UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.	))))	Docket No. AD17-11-000

INITIAL POST-TECHNICAL CONFERENCE COMMENTS OF INDEPENDENT POWER PRODUCERS OF NEW YORK, INC.

Pursuant to the Federal Energy Regulatory Commission's ("Commission") May 23, 2017 notice issued in the above-captioned docket,[1] the Independent Power Producers of New York, Inc. ("IPPNY")[2] hereby submits its initial post-technical conference comments. IPPNY's members generate over 75 percent of New York State's electricity using a wide variety of 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 seeking to build consensus where possible among all private and public-sector interests involved in the development of such markets.

The purpose of the technical conference that was held on May 1 and May 2 was for the Commissioners, Commission staff and interested parties to discuss proposed solutions to resolve the growing tension between state public policy goals that incent the development and

[1] Docket No. AD17-11-000, *State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.*, Notice Inviting Post-Technical Conference Comments (May 23, 2017) ("Notice").

[2] This pleading represents the position of IPPNY as an organization, but not necessarily the views of any particular member with respect to any issue.

maintenance of certain resource types or resources with certain attributes and the need for the electricity markets operated by ISO New England Inc. ("ISO-NE"), New York Independent System Operator, Inc. ("NYISO"), and PJM Interconnection, L.L.C. ("PJM") to produce accurate market signals that meet system needs reliably and cost effectively and allow new and existing resources a fair opportunity to recover their costs.

In its Notice, the Commission encouraged interested parties to address five potential paths or any other proposed individual solution with respect to the interplay between state policy goals and wholesale markets. IPPNY submitted pre-technical conference comments in this docket on April 28, 2017, urging the Commission to examine whether competitive market principles could be used to achieve state public policy goals and ensure the continued efficient functioning of the wholesale electricity market in New York.[3] IPPNY advocated for an individual solution consistent with Path 4, which would integrate New York State public policy goals to reduce carbon dioxide emissions ("carbon") into the wholesale energy market while protecting price formation and operation of the market from capacity retained or constructed with support from out-of-market payments. Specifically, IPPNY proposed that the NYISO adopt a market-based approach that provides one market-wide carbon price by internalizing a single value for carbon into wholesale energy prices to ensure all zero and low-carbon emissions resources are valued in a consistent and non-discriminatory manner. At the same time, IPPNY urged the Commission to protect the competitive wholesale electricity markets by ordering the NYISO to strengthen its existing buyer-side market power mitigation measures and extend the scope statewide to ensure that the development of new, and the retention of existing, uneconomic resources in any location in New York that are supported with payments made outside of the

[3] Docket No. AD17-11-000, *supra*, Comments of Independent Power Producers of New York, Inc. (Apr. 28, 2017).

wholesale competitive electricity markets do not artificially suppress installed capacity prices in any zone in New York.

It is important to note that a variety of parties representing different viewpoints recognized, in their pre-technical conference comments, the many benefits of internalizing carbon pricing in wholesale markets, and, in some cases, agreed that this was the preferred path to integrating public policies into wholesale markets.[4] For example, Brad Jones, President and CEO of the NYISO, stated that, while ISO markets were not designed to value environmental attributes, they could be modified to capture and monetize the value of those attributes.[5] He noted that the NYISO will soon begin exploring a carbon pricing construct with The Brattle Group, market participants and New York State. Dr. David B. Patton, of Potomac Economics, Ltd., the independent market monitoring unit ("MMU") for the NYISO, established that legitimate state actions must be accommodated and stated that "[c]arbon pricing is by far the most promising solution for achieving a market-based solution that achieves all of the objectives."[6] Joseph Bowring, the MMU for PJM, preferred a market approach to carbon if society decides that carbon must be addressed, stating, "[i]mplementation of a carbon price is a market approach which would let market participants respond in efficient and innovative ways to

[4] In its notice initiating this proceeding, the Commission initially established the current market design selects resources based solely on operational and economic efficiency but further noted market rules have evolved over time "to address a myriad of issues while ensuring the reliable delivery and sale of electricity at just and reasonable rates." *See* Docket No. AD17-11, *supra*, Notice of Technical Conference (Mar. 3, 2017) at 1.

