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February 21, 2014

By Electronic Delivery

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: *Hudson Transmission Partners, LLC v. New York Independent System Operator, Inc., Initial Compliance Filing, Docket EL12-98-00*

Dear Ms. Bose:

The New York Independent System Operator, Inc. (“NYISO”) respectfully submits this compliance filing in response to the Commission’s November 21, 2013 *Order on Complaint* (the “November Order”),¹ and February 11, 2014 *Order on Motion for Extension of Time* (“Extension Order”).² The November Order addressed a complaint by Hudson Transmission Partners, LLC (“HTP”) concerning the NYISO’s application of its buyer-side capacity market power mitigation measures for New York City (“BSM Rules”)³ to HTP’s 660 MW merchant transmission facility (“HTP Project”). The November Order generally upheld that application but directed the NYISO to make a compliance filing within sixty days to:

1. provide the Commission with the specific scaling factor used in the HTP Project determination;
2. explain in detail how the HTP Project scaling factor was calculated;

¹ *Hudson Transmission Partners, LLC v. New York Independent System Operator, Inc.*, 145 FERC ¶ 61,156 (2013).

² 146 FERC ¶ 61,082 (Feb. 11, 2014).

³ The BSM Rules are set forth in Section 23.4.5.7 of the NYISO’s Market Administration and Control Area Services Tariff (“Services Tariff”). At the time that HTP initiated this proceeding, the BSM Rules applied only to new entry into New York City. Subsequently, the BSM Rules were revised to apply to additional Mitigated Capacity Zones. The subsequent changes to Section 23.4.5.7 are not relevant to Section II of this filing, which describes the scaling factor used in the HTP determination.

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3. support the HTP Project scaling factor methodology;⁴ and
4. file, within sixty days of the date of the November Order, proposed tariff provisions to include a detailed description of the methodology that the NYISO intends to use in order to project the likely Energy and Ancillary Services revenues for merchant transmission lines in the future.⁵

The November Order also required the NYISO to “redo the exemption determination using HTP’s actual cost of capital.”⁶ On January 16, 2014, the NYISO issued the required redetermination for the HTP Project.⁷ It concurrently informed its stakeholders that the outcome of the HTP mitigation analysis had not changed, *i.e.*, HTP is not exempt from Offer Floor⁸ mitigation.⁹ The NYISO also posted the required notice, and an updated report from the independent Market Monitoring Unit (“MMU”) endorsing its analysis, on its website.¹⁰

On January 15, 2014, the NYISO requested a forty five day extension to submit the compliance filing required by the November Order so that it would have additional time to obtain stakeholder input into the proposed tariff revisions required by the fourth compliance directive.¹¹ The NYISO explained that it did not need more time to comply with the first three compliance directives, but believed that it

⁴ November Order at PP 82, 90. The November Order’s denial of HTP’s complaint determined that the NYISO’s application of a scaling factor to HTP was reasonable without making that determination contingent on a review of the more detailed description of the scaling factor calculation set forth in this compliance filing. *See also* Extension Order at PP 4-5.

⁵ *Id.*

⁶ November Order at P 112.

⁷ As described in the *Request for Leave to Answer and Answer of the New York Independent System Operator, Inc.* in this docket (January 21, 2014) (“NYISO Answer to Rehearing Petition”) when the NYISO performed the re-determination it did not change the scaling factor or any other element except the HTP Project’s cost of capital. *See* NYISO Answer to Rehearing Petition at 18-19.

⁸ Capitalized terms not otherwise defined herein shall have the meaning specified in the Services Tariff.

⁹ *See*

<http://www.nyiso.com/public/webdocs/markets_operations/services/market_monitoring/ICAP_Market_Mitigation/Buyer_Side_Mitigation/CY_2009%20CY_2010%20HTP/Notification_of_BSM_Determinations_Jan%2016%202014.pdf>.

¹⁰ *Assessment of the Buyer-Side Mitigation Exemption Test for the Hudson Transmission Partners Project, Potomac Economics, Ltd.* (Nov. 6, 2012); revised January 16 and February 21, 2014 <http://www.nyiso.com/public/webdocs/markets_operations/services/market_monitoring/ICAP_Market_Mitigation/Buyer_Side_Mitigation/CY_2009%20CY_2010%20HTP/HTP%20Report_02-21-2014__Clean.pdf> (“MMU Report”).

