

## **PRELIMINARY STATEMENT**

Multiple Intervenors, an unincorporated association of approximately 50 large industrial and commercial energy consumers with manufacturing and other facilities located throughout New York State, and the City of New York<sup>1</sup> (“City”), acting on its own behalf as a large energy user and in a representative capacity on behalf of its residential, industrial and commercial energy consumers, hereby submits their comments on the Installed Capacity (“ICAP”) Demand Curves recommended by New York Independent System Operator, Inc. (“NYISO”) Staff. Additionally, Multiple Intervenors requests that it be allowed to participate in oral argument on the Demand Curve for the Rest of State (“ROS”) region.

The NYISO Staff proposes that the ROS Demand Curve be set based on a substantially increased net revenue requirement for a proxy peaking generation unit (“peaking unit”). Furthermore, Staff proposes several other modifications to its calculation of net costs for the peaking units relied upon to set the Demand Curves for the New York City (“NYC”) and Long Island (“LI”) Localities. NYISO Staff’s recommendations for the Demand Curves could potentially, in total, raise electric costs in New York State by hundreds of millions of dollars.<sup>2</sup>

New York consumers are faced with some of the highest electricity costs in the nation. Therefore, the NYISO Board of Directors (“Board”) should proceed cautiously in evaluating the recommendations advanced by NYISO Staff. Subjecting electricity consumers to potentially hundreds of millions of dollars in increased electricity costs should

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<sup>1</sup> Specifically, the City submits Points II, IV and V, which directly effect City energy consumers.

<sup>2</sup> See Comments of the Transmission Owners, dated October 1, 2007, for a quantification of potential impact on electricity costs from NYISO Staff Recommendations.

not be done on the basis of questionable methodologies, unsupported conclusions, and faulty premises. Furthermore, as explained more fully below, there is no evidence at this time that the ROS Demand Curve warrants adjustment. There is no basis to support a determination that the assumptions underlying the existing ROS Demand Curve are insufficient to achieve the goals identified by the NYISO and the Federal Energy Regulatory Commission (“FERC”) at the time the Curves originally were proposed and approved. Specifically, two of the main goals of the Demand Curves – resource adequacy and price stability – are satisfied adequately by the existing ROS Demand Curve.

If the Board determines that changes to the ROS Demand Curve are necessary, the Board should make four modifications to the NYISO Staff recommendations: (i) eliminate inclusion of excess capacity, in accordance with the tariff; (ii) compute energy and ancillary services revenues on a realistic basis; (iii) reduce the inflation rate for subsequent capability periods; and (iv) recalculate the return on equity (“ROE”) utilizing FERC’s traditional methodology. Furthermore, modifications one, three and four, as stated above, should be adopted by the Board for the NYC Demand Curve. By incorporating each of these modifications the Board will ensure that the ROS and NYC Demand Curves provide for adequate capacity while minimizing the potential for overpaying generators to the significant, financial detriment of electric consumers.

### **BACKGROUND**

In 2003, the NYISO proposed to FERC in coordination with the New York State Public Service Commission and various stakeholders the creation of the Demand Curves. The Demand Curves were proposed as a means of ensuring reliability through compensating generators that provide capacity above the minimum reserve requirement.

Additionally, the proponents of the Demand Curves believed that the stable revenues produced by the Demand Curves would attract developers of new generation. The NYISO predicted to FERC that the Demand Curves would provide the following benefits:

enhancing system and resource reliability; promoting greater stability in the ICAP market, resulting in more effective price signals for new investment; and a reduction in the frequency of price spikes in the energy and ancillary services markets. The NYISO expects that movement to long-term equilibrium levels of capacity will be relatively rapid, and that, once reached, consumers are likely to realize significant savings compared to what could be expected under the current system. The NYISO estimates that increasing capacity in New York by 1 percent would result in average savings for consumers of \$100 million per year.<sup>3</sup>

Thus, the NYISO predicted that the Demand Curves would provide greater stability in the market and effective price signals for new investment, which eventually would result in a decrease of electricity prices for New York consumers.

