GAVIN J. DONOHUE

PRESIDENT & CEO

194 Washington Ave, Suite 315 Albany, New York 12210 **P** 518.436.3749 **F** 518.436.0369 **IPPNY.ORG**



November 25, 2020

Via email at climateact@dec.ny.gov

Jason Pandich Office of Climate Change NYS Department of Environmental Conservation 625 Broadway Albany, NY 12233-1030

Dear Mr. Pandich:

Independent Power Producers of New York, Inc. ("IPPNY") offers the following comments on the NYS Department of Environmental Conservation's ("DEC") draft guidance document, "Establishing a Value of Carbon: Guidelines for Use by State Agencies." IPPNY is a not-for-profit trade association representing companies involved in the development and operation of electric generating facilities in the State of New York. IPPNY member companies produce a majority of New York's electricity, and they are actively developing projects, financed principally through revenues from the competitive wholesale electricity markets, that will reduce power sector greenhouse gas ("GHG") emissions to comply with New York environmental regulations and energy goals. Incorporation of a uniform and reliable value of carbon into the electric power markets would send the price signals needed to reduce power sector GHG emissions as cost effectively as possible.

The DEC considered two approaches for establishing a value of carbon. The first approach, the damages-based approach, is based on the monetary cost of damages that would result from an incremental increase in GHG emissions as a result of climate change, commonly referred to as the social cost of carbon ("SCC"). GHG emissions are often described as a negative externality in the economy and, because there are costs to society from such emissions that are not accounted for in market prices, as a market failure. The second approach, the marginal abatement cost approach, establishes a value of carbon with reference to a specific emissions reduction goal - in other words - what would be the cost to reduce, or abate, the last metric ton of emissions by the amount needed to meet a particular emissions target at least cost. The marginal abatement cost is the highest cost required to meet the emission reduction goal.

The DEC recommends the use of the U.S. Interagency Working Group's damagesbased SCC as the basis for State agency consideration of GHG emissions-induced climate change impacts in decision-making processes. DEC states that it is not seeking to establish an economic cost, compliance cost, or fee on any entity through this guidance, which would require specific, targeted analyses of the relevant sectors, and that, while a damages-based approach establishes a SCC for all sectors, marginal abatement costs are typically estimated with regard to sector-specific technologies, markets, and emission reduction goals. DEC further states that the electric power sector is best positioned to develop marginal abatement cost curves quickly, due to available cost information and its longer history of emissions reductions policies.

DEC does not provide guidance for developing marginal abatement costs curves for use by the electric power sector, but it states that the Department *may* provide additional guidance at a later date. IPPNY urges the DEC to work with the New York State Energy Research and Development Authority ("NYSERDA")¹ and the New York Independent System Operator ("NYISO") to immediately develop marginal abatement cost curves based on the carbon reduction goals of the Climate Leadership and Community Protection Act ("CLCPA"), or issue guidance on how to do so, so that the NYISO may incorporate a uniform value of carbon into the competitive wholesale electricity market ("Carbon Adder") that is consistent with the State's goals under the CLCPA.²

Incorporating a carbon price based on marginal abatement cost curves would correct the existing power sector market failure to account for the cost to society of GHG emissions in electricity market prices and would establish the single highest cost needed to meet New York State's emissions reduction and technology specific goals under the CLCPA.³ The DEC should set the SCC at a level that represents the cost of achieving the State's clean energy goals, in order to ensure that the NYISO's Carbon Adder provides necessary price signals to private investors to develop the clean energy resources needed to meet the CLCPA's requirements.

In the absence of such guidance on marginal abatement cost curves, IPPNY recommends that DEC adopt a damages-based SCC, based on a discount rate no greater than 2%, for use by the NYISO.⁴ A damages-based SCC would establish the maximum price above which it is uneconomic to make electric power sector investments to reduce GHG emissions. In other words, if power sector technologies cost more than the damages-based SCC, those technologies should not be developed, as their costs exceed the cost of climate change damages. If the DEC adopts a damages-based estimate, then the State should also scrutinize any effort to reduce carbon that is inconsistent with that damages-based cost.

Wholesale energy prices in New York currently include some value for carbon emissions because New York is one of the states that participates in the Regional Greenhouse Gas Initiative ("RGGI") program. RGGI requires fossil electric generating facilities larger than 25 MW to purchase RGGI allowances through an auction for each ton of carbon they emit. These facilities include the costs of their RGGI allowances in their wholesale energy market offers

¹ Section 75-0113 of the Environmental Conservation Law requires the DEC, in consultation with NYSERDA, to establish the SCC.

² NYSERDA has experience with GHG abatement cost curves. *See* Development of New York State Greenhouse Gas Abatement Cost Curves, The New York State Energy Research and Development Authority, Albany, NY, Prepared by: The Center for Climate Strategies, NYSERDA Agreement 10850.

³ For example, the DEC should set the SCC at no less than the highest renewable energy credits ("REC") price that NYSERDA awarded to developers in its most recent solicitations for Tier 1 RECs and Offshore Wind RECs.

⁴ In terms of the damages approach to setting the SCC, the DEC notes that the value of carbon presented in the guidance document is not the only value that may be used by the State; alternative methods may be used by State agencies as needed to meet the CLCPA and other State goals. However, IPPNY points out that damages resulting from a ton of carbon emissions are the same, regardless of how, or from where, the emissions are produced, and that the cost of solutions that reduce carbon emissions should not exceed the SCC. A consistent number should be used by, and across, agencies, instead of agencies having discretion, and there should not be different values for different programs.

because these costs are part of their operating costs. The number of allowances available to be purchased is determined and controlled by the RGGI states; the greater the supply, the lower the expected cost to purchase RGGI allowances. The most recent RGGI allowance auction cleared at \$6.82/ton (the second highest price since auctions began in 2008),⁵ which is equivalent to approximately \$3.41/MWh for the marginal resources in the NYISO's statewide energy market assuming they emit carbon at an average of 0.5 tons/MWh. The current value of carbon as a result of RGGI is drastically below the value needed to support renewable energy development to meet the goals of the CLCPA.

