December 11, 2015

Dear RGGI Member States:

In addition to the comments we submitted jointly with other environmental organizations on December 4, 2015, NRDC is providing the following comments on the energy and peak demand forecast assumptions that the RGGI states will use in the reference case model for the 2016 Program Review.

According to the ICF presentation at the November 17 stakeholder meeting, the RGGI states are currently leaning toward using ISO-NE, NYISO, and PJM's forecasts of regional energy and peak demand growth, with potential adjustments by the states, in their reference case model. Acadia Center submitted comments on November 20 showing that ISO-NE's forecasts have "consistently overestimated both consumption and peak demand," and urged the states to make adjustments to these forecasts in the reference case to account for observed forecasting bias and better reflect investments in energy efficiency and demand-side resources in New England.

NRDC supports Acadia Center's comments. Our additional comments below show that NYISO and PJM's energy and peak demand forecasts have likewise consistently overestimated observed growth in their regions. Relying on these forecasts without adjustments would likely result in a RGGI reference case that overestimates both future CO_2 emissions and the cost of achieving additional emission reductions in the RGGI states.

To correct these problems, we urge the RGGI states to make adjustments to the energy and peak demand forecasts from ISO-NE, NYISO, and PJM to account fully for the energy and load-reducing effects of existing and future energy efficiency and demand-side resources in states throughout the RGGI region. As described further below, with respect to NYISO and PJM, we specifically request that the RGGI states:

- Use PJM's updated 2016 forecast as the starting point for PJM load growth in the 2016 Program Review reference case, and make further adjustments to fully capture the effects of energy efficiency and demand-side resources in the region.

- Utilize energy and peak demand forecasts for New York in the 2016 Program Review reference case that adjust NYISO's forecasts to account for NYISO's historic overestimation of growth, New York's existing commitments contained in the State Energy Plan, and reasonable expectations under the soon-to-be finalized Clean Energy Fund, REV, and other relevant proceedings.

NATURAL RESOURCES DEFENSE COUNCIL

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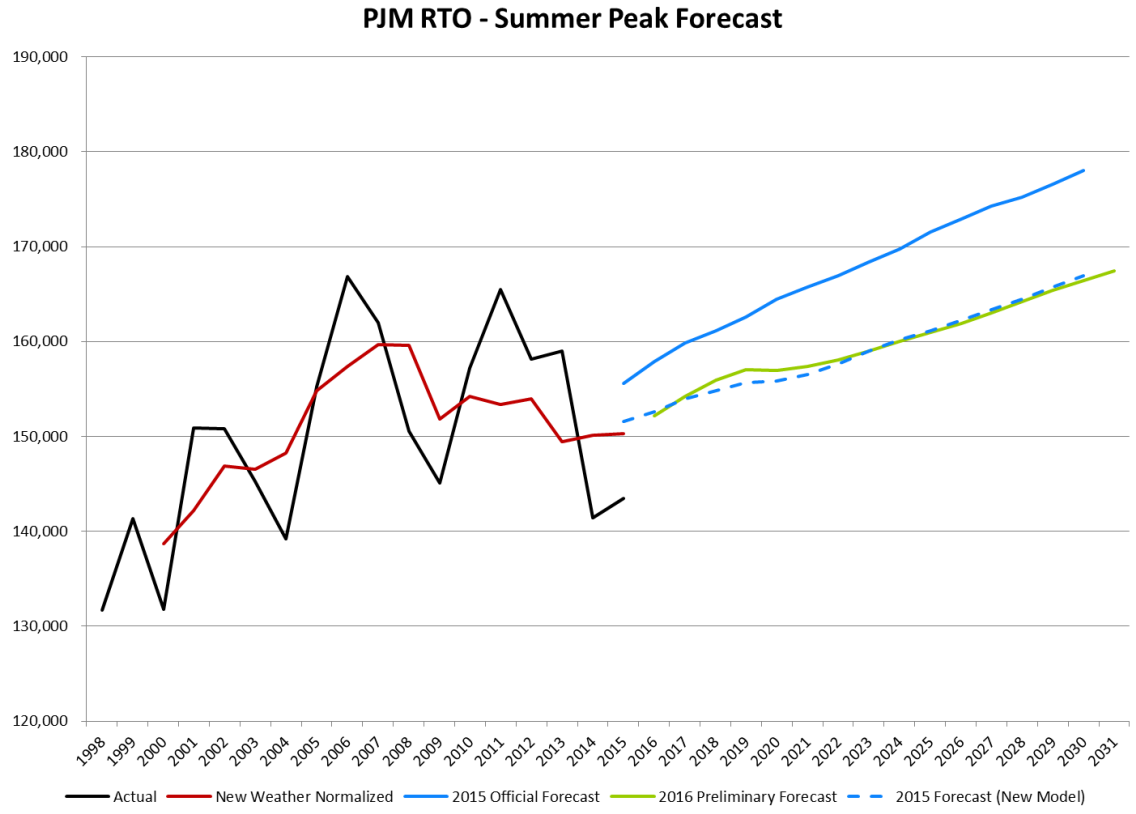
PJM Energy and Peak Demand Forecasts

