

# **NYISO Comments on the Regional Greenhouse Gas Initiative**

## **Program Review**

**October 6, 2017**

### **I. Introduction**

The New York Independent System Operator, Inc. (“NYISO”) appreciates the opportunity to comment on the proposed Policy Case for 2017 and the proposed Model Rule. The NYISO is the not-for-profit company charged with reliable operation of New York’s bulk electricity grid, administration of wholesale electric markets, and planning for the future of New York’s power system. The NYISO has participated in the Regional Greenhouse Gas Initiative (“RGGI”) stakeholder process since its inception, and continues its participation by offering the following comments in response to the issues raised at the stakeholder meeting held by the RGGI states on September 25, 2017.

### **II. General Comments**

The NYISO respectfully submits that RGGI should improve its electric system modeling for the 2016 Program Review before finalizing the Policy Case for 2017 and the proposed Model Rule.

The Integrated Planning Model (“IPM”) platform appears to assume inaccurate heat rates for generators located in New York State that should be corrected in order to improve the veracity of the model. The model assumes heat rates for Combined Cycles (“CC”), Combustion Turbines (“CT”), and Steam Turbines (“ST”) that are too low, in the view of the NYISO. While the model reports increased production levels from these units in New York for the period 2017 through 2029, compared to 2016 production levels, the assumed low heat rates force the model

to underestimate the amount of fuel burned to serve load, electricity prices, emission allowance prices, and emissions for New York. These underestimated model outputs could distort electric production and emission patterns across the RGGI states and the larger region considered in the model.

The NYISO submits that, in order to enhance the accuracy of the IPM, New York generator heat rates should be estimated using the USEPA Clean Air Markets Database (“CAMD”). The NYISO observes that, based on the 2016 CAMD reported data for New York generators, CCs reported a gross heat rate of 8.2 mmBTU/MWh, CTs reported a gross heat rate of 11.1 mmBTU/MWh, and STs reported a gross heat rate of 12.4 mmBTU/MWh. These heat rates yield much higher fuel use to serve load, electricity prices, emission allowance prices, and emissions for New York. The table below presents estimated emissions for New York generators based on the apparent heat rates reported in the 2016 CAMD, assuming only natural gas firing only. By comparison, the IPM model underestimates CO<sub>2</sub> emissions by more than 44 million tons, or 25%, for the six years modeled. Estimating emissions using the CAMD implied heat rates also demonstrates that New York CO<sub>2</sub> emissions would exceed its Allowance Budget by more than 64 million tons over the six year period.

**Estimated Emissions for New York Generators Based on the CAMD**

	Years Modeled in IPM						Six Year Total
	2017	2020	2023	2026	2029	2031	
<b>Estimated CO<sub>2</sub> Emissions Based on USEPA CAMD and IPM Generation by Type</b>							
Combined Cycle	24,249,234	24,708,000	27,846,624	25,526,887	21,769,297	21,773,574	
Combustion Turbine	1,430,953	1,212,208	1,380,433	1,252,016	1,188,997	1,225,666	
Steam Turbines	13,241,778	11,183,207	11,173,487	11,138,128	11,054,889	10,952,891	
Fossil Emissions	38,921,965	37,103,415	40,400,543	37,917,031	34,013,182	33,952,131	222,308,268
CO <sub>2</sub> Emissions Reported by IPM	32,621,877	29,907,854	32,184,848	30,036,888	26,728,994	26,751,450	178,231,912
Under Reporting	6,300,088	7,195,561	8,215,695	7,880,143	7,284,188	7,200,681	44,076,356
% Under Reported	19%	24%	26%	26%	27%	27%	25%
NY State Allowances	32,837,536	30,435,778	27,485,674	24,828,512	22,171,351	20,399,910	158,158,760
Estimated NY State Allowance Deficit	6,084,430	6,667,637	12,914,869	13,088,519	11,841,832	13,552,222	64,149,508

### III. Conclusion

The NYISO recommends that the heat rate database be adjusted to correctly reflect actual performance using the USEPA Clean Air Markets Database and be made available for additional public comment. The NYISO further recommends that the Policy Case for 2017 be reevaluated based on the NYISO's suggestion for revising the underlying data. The NYISO respectfully requests that the RGGI states consider these comments in the 2016 RGGI Program Review.

Respectfully submitted,

/s/ Zachary G. Smith

Zachary G. Smith, Vice President of System & Resource  
Planning

James H. Sweeney, Senior Attorney

**New York Independent System Operator, Inc.**

10 Krey Boulevard

Rensselaer, NY 12144

Tel: (518) 356-6000

[ZSmith@nyiso.com](mailto:ZSmith@nyiso.com)

[JSweeney@nyiso.com](mailto:JSweeney@nyiso.com)