¹¹ *Motion of New York Independent System Operator, Inc. for Extension of Time to Submit Compliance Filing and Request for Expedited Commission Action by January 21, 2014*, (filed Jan. 15, 2014) (“NYISO Motion”).

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would be simpler, and would make for a clearer record, if all the compliance directives were addressed in a single filing.¹²

The Extension Order suspended the fourth compliance directive until after the Commission has reviewed the compliance filing on the first three compliance directives and potentially provided further guidance regarding the fourth directive.¹³ The Commission granted the NYISO ten additional days to address those three compliance directives.¹⁴

Accordingly, this compliance filing fully addresses the first three directives of the November Order. Section II of this transmittal letter provides the scaling factor that the NYISO used to estimate the likely net energy revenues for the HTP Project under the BSM Rules, the underlying formula by which the HTP scaling factor was computed, a detailed description of the inputs to the formula, and support for the methodology.¹⁵

As the NYISO anticipated,¹⁶ Section II includes both “Confidential Information” and “Protected Information,” as those terms are used in the NYISO’s tariffs,¹⁷ and data that could be used to infer such information. The NYISO has tariff obligations to protect such information. It therefore placed information that it designated as “Protected Material” as defined by the Protective Order in this proceeding¹⁸ in Confidential Attachments A and C¹⁹ The NYISO is submitting to the Commission a

¹² *Id.* at 5.

¹³ Extension Order at P 11.

¹⁴ Extension Order at Ordering Paragraph (B).

¹⁵ As discussed below in Section II.B, the scaling factor utilized for the HTP Project determination is applied only in determining the HTP Project’s likely net Energy revenues.

¹⁶ *Motion of New York Independent System Operator, Inc. under EL12-98-000 for Adoption of Protective Order and Request for Commission Action by January 15, 2014* (filed Dec. 20, 2013).

¹⁷ “Confidential Information” is defined in Section 12.4 of Attachment F of the NYISO Open Access Transmission Tariff (“OATT”) as, in relevant part, “any commercially sensitive information including, without limitation, trade secrets, equipment specific information (e.g., Generator specific data such as heat rates, *etc.*), and business strategies, affirmatively designated as Confidential Information by its supplier or owner; [and] Transmission System Information that has not yet been posted on the OASIS or provided in some public forum such as a FERC filing.” Section 30.6.4 of Attachment O of the Services Tariff defines “Protected Information” in relevant part as “information that is confidential, proprietary, commercially valuable or competitively sensitive or is a trade secret, ... information that is Confidential Information under Attachment F to the ISO OATT,... [and] information that the Market Monitoring Unit or the ISO is obligated by tariff, regulation or law to protect.”

¹⁸ *Hudson Transmission Partners, LLC v. New York Independent System Operator, Inc.*, 145 FERC ¶ 61.022 (2014) (“Protective Order”).

¹⁹ The Protected Materials in Confidential Attachment A are NYISO scheduling data that were retrieved from the NYISO’s Market Information System (“MIS”). Although the NYISO is the source of the Protected Materials, the MIS data are an aggregation reflecting the hourly transactions of all Linden VFT rightsholders

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confidential and privileged version of this compliance filing, which contains these Confidential Attachments, as well as a separate public redacted version of the compliance filing in accordance with Section 388.112 of the Commission's regulations. Access to the privileged version will be governed by the terms of the Protective Order.

Section III of this filing briefly addresses the fourth compliance directive. It asks the Commission to consider the NYISO's views as it considers providing additional guidance regarding future tariff provisions regarding the determination of likely net Energy and Ancillary Services²⁰ revenues for UDR projects in BSM Rule determinations. Section III also describes the NYISO's plans for moving forward if it is required to make a future determination under the BSM Rules, *i.e.*, one not involving HTP, before prospectively applicable Commission-accepted rules regarding such net revenue estimates for UDR projects are in the Services Tariff.