Analyses by The Brattle Group[1] and Synapse Energy Economics[2] show that PJM has historically over-forecasted demand by failing to account for all expected energy efficiency savings in the region. Recently, PJM's Planning Committee endorsed changes to the load forecast model to more accurately forecast growth. As described by PJM, the "extensive revision" will, among other things, better "account for trends in appliance usage and energy efficiency."[3] PJM is also working to better account for behind-the-meter solar PV to further reduce its 2016 load forecast. PJM will release its final 2016 load forecast by the end of this year, but preliminary modeling projects loads that are significantly lower than previous estimates. PJM now forecasts a summer peak load in 2021 that is 5.1% lower than it forecast under the previous model last year. As shown in the figure below,[4] PJM's preliminary 2016 forecast predicts lower loads both in the near term and a slower rate of growth through 2030 than did the 2015 forecast.



[1] The Brattle Group (2014), Quantifying the Amount and Economic Impacts of Missing Energy Efficiency in PJM's Load Forecast, available at: http://www.brattle.com/system/publications/pdfs/000/005/080/original/Quantifying_the_Amount_and_Economic_Impacts_of_Missing_Energy_Efficiency_in_PJMs_Load_Forecast.pdf.

[2] Synapse Energy Economics, "Forecasting Energy Efficiency," presentation to PJM Load Analysis Subcommittee (April 30, 2015), available at: http://www.pjm.com/~/media/committees-groups/subcommittees/las/20150430/20150430-item-04-energy-efficiency-impact-synapse.ashx.

[3] PJM, "Executive Summary: Manual Changes," Planning Committee, Item #2 (November 5, 2015), available at: http://www.pjm.com/~/media/committees-groups/committees/pc/20151105/20151105-item-02-executive-summary-manual-changes-m19-pc-nov15.ashx.

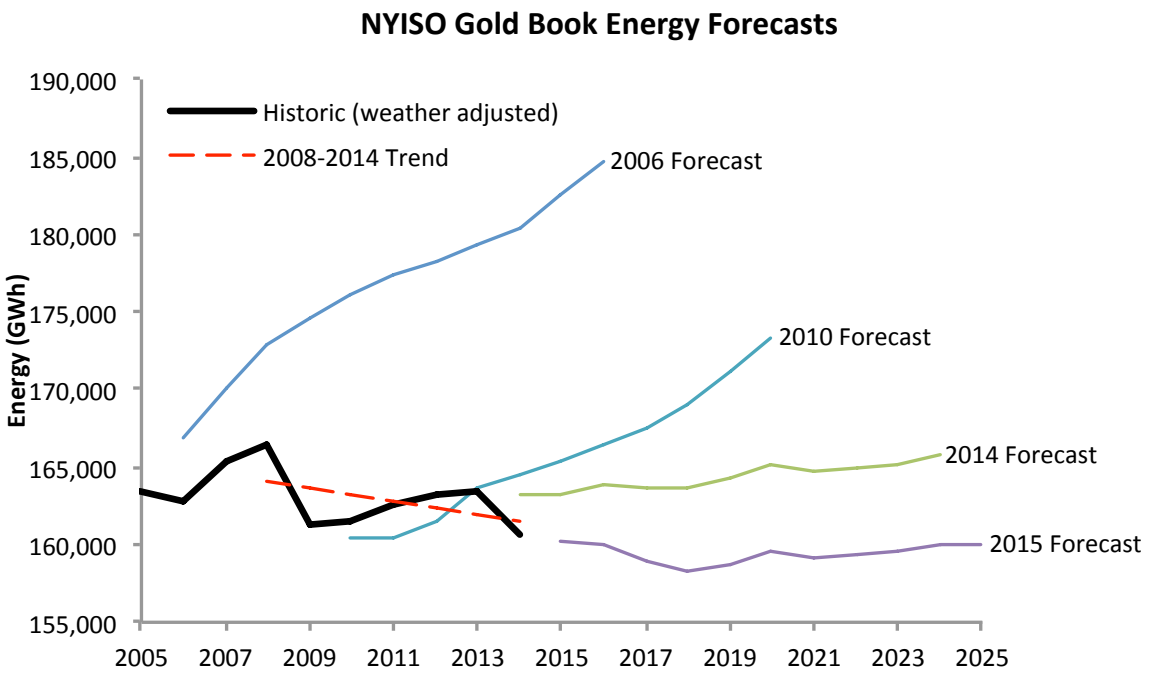
[4] PJM, "Preliminary 2016 Load Forecast," presentation to the Planning Committee (December 3, 2015), slide 5, available at: http://www.pjm.com/~/media/committees-groups/committees/pc/20151203/20151203-item-10-preliminary-load-forecast-presentation.ashx.