According to the tariff<sup>4</sup> approved in the Implementing Order, the ICAP Demand Curves shall be reviewed every three years. The review shall assess:

(i) the current localized levelized embedded cost of a peaking unit in each NYCA Locality and the Rest of State to meet minimum capacity requirements; (ii) the likely projected annual Energy and Ancillary Services revenues of the peaking unit over the period covered by the adjusted ICAP Demand Curves, net of the costs of producing such Energy and Ancillary Services, under conditions in which the available capacity would equal or slightly exceed the minimum Install Capacity requirement; (iii)

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<sup>3</sup> New York Independent System Operator, Inc., 103 FERC ¶61,201, Order Conditionally Accepting For Filing Tariff Revisions (May 20, 2003) (“Implementing Order”), P. 9.

<sup>4</sup> New York Independent System Operator, Inc., FERC Electric Tariff, Original Volume No. 2, Seventh Revised Sheet No. 157, Market Services Tariff, Section 5.14. (“Market Services Tariff”).

the appropriate shape and slope of the ICAP Demand Curves, and the associated point at which the dollar value of the ICAP Demand Curves should decline to zero; and (iv) the appropriate translation of the annual net revenue requirement of the peaking unit determined from the factors specified above, into monthly values that take into account seasonal differences in the amount of capacity available in the ICAP Spot Market Auctions.

As required by the Market Services Tariff, the Staff of the NYISO and stakeholders embarked upon an extremely contentious process to perform the periodic review of the Demand Curves. NERA Economic Consulting (“NERA”), with Sargent & Lundy as a subcontractor, submitted its final “Independent Study to Establish Parameters of the ICAP Demand Curve for the New York Independent System Operator” (“NERA Report”) on August 15, 2007, NYISO Staff issued a preliminary draft “Proposed NYISO Installed Capacity Demand Curves for Capability Years 2008/2009, 2009/2010, and 2010/2011” (“Recommendations”) on August 21, 2007, and its final Recommendations on August 31, 2007. Stakeholders were afforded extensive opportunities to comment on drafts of the NERA Report, as well as NYISO Staff’s draft and final Recommendations.

In its Recommendations, NYISO Staff generally adopted NERA’s assumption that excess capacity will produce lower revenues for generators. NERA accounts for the risk of excess capacity by shortening the amortization period for the new peaking unit, which increases the revenue requirement for generators by providing higher carrying charges. Additionally, NYISO Staff accepts NERA’s calculation of net energy and ancillary services revenues for the ROS peaking unit based upon historical prices for the period May 2003 to December 2006 – a period marked by significant excess capacity in the aftermath of a tidal wave of generator additions in upstate New York. Staff also, for the first time in its final Recommendations, adopts an inflation escalator based upon two data points (2005 and 2006)

of the Handy-Whitman Index of construction costs, almost tripling the inflation escalator recommended in the NERA Report for the costs and revenues of ROS, NYC and LI peaking unit.

According to the NERA Report, the ROS Demand Curve currently is based on a peaker unit net cost of \$74.09/kW-year. As a result of NYISO Staff's Recommendations, the net cost of the peaker unit used to set the ROS Demand Curve would rise to \$92.11 in the first capability period, and \$99.29/kW-year and \$107.04/kW-year for the second and third capability periods, respectively. Consequently, the NYISO Staff recommends a ROS Demand Curve based upon a peaker unit net cost which reflects a 30% increase from the current peaker unit net cost used to set the existing ROS Demand Curve.<sup>5</sup>

## **ARGUMENT**

### **POINT I**

#### **THE ROS DEMAND CURVE DOES NOT WARRANT ADJUSTMENT**

As demonstrated above, implementation of the Demand Curves was designed to principally achieve three main goals: resource adequacy; price stability; and increase investment in new generation. Because these goals, as detailed below, are adequately being met in the current and projected Demand Curve periods, there is no need to modify the ROS Demand Curve by increasing the net cost of a peaking unit. Thus, given the current circumstances in the ROS region – adequate resources and ICAP price stability – it is highly questionable whether the ROS Demand Curve should be modified at all, let alone increased by approximately 30%.