In 2016, the New York State Public Service Commission ("PSC") adopted its Clean Energy Standard ("CES"), which puts the State on a path of aggressively attracting and retaining zero-emissions energy resources through the awarding of contracts that value the environmental attributes of certain types of zero-emission resources. The CES implicitly assigns a much higher value to a ton of carbon avoided than RGGI has produced. Under the CES, load-serving entities ("LSEs") are required to acquire a certain quantity of RECs that increases annually through a formula. This process produced a price of RECs in 2020 of \$22.09/MWh that LSEs can buy to meet their REC compliance obligation for 2020, which implies that a ton of carbon avoided by carbon-free resources selected through the CES is 547% more valuable than a ton of carbon avoided by carbon-free resources that exist today and are being priced and dispatched in the NYISO's markets. In other words, while a carbon-free resource in the NYISO's market receives the value of the RGGI price (\$3.41/MWh) through higher clearing prices only when a carbon-emitting resource is on the margin, a REC recipient receives an exponentially higher payment (\$22.09/MWh), for the same attribute, regardless of whether a carbon-emitting resource is on the margin.

Absent incorporation into the market of a Carbon Adder, the manner in which New York State has chosen to achieve it clean energy goals to date threatens to undermine the competitive wholesale electricity market which, as designed, has successfully maintained resource adequacy while achieving the additional public policy goals of limiting cost incurred by consumers and attracting some low- and non-emitting resources. In order to the meet the goals of the CLCPA, New York's current clean energy policy is to accelerate the selection and payment of emissions credits, e.g., RECs, to certain types of resources through solicitation processes that would not otherwise receive adequate revenues under the current wholesale electricity market construct, thereby subsidizing their participation in the market. New York's decision to require retail consumers, through their retail electricity rates, to rely on such solicitations and pay a higher price for low-carbon energy sources than is reflected in the competitive wholesale electricity market price suppresses wholesale market prices below efficient levels, resulting in additional costs to consumers without securing the benefit inherent in the wholesale market's ability, by design, to attract the most efficient and cost-effective resources.

⁵ See RGGI Allowance Prices and Volumes (accessed October 22, 2020), available at https://www.rggi.org/Auctions/Auction-Results/Prices-Volumes.

⁶ Cases 15-E-0302 et al., *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).

To correct the failure of the market to account for the cost to society of GHG emissions and to allay the necessity for New York State to enter ratepayers into more long-term contracts through CES solicitations for carbon-free resources, IPPNY suggests that DEC should develop⁷ a carbon price, based on marginal abatement cost curves designed to comply with the CLCPA, to be used in the carbon pricing program developed by the NYISO.⁸ This approach would have the benefits of achieving the State's clean energy goals, utilizing the lowest cost pricing structure of the competitive market to dispatch low carbon resources, limiting the degree to which issues of buyer-side market power mitigation arise, and avoiding unnecessary litigation while maintaining just and reasonable market prices to ensure reliability in the long term.

The Federal Energy Regulatory Commission ("FERC") recently issued a draft Carbon Pricing Policy Statement, clarifying its jurisdiction over organized wholesale electric market rules that incorporate a state-determined carbon price in those markets and voicing its support for regional electric market operators, such as the NYISO, to explore and consider the benefits of establishing carbon pricing rules through Federal Power Act Section 205 filings. FERC's determination of whether such filings are just and reasonable will likely depend partly upon the manner in which a state or states set the carbon price. A non-discriminatory and uniform carbon price, calculated using marginal abatement cost curves, that is applied across the entire power sector would stand the best chance of FERC approval.

Establishing a single, market-wide carbon price by internalizing the value of carbon determined using marginal abatement cost curves in wholesale energy prices will provide an important signal to private sector energy developers to invest in clean energy resources to meet the requirements of the CLCPA. It is time for New York to continue its excellent record of innovative leadership in energy and environmental policy by establishing marginal abatement cost curve guidance and supporting carbon pricing for New York's wholesale electricity market, as central pathways to meet the CLCPA's goals. Thank you very much for your consideration, and we look forward to our ongoing work for how best to achieve the goals of the CLCPA.

Sincerely,

Gavin J. Donohue President & CEO

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⁷ Once the SCC is set, the DEC and NYSERDA, along with the PSC, should communicate their overt support to the NYISO for the prompt adoption of the market-based carbon pricing approach that provides a single, market-wide carbon price by internalizing the value of carbon in wholesale energy prices.

⁸ The NYISO has proposed carbon pricing as a modification to its energy market rules to internalize the value of carbon emission reductions in wholesale energy prices to harmonize the wholesale markets with State clean energy policies. The NYISO's carbon pricing proposal would much more effectively address the State's policies through the Carbon Adder, which adds the value of carbon to the energy bids of carbon-emitting resources. The carbon price signal would ensure that resources are economically dispatched in the locations where carbon-free electricity is most valuable, foster needed investment to attract new, and retain existing, renewable and other low or non-emitting energy resources.

⁹ Docket No. AD20-14-000, *Carbon Pricing in Organized Wholesale Electricity Markets*, Notice of Proposed Policy Statement (Oct. 15, 2020) ("Notice").