[5] Docket No. AD17-11-000, *supra*, Comments of Bradley C. Jones President and Chief Executive Officer New York Independent System Operator, Inc. (May 3, 2017) at 4.

[6] Docket No. AD17-11-000, *supra*, Comments of David B. Patton, Ph.D. Regarding State Policies Affecting Eastern RTOs (Apr. 24, 2017) at 5 ("Patton Comments").

the price signal rather than relying on planners to identify specific technologies or resources to be subsidized."[7]

Similarly, Samuel A. Newell of The Brattle Group stated that "[t]he most market-oriented approach to implementing a decarbonization policy is to price carbon emissions."[8] Likewise, Robert Erwin, General Counsel of the Maryland Public Service Commission, stated, "FERC should investigate placing value on the avoided externalized costs of non-emitting generation resources."[9] Amory B. Lovins of the Rocky Mountain Institute stated, "pricing carbon emissions is desirable and would help nuclear plants compete with gas-fired plants. However, it would equally advantage carbon-free renewables—a cheaper, stable-and-declining-price, more resilient, more popular, and more potent and ubiquitous competitor than gas. If avoided carbon emissions are to be valued, they should be valued equally for all resources."[10]

IPPNY will not repeat its pre-technical conference comments, which addressed many of the topics raised in the Notice. Rather, IPPNY focuses these comments on two topics raised in the Notice that it has not already addressed. First, in response to the Commission's request for comments on the degree of urgency for reconciling wholesale markets and state public policy programs, the NYISO should act as quickly as possible to incorporate the value of carbon into energy prices and strengthen its buyer-side market power mitigation rules to protect the price formation and operations in the competitive markets. Investors must be given confidence that they can make rational investment decisions that are needed to maintain reliability with assurance that their investments will not be undercut by the price suppressive impacts of state

[7] Docket No. AD17-11-000, *supra*, Statement of Joseph Bowring Independent Market Monitor for PJM (May 1, 2017) at 5.

[8] Docket No. AD17-11-000, *supra*, Samuel A. Newell The Brattle Group (Apr. 25, 2017) at 3.

[9] Docket No. AD17-11-000, *supra*, Comments of the Maryland Public Service Commission (Apr. 28, 2017) at 5.

[10] Docket No. AD17-11-000, *supra*, Letter from Amory B. Lovins to Hon. Cheryl A. LaFleur (Apr. 25, 2017) at 3.

public policies. Second, if the Commission decides that capacity markets should be modified to "accommodate" state public policies, it should direct the NYISO to adopt a forward capacity auction similar to the markets in PJM and ISO-NE.

I. THE NYISO SHOULD ADOPT A MECHANISM TO INCORPORATE THE VALUE OF CARBON IN WHOLESALE ENERGY PRICES AS SOON AS POSSIBLE.

New York may soon face a crisis if wholesale market price signals are distorted because they do not reflect the value of carbon that the State is paying to zero-emitting resources outside of the market, and thus, fail to attract needed investments. As of 2017, but for State-mandated out-of-market payments to certain New York nuclear facilities, more zero carbon emitting resources—totaling thousands of megawatts—would be financially distressed, distress which could be alleviated if the market properly incorporated the value of carbon emissions. In addition, while the capacity-weighted average age of U.S. power generation facilities was 29 years at the close of 2016, in New York, the average age was 36 years.[11] 520 MW of steam-turbine generating capacity and 1,400 MW of gas-turbine generating capacity in New York is 62.5 and 46 years of age or older, respectively.[12] Nationally, 95% of such capacity at these advanced ages have ceased operations.[13] By 2027, more than 7,250 MW of gas-turbine and steam-turbine generating capacity in New York will reach an age beyond which 95% of these

[11] Power Trends, New York's Evolving Electric Grid 2017, New York Independent System Operator, Inc. ("Power Trends 2017") at 18, available at http://www.nyiso.com/public/webdocs/media_room/publications_presentations/Power_Trends/Power_Trends/2017_Power_Trends.pdf.