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<sup>5</sup> NERA recommends a slight reduction in the net cost of the peaker unit used to set the NYC Demand Curve for the first capability period. This reduction is largely due to the selection of technology, and is eliminated in the subsequent capability periods.

Although Multiple Intervenors questions whether the Demand Curves have been directly responsible for the development of any new generation in New York,<sup>6</sup> the other two goals- resource adequacy and price stability – have been satisfied in the ROS region during the term of the ROS Demand Curve. Specifically, the ICAP price instability that plagued the market in advance of the implementation of the Demand Curves has been eliminated. Electric consumers in the ROS region, while facing some of the highest electric prices in the nation, no longer face wild fluctuations in their capacity charges.<sup>7</sup>

Second, the Demand Curves appear to contribute to ensuring resource adequacy by compensating capacity in excess of what is necessary to meet the minimum reserve requirements. Ensuring there is not a capacity deficiency is one of the fundamental reasons for the Demand Curves.<sup>8</sup> As determined by the NYISO’s “Reliability Needs Assessment 2007” (“RNA”), the ROS region enjoys sufficient capacity to meet its needs through the year 2011, which is the last year of the three-year cycle for the reset of the Demand Curves. Further, the need to add additional capacity in the ROS region, as identified in the “Comprehensive Reliability Plan 2007” (“CRP”), is not triggered until 2012 to 2016, with the New York Control Area resource to load ratio falling below the 112%

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<sup>6</sup> See New York Independent System Operator, Inc., Docket ER03-647-010, Multiple Intervenors’ Comments, dated September 27, 2007.

<sup>7</sup> Inasmuch as ICAP prices under the Demand Curves have stabilized, but at average levels appreciably higher than those in effect prior to 2003, it is not at all clear that consumers actually have benefited by the reduction in volatility. Generators, on the other hand, undoubtedly have benefited from higher and more consistent ICAP revenues.

<sup>8</sup> See Implementing Order, P. 5 (paraphrasing the NYISO’s explanation that the Demand Curves would assist generators in obtaining financing by providing a reliable revenue stream, which in turn would enable the rate of capacity additions to keep pace with needs, thus avoiding the potential for a capacity deficiency).

reserve margin in 2014 (CRP, p. 19). The RNA is conservative in its assessment of the need for capacity in the ROS region when one considers that the Besicorp-Empire Power Project, a 635 MW gas-fired generating facility located in the City of Rensselaer, which is scheduled to be operational in 2009, does not appear to be included in the RNA.<sup>9</sup> Thus, it appears that the ROS region will have sufficient capacity to meet its needs well beyond 2012.

The periodic review of the Demand Curves should not be undertaken in a vacuum. In determining the net costs of a peaking unit for the ROS region, it is imperative that the Board consider whether the fundamental goals for the Demand Curves are currently being satisfied. Because these goals, as discussed above, are adequately being met, there is no need at this time to modify the net cost of a ROS peaking unit. Adequate capacity necessary to maintain a reliable electric system exists currently – and for the foreseeable future – under the current ROS Demand Curve. Further, the minimal generator retirements identified by the RNA do not support a conclusion that the ROS Demand Curve is insufficiently compensating generators and, thus, forcing their early retirement. Therefore, the Board should decline to accept the NYISO Staff's Recommendations and, instead, apply an acceptable inflation rate for costs and revenues, as discussed below, to the existing ROS Demand Curve.

In the alternative, should the Board feel compelled to make modifications to the net cost of a peaking unit for ROS, it should do so only after determining that the

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<sup>9</sup> July 27, 2007, Press Release by Business Wire. Notably, the Besicorp Project was proposed prior to the establishment of the Demand Curves.

methodology upon which such adjustments are proposed is sound and in accord with the requirements of the Market Services Tariff.<sup>10</sup>

The NYISO Staff Recommendations could result in an increase of potentially hundreds of millions of dollars in electric costs for New York energy consumers. To adopt such recommendations at a time when all or most of the goals of the Demand Curves are being achieved, and on the basis of a methodology that is not in accord with the Market Services Tariff, would be imprudent and irresponsible.

