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Comments of Mirant Energy Trading, LLC and Mirant Bowline, LLC on NERA's Independent Study to Establish Parameters of the ICAP Demand Curve July 21, 2010

In accordance with the NYISO's revised 2011-2014 ICAP Demand Curve Development Schedule, Mirant Energy Trading, LLC and Mirant Bowline, LLC (collectively "Mirant") jointly submit their comments on the July 1, 2010 draft report prepared by NERA Economic Consulting ("NERA") entitled "Independent Study to Establish Parameters of the ICAP Demand Curve for the New York Independent System Operator" ("Demand Curve Study").¹ Pursuant to the terms of the Request for Proposals issued by the NYISO last year, NERA, with the assistance of Sargent & Lundy, LLC ("S&L), was chosen to conduct an independent analysis and prepare a Demand Curve reset process update for Capability Years 2011/2012, 2012/2013, and 2013/2014 for the New York City, Long Island and New York Control Area ("NYCA") capacity zones. The NYISO requested that NERA calculate a demand curve for the Lower Hudson Valley as a component of this analysis for informational purposes only.

Creation of a Lower Hudson Valley Zone

Mirant notes that the results of the Demand Curve Study coupled with the repeated findings of the Independent Market Advisor ("IMA") to the NYISO leads to the conclusion that the NYISO should go forward expeditiously to create a new capacity zone for the Lower Hudson Valley. The NYISO has been directed by the Federal Energy Regulatory Commission ("Commission") to submit a compliance filing by October 5, 2010 that sets forth the criteria for the creation of a new capacity zone.² All of the material that the NYISO needs to develop the criteria for a new zone is set forth in the Demand Curve Study and Dr. David Patton's previous findings.

At the outset, the Demand Curve Study assumed that "only a unit that could be practically constructed in a particular location would qualify."³ The Demand Curve Study chose a GE Frame 7FA combustion turbine for the NYCA capacity zone, which currently includes the Lower Hudson Valley. The Demand Curve Study, however, notes that a 7FA would need to use selective catalytic reduction ("SCR") technology in order to operate in the Lower Hudson Valley – a technical configuration that is not well-established nor is it economic in this region. Hence,

¹ Mirant supports the comments being submitted by IPPNY contemporaneously herewith.

² New York Independent System Operator, Inc., et al, 127 FERC ¶ 61,318, P 53 (2009).

³ Demand Curve Study at 7.

the Demand Curve Study concluded that it is impractical to construct a 7FA as a peaking unit in the Lower Hudson Valley.⁴ Thus, a GE LMS100 combustion turbine with an SCR should be used for the Lower Hudson Valley region. Considering that the chosen technology for the NYCA region is different than that for the Lower Hudson Valley, either a new capacity zone should be created for the Lower Hudson Valley or the NYCA Demand Curve should be based on using a LMS100 with an SCR as the proxy unit. As discussed below, the superior choice is the creation of a Lower Hudson Valley capacity zone.

Another pertinent element discussed in the Demand Curve Study, though not yet adopted as a component of the Demand Curves, is the deliverability requirement which was approved by the FERC for implementation in New York after the last demand curve reset process was completed. The NYISO tariff now requires that, in order for a supplier to be eligible to participate in the capacity market, it must be deliverable to all zones in the capacity region in which it seeks to provide service. The deliverability rules established for New York currently define three capacity deliverability zones which match the lines that have been drawn in the capacity market for capacity sub-zones: New York City, Long Island and "Rest of State." To be deemed to be deliverable in the Rest of State zone, a new entrant must demonstrate that it can deliver its capacity all the way down to the UPNY-Con Edison interface. However, the Demand Curve Study notes that new units north and west of UPNY/SENY cannot deliver to zones G through I. *i.e.*, the Lower Hudson Valley, hence, they cannot participate in the NYCA capacity market without enhancing the transmission system or otherwise obtaining deliverability rights.⁵ The Demand Curve Study estimates that meeting the deliverability requirement adds \$26.62/kWyear to the cost of the NYCA proxy peaking unit, the 7FA.⁶ However, as previously noted, a 7FA cannot be constructed in the Lower Hudson Valley. A comparison of the 7FA costs with deliverability with the LMS-100 costs demonstrates that a NYCA Demand Curve based on a 7FA unit inclusive of deliverability costs still fails to send the proper price signal to new entrant in the Lower Hudson Valley, and thus, it is still an inferior solution to the creation of a Lower Hudson Valley zone.