I. DOCUMENTS SUBMITTED

In addition to this transmittal letter, the NYISO is submitting:

- Confidential Attachment A, a spreadsheet that explains the calculation of the scaling factor that was applied to the HTP Project and that contains Protected Material, as defined in and protected by the Protective Order, of the NYISO;
- Attachment B, a public redacted version of the spreadsheet included in Confidential Attachment A that does not include Protected Materials;
- Confidential Attachment C, a graph illustrating the estimated aggregated monthly difference between the Day Ahead Market ("DAM") profits based on perfect economic foresight (labeled in the chart as "DAM based on Ideal Schedule") and the economic DAM and Real-Time ("RT") economic profits based on realized schedules over the Linden VFT merchant transmission facility ("Linden VFT") (labeled in the graph as "DAM based on Actual Schedule" and "RT based on Actual Schedule," respectively);

during the Data Period. Confidential Attachment C is described in the body of this transmittal letter (below). The analysis set forth in Attachment C utilizes actual confidential data from the "Data Period" considered by the NYISO (and defined below). In addition, the comparative graph could be commercially sensitive to the Linden VFT and current and future rightsholders. Accordingly, the NYISO informed Linden VFT and these rightsholders in advance that the aggregated scheduling data would be included, in this filing as Protected Materials and would be disclosed to individuals who sign the Non-Disclosure Certificate and are approved as Reviewing Representatives by the NYISO. The NYISO invited the Linden VFT and the rightsholders to comment on its approach on February 14, 2014. The NYISO addressed questions and other responses received from these entities in response to its notification.

²⁰ As the NYISO noted in this proceeding "the analysis ... nets revenues for Ancillary Services if the ICAP Supplier is capable of providing them." See *Answer of New York Independent System Operator, Inc.*, at n. 70 (Nov. 13, 2012) ("November 2012 Answer").

- Attachment D is the same graph with the confidential information redacted; *i.e.*, it only shows the heading and the axes; and
- Attachment E, the *Supporting and Confirming Affidavit* of Daniel A Jerke.

II. COMPLIANCE REPORT CONCERNING THE SCALING FACTOR METHODOLOGY UTILIZED IN THE HTP PROJECT BSM RULE DETERMINATION

In compliance with the November Order, this Section addresses the NYISO's first three compliance directives.

A. The Scaling Factor Used in the HTP Project Determination²¹

In response to the first compliance directive, the NYISO states that it applied a 32.94 percent scaling factor to estimate the likely net energy revenues of the HTP Project pursuant to the BSM Rules. That analysis was reviewed and endorsed by the MMU Report. The same scaling factor value was applied as part of the January 14, 2014 re-determination referenced above.

B. Description of the Scaling Factor Methodology for the HTP Project

The NYISO interprets the November Order's directive "to explain in detail how" the HTP Scaling Factor was calculated²² as requiring it to provide both the formula that it used to calculate the scaling factor, as well as the actual inputs into the formula. Accordingly, this subsection provides that formula and a detailed description of each of its inputs, along with additional explanations supporting the reasonableness of the NYISO's approach.

The MMU Report, which is part of the record in this proceeding and contains a considerable amount of information concerning the scaling factor methodology,²³ explains that the NYISO used the following formula ("Equation 1") to calculate the 32.94 percent scaling used in the calculation of likely Energy revenues for the HTP Project.²⁴

²¹ As set forth in footnote 7 above, the NYISO did not change the scaling factor or the inputs to it when it made the January 12, 2014 re-determination or the other final determinations for the HTP Project, *i.e.*, in December 2011 or November 2012.

²² November Order at PP 18, 82.

²³ See Affidavit of Daniel A. Jerke to November 2012 Answer; Supplemental Affidavit of Daniel A. Jerke to the New York Independent System Operator, Inc., *Request for Leave to Answer and Answer*, Docket EL12-98-000 (Dec. 17, 2012). See also Supplemental Affidavit of Joshua A. Boles, *Answer of the New York Independent System Operator, Inc., to Comments*, Docket No. EL11-42 (July 21, 2011) (which was submitted as Attachment 3 to the November 2012 Answer).

²⁴ The NYISO's applied the scaling factor to the HTP Project solely to estimate its likely Energy revenues. The NYISO previously explained in this proceeding that "[t]he use of a Scaling Factor is necessary to

Scaling Factor =

$$= \frac{\left\{ \sum_h \{ (DA \text{ Price Spread} - \text{Export Fee}) \times DA \text{ Sch MW} \} \right.}{\sum_h \{ \max \text{ of } (\$0, DA \text{ Price Spread} - \text{Export Fee}) \times \text{Max Capability MW} \}}$$

$$I_{MW} = \begin{cases} \text{Export Fee,} & \text{if } RT \text{ Sch MW} < DA \text{ Sch MW} \\ -\text{Export Fee,} & \text{otherwise} \end{cases}$$