## **POINT II**

### **THE NYISO STAFF RECOMMENDATIONS IMPROPERLY INCLUDES A RISK PREMIUM TO ACCOUNT FOR THE POTENTIAL FOR EXCESS CAPACITY**

In establishing the cost of a new peaking unit for ROS and NYC, the NYISO Staff assumes a 102.8% and 104% level of capacity, respectively. According the NYISO Staff, in order to match costs and revenues for a new peaking unit under conditions of excess capacity, the amortization period of the new unit would have to be reduced. Reduction of the amortization period results in an increase in the carrying charges. Specifically, the NYISO Staff accepted NERA's determination that because "there exists a bias toward excess capacity, a steeper slope requires a higher carrying charge to compensate for lower prices in excess capacity periods."<sup>11</sup> The NYISO Staff Recommendations lowers the current 20-year amortization period for ROS and NYC units to 16.5 years and 17.5 years, respectively.<sup>12</sup>

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<sup>10</sup> As detailed in Point II, *infra*, some of the Staff Recommendations, if adopted, arguably would violate – or at a minimum are inconsistent with – the Market Services Tariff.

<sup>11</sup> NERA Report, p. 13.

<sup>12</sup> NYISO Staff Recommendations, p. 4.

Calculating costs for new entry under the premise of excess capacity is a violation of the NYISO's Market Services Tariff. As quoted above, the Market Services Tariff requires that the Demand Curves be based on embedded cost of a peaking unit "to meet minimum capacity requirements."<sup>13</sup> Thus, the tariff requires the calculation of the cost of a new peaking unit to be done under the minimum ICAP requirements. NERA determined that because it did not increase the cost of capital to allocate the risk of excess capacity, it believes that it "is necessary to reflect merchant risk in the cost and do so through a shortening of the recovery period."<sup>14</sup> Even assuming that calculating costs and revenues for a new peaking unit based upon excess capacity is permissible, under the Market Services Tariff, the NERA Report and the NYISO Staff Recommendations are devoid of any justification as to why the ROE of 12% does not already adequately compensate generators for such risk.

NERA utilized the Capital Asset Pricing Model ("CAPM") for calculating the ROE of new entrants. The CAPM theory identifies two types of risks for a security: company-specific risk and market risk. Within the CAPM framework, the expected return on a security is equal to the risk-free rate of return plus a risk premium that is proportional to the security's market. Beta is the factor that reflects the inherent market risk of a security and measures the volatility of a particular security relative to the overall market for securities. For example, a stock with a beta of 1.0, which is the beta used by NERA for its CAPM calculation, indicates that if the market rises by 15%, that stock will also rise by 15%. This stock moves in tandem with movements in the overall market. Thus, beta is the measure of

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<sup>13</sup> Market Services Tariff, Section 5.14.

<sup>14</sup> NERA Report, p. 13.

the relative risk of individual securities vis-à-vis the market. A beta of 1.0 or greater indicates a risky investment.

The NERA Report and NYISO Staff Recommendations do not explain why the recommended ROE of 12%, using a CAPM with a beta of 1.0, does not sufficiently address the risk inherent in the electric generation market – that the market will have excess capacity and revenues will, consequently, decline. Conversely, NERA states that the “beta of 1.0 is consistent with observed equity betas for existing merchant generators” that, importantly, presumably operate in markets with the same potential for experiencing excess capacity.<sup>15</sup> Thus, it is highly likely that the ROE produced by the CAPM already accounts for the risks associated with excess capacity and, therefore, the proposed adjustment to account for excess capacity is not needed.