[12] *Id.*

[13] *Id.*

types of capacity have deactivated nationally.[14] Deactivation and, potentially, replacement of these important capacity resources is imminent.[15]

In addition, IPPNY is aware that the New York State Department of Environmental Conservation is planning to release proposed regulations by this summer that would further restrict emissions of nitrogen oxide from approximately 3,000 MW of combustion turbine peaking facilities in New York City and Long Island during high electric demand days. A significant portion of this capacity is needed to maintain reliability on hot summer days. In addition, given their unique fast ramping capability, more of these facilities must be added to the system to complement the intermittent renewables that are being added to the system in substantial quantities. These regulations, which are likely to be adopted, will require generator owners to make the business decision to either incur significant capital investments and upgrade or replace this capacity or, alternatively, to retire it.

While the goal of New York State's Clean Energy Standard ("CES") is that 50% of New York's electricity be generated by renewable sources by 2030 ("50 by 30 goal"), replacing all of the carbon emitting generating facilities needed to maintain reliability and balance the energy provided by intermittent renewable resources with zero-emitting resources in the near term is infeasible due to the high costs of developing storage and other highly responsive resources, in general, and especially in New York City and Long Island.[16] New York City's and Long Island's locational capacity requirements require approximately 82% and 103%, respectively, of the generation serving these capacity zones to be electrically located in these zones. However,

[14] *Id.* at 19.

[15] *Id.*

[16] *See* NYPSC Case 15-E-0302, *Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard*, Order Adopting a Clean Energy Standard (Aug. 1, 2016) ("CES Order").

the vast majority of the proposed renewable projects in the NYISO's interconnection queue are planned for upstate New York in the Rest of State market.

Given the age of New York's generation assets, the likelihood of more stringent environmental requirements and the requirements of the CES program, at least a full investment cycle in carbon emitting generation is necessary to maintain reliability. As the permitting and development process for repowered and new generating facilities takes many years, developers will need to begin making investment decisions very soon. Specifically, as John P. Reese of Eastern Generation testified at the May 1 technical conference, given New York's monthly capacity market structure, investment signals must be sent now with mechanisms in place within two years to account for five-year investment cycles.[17] The record is thus clear—if we want to transition to a cleaner generation portfolio, the cost of carbon must be part of the economic dispatch and other market enhancements must be considered in the near term.

Internalizing the value of carbon in the wholesale energy market will advance the State's efforts to reduce carbon emissions and provide price signals to incent investors to upgrade and replace old, inefficient carbon-emitting resources. It will also help retain zero-emitting resources critical to this transition through competitive market forces instead of through out-of-market attribute payments by the State. For the NYISO's competitive electricity and capacity markets to succeed in driving needed investment, investors must be able to reasonably rely on market price signals that properly reflect the costs of new entry 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, developers of generation needed to satisfy reliability needs may also demand regulated, long term contracts and

[17] Docket No. AD17-11, *supra*, May 1, 2017 Transcript at 152-53, 191-92.

subsidies. The NYISO's MMU agreed that investors will not risk capital if they fear that State policies will create artificial surpluses that suppress energy and capacity prices. He stated at the May 1 technical conference that:

> I think we have to keep in mind that any dollar an investor spends is going to be based on an expected set of revenues over many years and if there's no solution in sight at this moment and you are asking me to [put] money in as an investor at this moment -- I don't know why they would. So that's the concern and that's the urgency and I think what I'm afraid we are going to get to is a very competitive market for rents and subsidies rather than a competitive market for generating assets and energy and ancillary services. So I think we have to get our hands around this and figure out which direction we are going relatively quickly.[18]

As many of the parties that testified at the technical conference stated, failure to integrate State public policies in wholesale markets will be the death of such markets. The NYISO's MMU correctly stated in its pre-conference comments that:

> If state policies are achieved outside of the RTO markets and no attempt is made to mitigate their effects on the RTO markets, the RTO markets will cease to be effective in facilitating resource adequacy. This would adversely affect suppliers in the RTO markets, the states and consumers served by the RTOs who would likely bear much higher costs and lower reliability.[19]

As discussed above, the NYISO is currently examining internalizing the value of carbon into wholesale energy prices. IPPNY understands that the carbon adder proposal that The Brattle Group is studying is similar if not identical to the approach that IPPNY has been advocating. Unfortunately, Mr. Jones of the NYISO testified at the May 1 technical conference that he believed it would take a minimum of three years to complete the process of implementing a

[18] Docket No. AD17-11-000, *supra*, May 1, 2017 Transcript at 186-187.