The NYISO used the actual energy price and schedule data for transactions utilizing the Linden VFT as inputs into Equation 1.²⁵ The NYISO selected data associated with the Linden VFT, and made corresponding assumptions, because that facility has key characteristics in common with the HTP Project that made it reasonable to use to calculate the HTP scaling factor. Prior to the HTP Project, the Linden VFT was the only UDR project from the PJM Interconnection (“PJM”) into New York City. The Linden VFT source and sink buses are located physically and electrically close to those of the HTP Project’s. It is therefore reasonable to expect Linden VFT data to approximate the relationship between prices in PJM’s PSEG-North Zone (in northern New Jersey) similar to the reasonably expected relationship for scheduled transactions utilizing the HTP Project.

The NYISO used Linden VFT price and schedule data for an eighteen month “Data Period.” The beginning of the Data Period corresponds to the first date of Day-Ahead Market transaction schedules for the Linden VFT, *i.e.*, November 1, 2009. The end of the Data Period is the date the scaling factor formula for the HTP Project was specified, in consultation with the MMU; *i.e.*, May 16, 2011.

During the Data Period, flows across the Linden VFT were uni-directional, *i.e.*, exclusively from PJM to New York,²⁶ just as they presently are across the HTP Project.²⁷ The NYISO thus

properly implement the Services Tariff’s express requirement that the NYISO reasonably estimate the projected net Energy revenues for new entrants, including merchant transmission entrants.” *See* NYISO November 2012 Answer at 14 (footnote omitted). The November Order confirmed that applying a scaling factor to estimate the HTP Project’s likely Energy revenues was reasonable. *See* November Order at 82 and 83. Similarly, on rehearing HTP challenged what it believed was the NYISO’s fifty percent reductions in its Energy revenues. *See* Request for Rehearing and Clarification of Hudson Transmission Partners, LLC, at 11, 53 (Dec. 23, 2013). While the November Order’s fourth compliance directive required the NYISO to explain how it would account for both Energy and Ancillary Services revenues in future scaling factor analyses, the scaling factor described herein for the HTP Project is only applicable to the determination of the HTP Project’s estimated net Energy revenues.

²⁵ The Linden VFT is a 315MW controllable and Scheduled Line with 315 MW of CRIS and UDRs. It extends from Linden, New Jersey in PJM to New York City. During the “Data Period” (defined below) considered by the NYISO, the Linden VFT had 300 MW of CRIS and 300 MW of UDRs.

²⁶ Subsequent to the Data Period, the Linden VFT began to support bi-directional flows.

reasonably assumed that arbitrage over the HTP Project would be comparable to that experienced by users of the Linden VFT.

The NYISO did not select data associated with, or make assumptions with reference to, the other merchant transmission lines interconnecting with the New York Control Area that participate in the ICAP market as UDR projects, namely, as the Cross-Sound Cable (“CSC”) or the Neptune Regional Transmission System (“Neptune”). It would not have been reasonable for the NYISO to do so. The CSC connects Connecticut to the Long Island Locality and thus is not comparable to the HTP Project for purposes of establishing a scaling factor. Its source is in ISO New England, Inc. (“ISO-NE”), not PJM, which means that it is impacted by a host of different market and inter-regional scheduling rules and interactions than the HTP Project.

The NYISO did not select Neptune, which has a source in PJM, because it sinks into the Long Island Locality, and not the New York City Locality.²⁸ Therefore, the price differences between the Long Island and New York City Localities would have resulted in Neptune’s net energy revenues not being indicative of what HTP’s might have been. It might seem that because Neptune and the Linden VFT would be subject to the same NYISO-PJM inter-market interactions they should theoretically realize a similar percentage of their theoretical profits. This is not true chiefly because the Long Island Locality has a materially different market than New York City. Most notably, the energy prices on Long Island exceed those of New York City, which results in consistently higher price spreads for UDR projects sinking in Long Island.²⁹ Such price spreads would be expected to produce easier arbitrage opportunities, because there is less risk that the price spread less a fee would be negative, as can be the case due to imperfect foresight and scheduling inefficiencies. As a result, a Market Participant would expect to see much more frequent scheduling of UDR projects into Long Island in the NYISO’s Day-Ahead and Real-Time Energy markets compared to a line into New York City. Because the HTP Project interconnects PJM and New York City, it is most appropriate to utilize data