The Board should reject the NYISO Staff Recommendations to calculate the cost of new entry on the premise of excess capacity. Relying on such premise, as discussed above, is contrary to the requirements of the Market Services Tariff. Furthermore, neither the NERA Report, nor the NYISO Staff Recommendations, demonstrate that the risk of excess capacity is insufficiently addressed by the 12% ROE. Because the ROS region, and to a lesser extent NYC, has excess generation, the Demand Curves essentially force consumers to make substantial payments for ICAP in excess of minimum requirements. To now artificially inflate the level of the ROS and NYC Demand Curves to somehow account for that excess capacity would add insult to injury for electric consumers. The proposed, new adjustment for excess capacity is inconsistent with the Market Services Tariff and, in

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<sup>15</sup> NERA Report, p. 43.

any event, is a risk typically faced by unregulated generators and, consequently, presumably is reflected in the CAPM-generated 12% ROE.

### **POINT III**

#### **THE ENERGY AND ANCILLARY SERVICES REVENUE OFFSETS UTILIZED BY THE NYISO STAFF SHOULD BE INCREASED**

The NYISO Staff Recommendations include an estimate of energy and ancillary service revenues for the ROS region based upon historical prices for the period May 2003 to December 2006 – a period marked by significant excess capacity. The Market Services Tariff, however, requires that the energy and ancillary services revenues for the new entrant be calculated “under conditions which the available capacity would equal or slightly exceed the minimum Installed Capacity requirement.” Therefore, absent a change to the Market Services Tariff, the tariff does not support the calculation of energy and ancillary services revenues at capacity levels that exceed what one reasonably could define as “slightly” exceeding the minimum capacity requirement. Instead, the NYISO should calculate net energy and ancillary services revenues at condition at or near the minimum ICAP requirement.

Additionally, whether it is through costs or revenues, at some point there needs to be a signal to the market that new entry is neither needed, nor can be supported when capacity reaches levels that significantly exceed the requirement. Failure to acknowledge such a fundamental rule of supply and demand will create an inefficient market structure at the expense of electric consumers. Pricing capacity so that, regardless of the amount of excess capacity, generators are compensated the same amount, creates a vicious cycle. When

does the cycle end? If there is excess capacity in the ROS region, why should the Demand Curve be increased to compensate generators even more for capacity that exceeds the requirement? The slope of the Demand Curves is designed to bring compensation to zero at a certain levels of capacity. It seems that tinkering with the Demand Curve methodology, through the computation of costs or the calculation of revenues, to provide extra compensation to generators in times of excess capacity, circumvents the purpose of a sloped Demand Curve.

#### **POINT IV**

#### **THE NYISO STAFF IMPROPERLY INFLATES COSTS AND REVENUES FOR THE SECOND AND THIRD CAPABILITY PERIODS**

The NYISO Staff recommends an inflation factor of 7.8% for the second and third capability periods, applicable to net costs of the ROS and NYC peaking unit. The inflation rate is arrived at by taking two data points (2005 and 2006) from the Handy-Whitman index of construction costs (“Handy-Whitman index”) to produce an inflation rate of 5.1%, which then is added to the inflation rate, recommended by NERA, of 2.7%.

Despite the fact that the Handy-Whitman index provides construction cost information over a significant period of time, the NYISO Staff, without explanation, chose to calculate the inflation rate using only two data points (2005 and 2006), which happen to experience the highest increase in costs out of the most recent five years. Such cherry picking produces an artificially high inflation rate, and does not comport with sound methodology; costs and rates of inflation can experience exaggerated periods. To account for these periods, a reasonable approach would have been to normalize the data. Using a

greater number of years and eliminating the outliers, both high and low, would provide a balanced result.

The rate of 5.1% used by NYISO Staff is unsupported by sound methodology and also is contrary to the U.S. Energy Information Administration's ("EIA") prediction that general construction costs will decline.<sup>16</sup> The EIA states that "it is typical for investment in the power industry to cycle through patterns of increased building and slower growth, responding to changes in the expectations for future demand and fuel prices, as well as change in the industry, such as restructuring."<sup>17</sup>

Multiple Intervenors and the City do not object to utilizing the Handy-Whitman index to calculate the inflation rate for the second and third capability periods, so long as the methodology employed to arrive at the rate is reasonable. The Board should direct the NYISO Staff to recalculate the inflation rate using a longer historical period and normalizing the data.