[19] Patton Comments at 6.

carbon adder into the NYISO markets.[20] This is far too long to address the investment concerns discussed above. Once a quorum is reconstituted, the Commission should immediately issue an order directing the NYISO to submit a compliance filing within six months composed of the Brattle Group's analysis of internalizing carbon prices in wholesale markets along with a proposal to incorporate public policies in wholesale markets.[21] If the NYISO determines that such a path is not warranted, the NYISO should be required to file a report with the Commission explaining the basis for its determination.

II. THE NYISO NEEDS A FORWARD CAPACITY AUCTION TO ACCOMMODATE STATE PUBLIC POLICIES

IPPNY also wishes to address the question in Path 4 concerning the steps the Commission should take to address the market impacts of state policies that cannot be readily valued and integrated into the wholesale markets. Even if the NYISO prices carbon, given the significant transmission constraints in New York separating the western part of the State from the eastern part of the State, renewable generation in the west is unlikely to displace carbon emitting resources in the east.[22] In addition, the NYISO's MMU indicates that the carbon price needed to incent a large-scale solar farm downstate is three to four times higher than the carbon price the NYISO may use.[23] This means that, if a carbon price is not set at a sufficient level, subsidization is still likely to be needed to incent new entry of specific renewable generation in

[20] Docket No. AD17-11-000, *supra*, May 1, 2017 Transcript at 187-88 (noting "the real possibility of driving the type of investment we want" by sending prices signals to New York City generation that "if you can avoid higher carbon output by putting in a more efficient facility that can be done.")

[21] While Mr. Jones suggested that working through market participants takes a long time and getting the State comfortable "will take a while" (id. at 188), these issues have been under consideration in New York since last August and the stakeholder process is often more effective when disciplined by a deadline.

[22] *See* Power Trends 2017 at 10. NYISO describes the New York Control Area as "A Tale of Two Grids." *Id.*

[23] *See* 2016 State of the Market Report for the New York ISO Markets, Potomac Economics (May 2017) at 69, available at http://www.nyiso.com/public/webdocs/markets_operations/documents/Studies_and_Reports/Reports/Market_Monitoring_Unit_Reports/2016/NYISO_2016_SOM_Report_5-10-2017.pdf.

certain areas of the state. To ensure that this subsidized new entry does not distort capacity market price signals, the NYISO will still need an "accommodate" solution.

The Notice states that "other approaches for these state policies may include accommodation, application of the minimum offer price rule ("MOPR"), or an exemption from the minimum offer price rule."[24] A number of proposals to modify installed capacity markets to accommodate state public policy goals were discussed at the technical conference. IPPNY takes no position on the merits of any of these 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-NE and PJM 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.

To the extent that there are any adjustments to the capacity clearing mechanism to accommodate state public policies, these adjustments must be done in a way that produces decisions before major investments are made. Thus, if the Commission decides that capacity markets should be modified to accommodate state policies, it should direct the NYISO to adopt a forward capacity auction.[25]

[24] *See* Notice at 2.

[25] From the outset of this proceeding, Commissioner Honorable recognized that a one-size-fits-all solution may not be possible across the three RTO/ISO regions. *See* Docket No. AD17-11, *supra*, Notice of Technical Conference – Statement of Commissioner Colette Honorable (Mar. 3, 2017) at 1. IPPNY agrees. Once a forward market is put into place in New York, the NYISO must be permitted to review specific modifications to the design of its capacity markets with its stakeholders and receive their input.

III. CONCLUSION

For the foregoing reasons, the Commission should, once it has a quorum, immediately direct the NYISO to file The Brattle Group's analysis of internalizing carbon prices in wholesale markets along with a proposal to incorporate public policies in wholesale markets. If the NYISO decides not to file such a proposal, the Commission should require the NYISO to explain the basis for its decision. In addition, if the Commission decides that capacity markets should be modified to accommodate state public policies, it should direct the NYISO to adopt a forward capacity auction similar to the markets in PJM and ISO-NE.

Dated: June 22, 2017

Respectfully submitted,

Gavin J. Donohue
Gavin J. Donohue
President and CEO Independent Power Producers of New York, Inc.
194 Washington Ave., Suite 315
Albany, New York 12210
518-436-3749
gavin@ippny.org