²⁷ Although the HTP Project is physically capable of bi-directional operation, pursuant to the terms of its interconnection agreement, it currently only has permission to flow from PJM to New York. *See, e.g.* November Order at P 2 and *Filing of an Executed Merchant Transmission Facility Interconnection Agreement Among the New York Independent System Operator, Inc., Consolidated Edison Company of New York, Inc., and Hudson Transmission Partners, LLC and Request for Critical Energy Infrastructure Information Designation* at 2 (explaining that the HTP Project will have only unidirectional flow from PJM to the New York Control Area) Docket No. ER11-3479 (filed April 29, 2011). *See also* NYISO Technical Bulletin 223: “The HTP Scheduled Line presently supports import transactions to the NYCA (exports from PJM),” available at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Technical_Bulletins/Technical_Bulletins/Technical_Bulletins/TB_223_Designated_Scheduled_Lines_Consolidated_Final_04-02-13.pdf.

²⁸ This consideration was also applicable to the CSC which also sinks on Long Island.

²⁹ Potomac Economics’ 2011 *State of the Market Report* calculated the average price spreads for 2011 as \$6.78/MWh for the CSC, \$5.91/MWh for Neptune, and \$1.36/MWh for the Linden VFT. The average price spreads used in the scaling factor calculation was \$1.07/MWh in the DAM and \$2.40/MWh in RT, calculated over the Data Period. The 2011 *State of the Market Report* is available at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Studies_and_Reports/Reports/Market_Monitoring_Unit_Reports/2011/SOM_Report-Final_41812.pdf

associated with a UDR project with similar source and sink locations for comparison, which is why the Linden VFT was chosen.

At the highest level, Equation 1 is a ratio between assumed economic day-ahead and real-time net energy revenues based on actual Linden VFT schedules to the day-ahead net energy revenues that theoretically could have been realized over the same time period. The numerator was calculated from actual transaction schedules and the denominator was calculated based on an ideal dispatch, assuming the full capability of the line was utilized whenever there was a positive day-ahead price spread that exceeded the transmission scheduling fee. The ideal dispatch is referred to as the “Ideal Schedule” in Attachments C and D.

Specifically, the numerator of the scaling factor calculation includes the following variables:

- *DA Price Spread*: the hourly price difference between the DAM Locational Based Marginal Prices (“LBMPs”) at the NYISO’s Proxy Generator Bus for the Linden VFT and the day-ahead market PJM Locational Marginal Prices (“PJM LMPs”)³⁰ for the PJM equivalent Linden VFT External Interface. The LBMPs were retrieved from the NYISO’s public website.³¹ The PJM LMPs were retrieved from PJM’s public website.³²
- *RT Price Spread*: the hourly price difference between the NYISO RT market LBMP at the NYISO’s Proxy Generator Bus for the Linden VFT and the real-time market PJM LMP for the PJM equivalent Linden VFT External Interface. The real-time prices were retrieved from the same sources as the day-ahead prices.
- *DA Sch MW*: the hourly scheduled MWh over the Linden VFT in the DAM. Each hourly scheduled MW was the sum of the Linden VFT rightsholders’ schedules in that hour. The values were retrieved from the NYISO’s MIS, are confidential, and are not accessible to any Market Participant.³³

³⁰ “LMP” is a term from PJM’s market that is defined in PJM’s tariff. *See, e.g.*, <http://www.pjm.com/about-pjm/learning-center/markets-and-operations/market-overview/what-is-lmp.aspx>.

³¹ Data from the Data Period was retrieved from http://www.nyiso.com/public/markets_operations/market_data/pricing_data/index.jsp. The NYISO bus utilized was “PJM_GEN_VFT_PROXY” (PTID 323633).

³² Data from the Data Period was retrieved from: <http://pjm.com/markets-and-operations/energy.aspx>. The PJM bus utilized was “LINDENVFT” (PnodeID 81436855).

³³ An approximation of the scaling factor based on publicly available data could be calculated using the difference between the relevant Total Transfer Capability (“TTC”) and Available Transfer Capability (“ATC”) values (as those terms are defined in the NYISO’s Open-Access Transmission Tariff). The NYISO methodology for ATC calculations is set forth at: http://www.nyiso.com/public/webdocs/markets_operations/market_data/power_grid_info/ATCDetailedAlgorithm.pdf.

