

**Written Statement of the New York Independent System Operator
New York State Senate Standing Committee on Environmental Conservation**

**Senator Todd Kaminsky, Chairman
Public Hearing: To discuss the Climate and Community Protection Act
February 15, 2019**

The New York Independent System Operator (NYISO) is the independent body responsible for providing open access transmission service, maintaining reliability, and administering competitive wholesale electricity markets in New York State. We do not generate power or own transmission lines, but we administer wholesale energy markets and operate the bulk power system in New York State to meet New Yorkers' electricity needs on a daily, hourly, and minute-to-minute basis. We are committed to a fair, transparent market system because it helps us select the least-cost mix of resources to reliably deliver wholesale power to New York consumers.

The NYISO is charged with operating New York's power grid under the most stringent reliability standards in the nation, under the strict oversight of the Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, the Northeast Power Coordinating Council, the New York State Reliability Council, and the New York State Public Service Commission. At the state level, in addition to serving as a non-voting member of the State Energy Planning Board, we work closely with the Public Service Commission, the Department of Public Service, the Department of Environmental Conservation, the New York Power Authority, the Long Island Power Authority, and the New York State Energy Research and Development Authority to provide timely and accurate data, analysis, and studies to help these agencies fulfill their duties and to better understand the state's public policy goals and their implications for the grid.

The NYISO conducts independent, expert planning studies of the bulk power system in New York to fulfill reliability standards, identify opportunities to reduce congestion on the transmission system, and meet New York State public policy needs calling for new transmission facilities, such as transmission lines to deliver power from renewable resources to customers.

Our dual role as grid operator and wholesale market administrator gives us a unique perspective on how competitive markets can contribute to achieving the state's energy and environmental policy goals. The NYISO-administered markets select the least-cost set of suppliers to meet consumer demand, all while adhering to strict reliability requirements. Our markets incentivize suppliers to minimize their operating costs, and provides powerful investment signals to inform developers on how to best meet the energy needs of New Yorkers.

This competitive market structure has delivered lower power prices to New Yorkers and contributed significantly to environmental gains on the grid. Since our markets began operation in 2000, carbon dioxide emissions from the power sector have declined by more than 50%; a level of emissions reduction that far outpaces reductions from other sectors of the state's economy. These emissions reductions are attributable to investments that improve the efficiency of existing generators, investments in new power plants that have displaced older, less efficient generation, and the NYISO's efforts to integrate more than 1,800 megawatts of wind generating capacity.

Carbon Pricing

As the state pursues more aggressive goals for carbon dioxide emissions reductions and renewable energy development, the NYISO believes competitive markets can be enhanced and leveraged to help achieve the state's energy and environmental initiatives. That's why in 2017, when the PSC enacted the Clean Energy Standard requiring that 50% of the energy consumed in the state be generated from renewable resources by 2030, the NYISO and its stakeholders sought ways to further enhance the NYISO's wholesale markets to better reflect and facilitate state energy policy goals.

The approach chosen, known as *carbon pricing*, holds the promise of helping the state more efficiently reach its goals by building incentives into the NYISO's wholesale energy markets to more efficiently reduce carbon dioxide emissions. Based on several months of research, analysis, and collaborative discussions with stakeholders, the NYISO believes that carbon pricing has the potential to enhance New York State's energy and environmental goals without disrupting reliability or adding substantial cost to ratepayers. Carbon pricing has the potential to help the state achieve its goals at a lower cost by guiding private-sector investment to where it can best meet policy goals as well as the energy needs of the grid. Additionally, and perhaps most importantly, this shifts the financial risk of investments away from consumers and onto developers.

Under the carbon pricing proposal currently being considered by NYISO stakeholders, the NYISO would factor the social cost of carbon into the clearing price for energy. Cleaner generators that produce little or no emissions would see increased market revenue, reflecting the value of both the energy they produce and the value associated with avoided carbon dioxide emissions. Meanwhile, sources of generation with higher emissions would receive no additional revenue beyond the value of the energy produced.

The state's current approach to reaching its carbon dioxide emissions reduction goals relies heavily on the purchase of "Renewable Energy Credits" (RECs), or out-of-market payments to eligible renewable generators, designed to compensate those resources for their environmental attributes. Further, the state is procuring "Zero Emissions Credits" (ZECs) from eligible nuclear facilities associated with the energy they produce in an effort to retain this significant base of zero-emitting energy production.

By incorporating an incentive to reduce carbon dioxide emissions directly into energy markets, the NYISO believes that the state can realize greater emissions reductions than it can by providing REC and ZEC payments alone. This is because fossil fuel-based generators, which are not eligible for REC or ZEC payments, would see incentives to make investments that reduce their emissions profiles. Reliance on RECs and ZECs alone does not provide an incentive for fossil fuel generators to reduce emissions.

Renewable resources such as wind and solar, and nuclear generation, would benefit from this novel market-based approach because they do not produce carbon dioxide emissions. As a result, the NYISO's analysis shows that ZEC payments could be eliminated while future REC payments would be reduced since resources seeking such payments would be able to derive more revenue directly from the NYISO's competitive wholesale energy markets. Carbon pricing would encourage renewable energy developers to target areas of the grid with higher carbon dioxide emissions from fossil fuel resources, further supporting the state's efforts.

The NYISO is optimistic about the potential for carbon pricing to enhance the state's approach to reducing carbon dioxide emissions and expanding renewable generation. We continue to work closely with state agencies and NYISO stakeholders to refine the proposal and garner broad consensus on the

approach. Among the issues we are addressing are mechanisms to treat energy imports and exports in a way that avoids emissions leakage from New York to other states, a mechanism to return carbon residual revenues back to customers, and mechanisms to make carbon emission costs transparent to participants so they can make informed investment and operational decisions.

As the Senate considers action on legislation related to climate change and the power grid, the NYISO would like to respectfully remind you and the committee of the power and strength of the competitive wholesale electric marketplace. While establishing aggressive goals for emissions reductions and renewable development can help to stimulate investment, markets are best equipped to guide those investments to where they can provide the greatest benefit for consumers and the environment. Potential legislation intended to reshape the grid should not prescribe or limit solutions, but enable market forces to drive towards solutions that build upon the success of energy markets in New York. Ultimately, the NYISO's 20 years of leveraging competitive markets to operate the grid reliably and efficiently have shown that markets deliver cleaner sources of energy at lower prices.

Thank you for the opportunity to comment on these important issues.