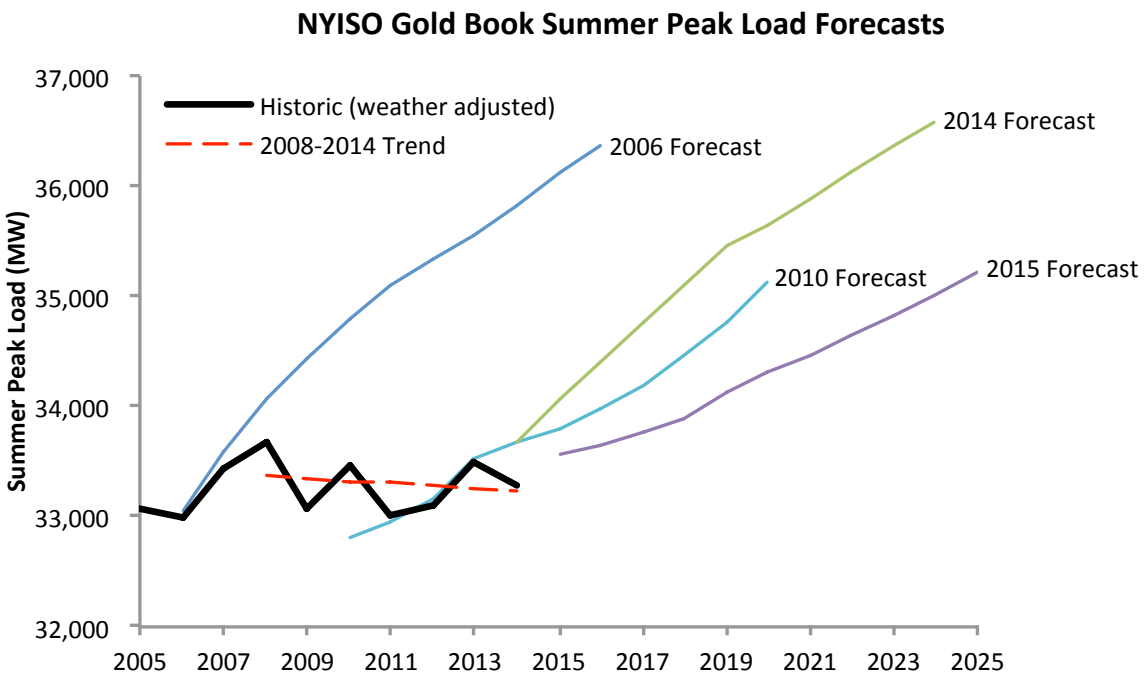
PJM's revised methodology is an improvement over previous years; however, the model endorsed by the Planning Committee likely still overestimates growth. PJM, for example, only accounts for the energy efficiency of specific categories of equipment (primarily heating, cooling, and lighting) and does not account for industrial energy efficiency. PJM also does not account for the expected impact of future policies, such as the Clean Power Plan, on energy efficiency and behind-the-meter generation.

The RGGI states should use PJM's updated 2016 forecast as the starting point for PJM load growth in the 2016 Program Review reference case, rather than the outdated 2015 forecast as proposed at the November 17 meeting, and make further adjustments to fully capture the effects of energy efficiency and demand-side resources in the region.

NYISO Energy and Peak Demand Forecasts

As shown in the figures below, NYISO's energy and peak demand forecasts, published in its annual Gold Book, have also consistently overestimated growth in the state. For example, NYISO's 2006 Gold Book forecasts for 2014 energy and peak demands were 12.3% and 7.6% higher, respectively, than actual (weather-normalized) levels. Recent forecasts have projected growth in energy and peak demand even as trends have been flat or declining. It is important to consider the performance of NYISO's past forecasts given that the RGGI states propose to rely on NYISO forecasts to project conditions at least 15 years into the future, to 2030 or later.





Under the state's Reforming the Energy Vision (REV) process and the State Energy Plan, New York will also increase its use of energy efficiency and other demand-side resources in the years ahead, which will further counteract growth in energy and peak demand. Under the State Energy Plan, for example, Governor Cuomo has committed to reduce energy consumption in buildings, which use approximately 60 percent of the energy in New York State, by 23 percent by 2030.[5]

The RGGI states should utilize energy and peak demand forecasts for New York in the 2016 Program Review reference case that adjust NYISO's forecasts to account for NYISO's historic overestimation of growth, New York's existing commitments contained in the State Energy Plan, and reasonable expectations under the soon-to-be finalized Clean Energy Fund, REV, and other relevant proceedings.

Getting the energy and peak demand forecasts right in RGGI's 2016 Program Review reference case is key to understanding the potential for additional emission reductions in the region beyond business as usual. We appreciate the opportunity to provide comments during this process, and the states' consideration of these important issues. We look forward to engaging in the Program Review process further in the months ahead, and to the states' continued climate leadership.

Sincerely,

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[5] New York State Energy Planning Board, *The Energy to Lead: 2015 New York State Energy Plan*, available at: http://energyplan.ny.gov/Plans/2015.