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- *RT Sch MW*: the hourly scheduled MWh over the Linden VFT in the real-time market. The data were retrieved from the NYISO's MIS, are confidential, and are not accessible to any Market Participant.³⁴
- *Export Fee*: the transmission scheduling fee that the NYISO assumed would be incurred when an entity scheduled energy across the Linden VFT from PJM to New York City. The value of the export fee was determined to be \$1.17/MWh, based on a review of PJM's tariff and website. The estimated Export Fee is intended to capture the cost of non-firm point-to-point transmission service, plus additional PJM cost-based ancillary service charges that a scheduling entity would be required to pay.
- *I_{MW}*: a variable that takes the value of the Export Fee if the RT Sch MW is less than the DA Sch MW, and the opposite of Export Fee (-Export Fee) if the RT Sch MW exceeds than the DA Sch MW.

The denominator of the scaling factor calculation includes the *DA Price Spread* and *Export Fee* variables, which are calculated the same as they are in the numerator. There is one additional variable in the denominator:

- *Max Capability MW*: the maximum MWh capability of the Linden VFT, which was assumed to be 300 MWh based on the maximum amount of MWh scheduled over the line throughout the Data Period.³⁵ The denominator represents the DAM revenues that would be expected if there were perfect foresight. That is, it was assumed that the full capability of the line is utilized whenever the price spread, less a fee, is positive.

The result of the application of the above inputs in Equation 1 was the 32.94 percent scaling factor. The day-ahead net Energy revenues determined by NERA Economic Consulting ("NERA") using its econometric model were multiplied by that scaling factor to produce a reasonable approximation of the HTP Project's likely total net Energy revenues from the DAM and RT Market.

The scaling factor for the HTP Project was computed in a spreadsheet, accompanied by a table describing each of the data elements and formulas. This spreadsheet is provided in public, redacted form as Attachment B. As noted above, Confidential Attachment A is an unredacted version of the spreadsheet that includes confidential scheduling data retrieved from the NYISO's MIS. Those data are an aggregation reflecting the hourly transactions of all Linden VFT rightsholders during the Data Period. The NYISO is making Attachment A available to the Commission and to entities approved as

³⁴ An approximation of the scaling factor based on publicly available data could be calculated using the difference between the TTC and ATC values.

³⁵ During the Data Period, the DA Sch MW and RT Sch MW did not exceed 300 MW. Thus, although the Linden VFT was awarded an additional 15 MW of CRIS under the Commission's October 2012 and January 2013 orders in Docket No. EL12-64, 300 MW, not 315 MW, was the correct maximum capability value for the NYISO to use for the Data Period.

Reviewing Representatives under the Protective Order. Attachment B does not include the DA Sch MW and RT Sch MW values or calculations that depend on them. Text formulas are included in lieu of the calculated values.

Attachment C is a graph showing aggregated monthly totals of estimated revenues and losses in both the DAM and RT Market for transactions scheduled over the Linden VFT during the Data Period. As noted above, the graph illustrates the estimated aggregated monthly difference between the DAM and profits based on perfect economic foresight (labeled in the graph as “DAM based on Ideal Schedule”) and the economic DAM and RT Market profits based on realized schedules over the Linden VFT (labeled as “DAM based on Actual Schedule” and “RT based on Actual Schedule,” respectively). The graph shows that the sum of day-ahead and real-time realized profits was less than the theoretical ideal day-ahead profits. Attachment D is the same graph with the Confidential Information redacted.

C. Additional Support for the HTP Project Scaling Factor Methodology

Even though the November Order’s acceptance of the application of a scaling factor to the HTP Project was not contingent on the NYISO further justifying its approach in this compliance filing, the Commission required the NYISO to provide support for the scaling factor methodology that it used for HTP. Accordingly, the NYISO in this subsection demonstrates that the scaling factor methodology was an appropriate, necessary, and effective way to implement the Services Tariff’s requirement that the NYISO reasonably project the likely net Energy and Ancillary Services revenues of the HTP Project.