#### **POINT V**

#### **THE BOARD SHOULD DIRECT THE NYISO STAFF TO CALCULATE THE ROE BASED UPON FERC'S APPROVED METHODOLOGY**

NERA estimated the ROE of 12% from the CAPM, which was discussed in Point II. NERA used a risk-free rate of 4.73%, an equity beta of 1.0, and an equity risk premium of 7.10%, to arrive at a 12% ROE. Under the CAPM, the risk premium is calculated based upon the historic earned returns of companies. NERA relied on the "Long

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<sup>16</sup> US Energy Information Administration, Annual Energy Outlook 2007, p. 41.

<sup>17</sup> Id.

Horizon Equity Risk Premium from 1926 to 2005” (Ibbotson Associates) to obtain the risk premium.

The use of historic earned returns to estimate the current market risk premium, however, is rather suspect because it naively assumes that investors currently expect historical risk premiums to continue unchanged into the future regardless of present or forecasted economic conditions.<sup>18</sup> The use of historic earned returns should be viewed with a great deal of caution. There is no real support for the proposition that an unchanging, mechanically-applied historical risk premium is representative of current investor expectations and return requirements.

Furthermore, a considerable amount of judgment must be employed in determining the risk-free rate and market return portions of the CAPM equation. NERA’s judgment can significantly influence the results obtained from the CAPM, which is why it is prudent to use a wide variety of data in estimating returns. The returns produced by the CAPM are quite often higher than those produced by the discounted cash flow (“DCF”) model.

The FERC methodology of choice for computing ROE is the DCF. The Commission has used a DCF model to “develop a range of returns earned on investments in companies with corresponding risks for determining the ROE.”<sup>19</sup> The NERA Report does

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<sup>18</sup> See Brigham, E.F., Shome, D.K. and Vinson, S.R., “The Risk Premium Approach to Measuring a Utility’s Cost of Equity,” *Financial Management*, Spring 1985, pp. 33-45 (finding that “there is no compelling reason to think that investors expect the same relative returns that were earned in the past”). See also Pre-filed Testimony of John Stewart and Patrick Barry on behalf of the Department of Public Service, Case 05-E-1222, pp. 21-22.

<sup>19</sup> See *Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Equity*, 120 FERC ¶61,068, Proposed Policy Statement (2007), P. 2. See also, *Promoting*

not indicate why it is appropriate to use a CAPM model or if it considered using a DCF model. Given FERC's preference for the DCF model, the trend for the CAPM model to produce higher returns and rely on a great amount of judgment, the Board should direct NYISO Staff to establish the ROE for the proxy peaking unit based upon the DCF model.

Finally, use of the DCF model would not alter the position of Multiple Intervenors and the City, as set forth in Point II, that no risk premium to account for excess capacity is needed or warranted. Like the CAPM model, the DCF model should incorporate the risk a typical merchant generator faces in the market. The DCF model similarly relies on a proxy group of companies with a comparative level of risk. Thus, regardless of whether the DCF or CAPM method is used, the use of a reasonable proxy group should include generators that face the risk of operating in markets with excess capacity, thereby, obviating the need for any extra adjustment to inflate the ROS and NYC Demand Curves for generators (at the expense of consumers).

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*Transmission Investment through Pricing Reform*, 116 FERC ¶61,057, Order No. 679 (2006) (stating that the Commission will continue to use the DCF model for ROE determinations regarding electric transmission), P. 92.

## CONCLUSION

For the reasons set forth herein, Multiple Intervenors urges the NYISO Board to maintain the current Demand Curve for the ROS, or in the alternative the Board should reject inclusion of excess capacity in calculating costs, increase energy and ancillary services revenues for a new peaking unit, recalculate the inflation rate for subsequent capability periods based upon sound methodology, and set the ROE for a new peaking unit based upon the DCF model. NYC agrees that the Board should reject the inclusion of excess capacity in calculating net costs of a new peaking unit, recalculate the inflation rate for subsequent capability periods, and set the ROE for a new peaking unit based upon the DCF model.

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                  Albany, New York

Respectfully submitted,

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