scenario would be expected to reduce the net CONE for efficient units, like combined cycles, and would hasten the turnover of carbon-emitting resources with newer, state-of-the-art, efficient resources.

The Brattle Study identified a number of market design issues that need to be addressed, which The Brattle Group stated are solvable. These include: how and at what level the Carbon Price should be set; whether and how the “pool” of carbon money should be allocated among the customers of load serving entities and utilities; preventing emissions leakage from imports and exports; and the impacts of a Carbon Price on the installed capacity market, transmission planning, flexible resources that will be needed as more intermittent resources enter the market, and on RECs. IPPNY believes that each one of these matters is important and requires further study. They should be considered and decided by market participants in the NYISO’s stakeholder process. While IPPNY takes no position on these specific issues at this time, the Carbon Price should be set to minimize the need for out-of-market compensation to resources outside of the market to protect the ability of the merchant generation market to function.

The Brattle Report identified a number of benefits of the Carbon Price, including:

- Shifting unit commitment and dispatch toward lower-emitting existing resources;
- Tilting investment in renewable resources (procured under the CES using Tier 1 RECs) toward those that generate at the times and places that displace the most carbon;
- Supporting investment in new, efficient gas-fired combined cycle generation that can displace higher-emitting existing generation and imports;
- Supporting investment and operation of distributed energy resources, including storage and demand response;
- Promoting energy efficiency through higher per-kWh charges, even if demand charges, customer charges, or overall customer costs decrease; and
- Encouraging other innovative solutions and decarbonization opportunities that are difficult to imagine today.

The Brattle Report also found that assuming a \$40/ton Carbon Price in 2025 would have a negligible impact on customer costs as compared to a scenario with the CES and RGGI alone. The Brattle Group estimated a -1% to +2% change in customer costs assuming a \$40/ton Carbon Price and the NYISO returned all carbon monies related to carbon-emitting generators and imports. As these costs and benefits are fully detailed in the Brattle Report, IPPNY need not discuss them further here.

Going forward, IPPNY recommends that the Carbon Price concept and the associated issues identified in the Brattle Report for further consideration be immediately explored with the assistance of the Brattle Group through the NYISO stakeholder process. While the focus of this proceeding is to consider proposals to integrate carbon pricing into the wholesale energy market, mechanisms to protect the market from the impacts of State policies, to the extent that they cannot be readily valued and integrated into the wholesale markets, should also be considered. A

number of proposals to modify installed capacity markets to accommodate state public policy goals have been proposed in neighboring markets. IPPNY takes no position on the merits of any of these individual proposals but notes that none of them would be workable in New York unless the NYISO adopted a forward capacity auction.

Bifurcated capacity auction proposals have been offered in ISO-New England and PJM Interconnection because they have forward capacity auctions in which new projects are cleared three years in advance so investors are not making investment decisions with stale information that will lead to an inefficient use of money. This type of proposal will not work for the NYISO markets because it only has a monthly forward capacity auction which requires a developer to first build its project and then offer its capacity into the auction. If adjustments to the capacity clearing mechanism to accommodate state public policies are considered, these adjustments must be done in a way that produces decisions before major investments are made. Thus, if capacity markets should be modified to accommodate state policies, the NYISO must adopt a forward capacity auction.

Respectfully submitted,

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