Specifically, the Demand Curve Study model finds that the net cost for a LMS100 in the Lower Hudson Valley is \$126.54/kW-year, utilizing the same X-intercept as the NYCA reference point. Compared to the demand curve values of \$89.88/kW-year without deliverability and \$116.50/kW-year with deliverability the projected demand curve values for the NYCA market are woefully inadequate for a developer to build a new facility in the Lower Hudson Valley. As noted in the Demand Curve Study, the demand curve needs to produce adequate expected revenues to recover cost and induce the proper level of investment. A NYCA curve that is anywhere from \$10 to \$36/kW-year short of the net cost of new entry for the Lower Hudson Valley will not achieve its desired result. Thus, as Dr. Patton previously has found, the

⁴ *Id.* at 21.

⁵ *Id.* at 67.

⁶ Adding deliverability costs to the cost of the 7FA unit would allow a new entrant to reach all zones in the Rest of State area. Thus, at a minimum, this cost component must be included in the Demand Curves to send the correct price signal to the NYCA capacity market exclusive of the Lower Hudson Valley.

creation of a Lower Hudson Valley capacity zone utilizing the cost of technology appropriate for that region is required.

The importance of the price signal for the Lower Hudson Valley cannot be overstated. Potomac Economics, the NYISO's IMA, began to recognize the need for a new capacity zone back in its "2007 State of the Market Report" posted on September 5, 2008.⁷ The IMA found that, while there were deliverability issues between Zones F and G, there was no mechanism in the capacity market for distinguishing the value of capacity in Southeast New York⁸ from the value of capacity in the rest of up-state New York (Zones A-F). The IMA concluded that it was likely to be more costly to build in Southeast New York but the lack of capacity market signals that reflected this need would prevent suppliers from having adequate incentives to build in Southeast New York. Clearly, the Demand Curve Study results demonstrate that it is more costly to build in the Lower Hudson Valley than the remainder of Upstate New York. Potomac Economics echoed these concerns again in its "2008 State of the Market Report" posted on September 8, 2009, finding that creating a new Lower Hudson Valley zone, would "improve the incentives for investment that is beneficial for reliability."⁹ The IMA went further in its "2009 State of the Market Report" presentation posted on May 4, 2010. In that report, the IMA reaffirmed that a new zone would allow the capacity market to signal where new capacity would be most beneficial -- critical for the Lower Hudson Valley where the cost of new entry is likely to be higher than in other areas. The IMA identified a deliverability test failure on a highway (e.g., the Leeds-Pleasant Valley interface) as the primary criteria for developing new zones. Thus, Dr. Patton specifically recommended that the NYISO make the necessary preparations to define a new zone in parallel with developing the criteria for a new zone, which would include developing CONE estimates, demand curves and other details to develop a new zone in Southeast New York.¹⁰

The time is right for the NYISO to proceed with the development of a Lower Hudson Valley zone. The NYISO should direct NERA to develop comprehensive demand curves for the Lower Hudson Valley so that those curves may be filed to create the Lower Hudson Valley zone as soon as the criteria for the new zones are approved. While there is currently a surplus of capacity in Southeast New York, the NYISO has recognized that this situation may not continue for long. The NYISO's "Comprehensive Reliability Plan 2009" issued on May 19, 2010 notes that an increase in load or reduction of resources of 750 MW in the Lower Hudson Valley, or a change of between 500 and 750 MW in New York City would cause reliability problems in 2018.¹¹ The draft 2010 RNA results issued by the NYISO to date identifies scenarios where reliability violations will occur and reflect the fact that reliability violations are highly dependent

⁷ http://www.nyiso.com/public/webdocs/documents/market_advisor_reports/2007/NYISO_2007_SOM_Final.pdf at xvi-xvii.

⁸ Southeast New York includes the Lower Hudson Valley, New York City and Long Island.

