

Preliminary Comment on New York Department of Public Service “Staff’s Responsive Proposal for Preserving Zero-Emissions Attributes”

Summary:

- Electricity price effects must be considered when evaluating Staff’s proposed ZEC program. We found previously that electricity costs for New York consumers would average \$1.7 billion per year higher without the upstate nuclear plants. The electricity cost savings that come from preserving these nuclear plants exceed the cap on ZEC costs, which is \$482 million per year for the first two years. Thus Staff’s proposed program to preserve the upstate nuclear plants would actually save consumers money on power costs. The ZEC cost cap is below the estimated electricity cost savings that comes from preserving the upstate nuclear plants, and actual ZEC costs are expected to be below the cap in future years.
- In addition to the electricity cost savings for New York consumers, preserving the upstate nuclear plants would prevent the release of about 15 million tons of CO₂ per year into the atmosphere.

On July 8, 2016, the staff of the New York State Department of Public Service (Staff) released a document entitled “Staff’s Responsive Proposal for Preserving Zero Emissions Attributes” that proposes a methodology to set prices for Zero Emissions Credits, or ZECs, to preserve the zero-emissions attributes of the upstate New York nuclear plants, Fitzpatrick, Ginna, and Nine Mile Point. The Staff proposal effectively sets the ZEC price at the U.S. government estimate of the prevailing Social Cost of Carbon for the first two-year tranche, offset for the carbon value already captured via the prevailing carbon price in the Regional Greenhouse Gas Initiative (RGGI), and converted to a per-MWh rate.

Although the proposed ZEC program, viewed in isolation, appears to add to the price that consumers will pay for power, it is important to put this cost in the larger context of what the power price would be if the upstate nuclear plants were to shut down, as is likely absent the ZEC support. As discussed in our previous paper, absent the upstate nuclear plants, power prices would be significantly higher, because higher-cost resources would be called upon to make up the lost power production.¹ We estimated that

¹ *New York’s Upstate Nuclear Power Plants’ Contribution to the State Economy*, The Brattle Group, December 2015. Power prices are set by short-run variable cost, and nuclear plants have very low short-run variable cost compared to the alternative sources of power (mostly gas-fired) that would be needed to make up the lost power production. This is true even though the fixed costs of operating a nuclear plant are higher.

without the upstate nuclear plants, electricity costs would be higher by \$1.7 billion a year, averaged over the period 2015-2024. This would correspond to a rate increase of over one cent per kilowatt-hour – about a 7.2% increase averaged across all customer classes, or 5.8% for residential customers and 8.2% for commercial/industrial customers.² The cap on the cost of ZECs is well below this amount – \$482 million per year in the program’s first two years. The ZEC cap rises in later years but always remains below the electricity cost savings – in fact, the electricity price savings we estimated exceeds the ZEC cap by about \$1.0 billion per year on average. The actual cost of ZECs is likely to be lower, since power market prices are expected to increase, which will reduce ZEC prices below the cap.³

Thus, with the ZEC program to preserve the upstate nuclear plants, although customers would pay for ZECs, they would avoid a power price increase that is larger than the ZEC cost. This means that customers actually pay less overall for power than if the upstate nuclear plants were to shut down. Preserving the upstate nuclear plants will allow New York ratepayers to continue to benefit from recent reductions in wholesale electricity prices. According to the NYISO, wholesale prices in 2015 were the lowest in the 15-year history of New York’s competitive markets for wholesale electricity.⁴

Finally, the ZEC program would also prevent the release of about 15 million tons of CO₂ per year into the atmosphere, as well as reductions in other pollutants such as NO_x, SO₂, and particulates. The Staff proposal would thus reduce carbon and other emissions while simultaneously saving money for New York’s electricity consumers.

² To estimate the rate impacts by customer class, the \$1.7 billion in projected annual future costs that would accompany the loss of the upstate nuclear plants are allocated across customer classes according to rates and sales volumes for 2014, the most recent year available, as reported by the U.S. Energy Information Administration in EIA Form 826.

³ The Staff proposal updates the ZEC price to the estimated SCC for future periods (the SCC rises over time, and the proposal continues to adjust for the RGGI carbon value), but offsets the ZEC price for any improvements in future power market conditions relative to current conditions. Thus the Staff formula provides an upper bound on the magnitude of ZEC payments; ZEC prices would be lower than this bound to the extent the wholesale market value of power improves from its current low levels, and in fact power prices are generally expected to improve from their current lows.

⁴ New York ISO, “Power Trends 2016, The Changing Energy Landscape,” page 3.