⁹ http://www.nyiso.com/public/webdocs/documents/market_advisor_reports/2008/NYISO_2008_SOM_Final_9-2-09.pdf at xiv-xv.

¹⁰ http://www.nyiso.com/public/webdocs/documents/market_advisor_reports/2009/2009_NYISO_SOM_Final_4-30-2010.pdf at 179.

¹¹ <u>http://www.nyiso.com/public/webdocs/services/planning/reliability_assessments/CRP__FINAL_5-19-09.pdf</u> at 5.

on, and sensitive to, load forecast and projected energy efficiency load reduction assumptions.¹² Likewise, the draft 2010 RNA results reveal that the cumulative impact of the array of pending and proposed environmental regulations may lead to unplanned retirements, and with them, reliability violations. With the time required to site, permit and construct a power plant in the Lower Hudson Valley, there is little time to waste in implementing a new zone in that region in order to send the proper price signals to get new supply in the Lower Hudson Valley.

Lower Hudson Valley -- Labor Rates

In its Draft Report, NERA indicates that it has used a labor productivity adjustment for Zone J (New York City) of 1.40, 1.35 for Zone K and 1.10 for all other zones. (See Report at 24.) However, major projects located in the Lower Hudson Valley are required to use the same union halls as are used by New York City projects and are likewise subject to the same general pay scale for most locals.¹³ Thus, the labor productivity factor for the Lower Hudson Valley Demand Curve should have been the same as the New York City labor productivity factor. Otherwise, the Lower Hudson Valley Demand Curve will be set too low to allow for new generation to be built in this area.

NYCA Net Energy and Ancillary Service Revenue Estimates

During the July 16, 2010 ICAP Working Group meeting, Levitan & Associates, Inc.("Levitan") made a presentation entitled, "Suggestions for Improvement of Energy Net Operating Revenue Modeling." This presentation was focused on the flaws inherent in the methodology and data that NERA used to estimate Net Energy and Ancillary Service Revenues for the NYC Demand Curves. However, many of the issues that were identified in that report apply with equal force to the NYCA Curves. Thus, corresponding changes also must be made to improve the NYCA Net Energy and Ancillary Service Revenue estimates.

For example, as revealed by Levitan, NERA failed to account for any intra-day gas price premium. It is important to note that NERA has assumed that the Frame 7FA will run a substantial portion of the year, often during shoulder month periods and on weekends. Given that NERA is assuming that this unit is capable of chasing price, the costs that this unit will face when it does so must be fully captured. Otherwise, it will be deemed to earn revenues that are, in reality, phantom dollars. Likewise, NERA failed to account for the cost of environmental allowances, including those for the RGGI and NOx programs. Given that the Frame 7FA unit that is assumed to be the proxy unit for the NYCA Curve does not have an SCR, the NOx allowance costs must be taken into consideration. Likewise, given that all carbon allowances must be purchased, these costs also must be captured.

¹² http://www.nyiso.com/public/webdocs/committees/bic_espwg/meeting_materials/2010-07-RNA_2010_Draft_4_Clean_Version.doc

¹³ Mirant has local information concerning the rates paid for its major trades that it plans to share with S&L.

In addition, Levitan has demonstrated that there were flaws inherent in the data that was used by NERA that must be corrected. In each instance, these corrections lead to lower Energy and Ancillary Service Revenue estimates. To the extent that these flaws are corrected, they must be addressed for both the NYC and NYCA markets.

Lastly, the Draft Report reveals a very substantial increase (i.e., nearly tripled) in the NYCA Net Energy and Ancillary Service Revenue estimates that were derived in this reset process as compared to those that were estimated in the last reset process (\$30.17 now versus \$10.87 then).¹⁴ However, NERA notes that it has used the same methodology in both instances. (See Report at 9.) Given the substantial change in revenue during periods with lower gas pricing and additional supply sources, these results appear to be counter-intuitive. Thus, at a minimum, NERA must provide a detailed discussion in the Final Report identifying and explaining the factors that have led to this substantial increase.

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President Mirant Bowline, LLC

¹⁴ Mirant has requested details for the energy and ancillary services regression models. Mirant will review these details and may provide supplemental comments.