The scaling factor methodology was developed in consultation with, and with the support of, NERA and the MMU with the objective of making a reasonable estimate of the HTP Project’s likely energy revenues.³⁶ The MMU recognized that if a scaling factor was not used, the net energy revenues calculated by NERA using its econometric model “would assume perfect arbitrage between PJM and the NYISO in the day-ahead market, which is not reasonable.”³⁷ The NYISO and NERA agreed with the MMU, and determined that a scaling factor was necessary so that a reasonable estimate of the net Energy revenues for the HTP Project reflected its inability to garner theoretically-maximized profits. The MMU concluded that the “methods and assumptions used to estimate net revenues for the HTP Project were generally consistent with those used in the Demand Curve reset process,” and were “reasonable and consistent with the [Services] Tariff.”³⁸

The scaling factor methodology as applied to the HTP Project was specifically designed to work in conjunction with the econometric model utilized by NERA to estimate the theoretical DAM net Energy revenues in other determinations under the BSM Rules that were made at the time of the December 2011 determination for the HTP Project. The econometric model was likewise used in

³⁶ November 2012 Answer, Affidavit of Daniel A. Jerke at P 34.

³⁷ *Id.* citing the MMU Report at 8.

³⁸ MMU Report at 9.

establishing the relevant ICAP Demand Curves.³⁹ The NERA econometric model had been developed to estimate net Energy revenues for generators electrically located inside of the NYCA; thus, in addition to other modifications, an additional modeling component had to be developed to account for the scheduling interactions between control areas that the HTP Project would experience.

HTP did not agree that the methodology that the NYISO chose to estimate the HTP Project's likely net Energy revenues was the correct one, but that disagreement did not, in and of itself, mean that the NYISO's methodology was not "just and reasonable."⁴⁰ Pursuant to well-established Commission precedent, the mere existence of alternative methodologies that might be reasonable does not make a utility's chosen methodology unjust or unreasonable.⁴¹ The NYISO was not, and is not, obligated to demonstrate that its chosen methodology was the perfect, or even the most likely to be accurate, means of estimating the likely net energy revenues of the HTP Project.⁴² Rather, the NYISO was obligated to demonstrate that the methodology was just and reasonable, which the Commission has confirmed that it did.⁴³

In addition, the scaling factor methodology applied in the determination for the HTP Project properly reflected its unique characteristics. As described above in Section II.B, the specific components selected by the NYISO to develop the scaling factor accounted for the "particular

³⁹ *New York Independent System Operator, Inc.*, 122 FERC ¶ 61,064, at P 47 (2008) (finding that "[w]hile there is no perfect method to predict future revenues, we conclude that [NERA's econometric model] used here falls within a zone of reasonableness and is supported by substantial evidence.") This model was also used in to develop the ICAP Demand Curves for 2014/2015 - 2015/2017 recently accepted by the Commission. See 146 FERC ¶ 61,043 (2014).

⁴⁰ November Order at P 83.

⁴¹ *PJM Interconnection, LLC*, 119 FERC ¶ 61,063 at P 41 (2007) (stating that "on the same set of facts there can be 'multiple just and reasonable rate designs'"); *California Independent System Operator Corporation*, 119 FERC ¶ 61,076 at P 14 (2007) (stating that "there can be more than just and reasonable proposal, and the proposal under consideration will be selected unless it is found unjust and unreasonable"); *Midwest Independent Transmission System Operator, Inc.*, 117 FERC ¶ 61,241 at P 62 (2006) (stating that "[u]nder the FPA, if we find that the Midwest ISO has successfully supported the justness and reasonableness of its proposal, we must approve it even if there are other just and reasonable ways..."); *Cities of Bethany v. FERC*, 727 F.2d 1131 at 1136 (1984) (finding that "[t]he Federal Power Act requires that all rates charged by public utilities be 'just and reasonable.' In the past FERC has interpreted its authority to review rates under this provision of the Act as limited to an inquiry into whether the rates proposed by a utility are reasonable - and not to extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs").

⁴² See *New England Power Company*, 52 FERC ¶61,090, at p. 61,336 (1990), reh'g denied, 54 FERC ¶61,055, *aff'd*; *Town of Norwood v. FERC*, 962 F.2d 20 (D.C. Cir. 1992); citing *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984), cert. denied, 469 U.S. 917 (1984) (utility need establish that its proposed rate design is reasonable, not that it is superior to alternatives); *OXY USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) ("[T]he Commission may approve the methodology proposed in the settlement agreement if it is 'just and reasonable'; it need not be the only reasonable methodology or even the most accurate").

⁴³ November Order at PP 82, 83.

characteristics of the HTP Project.”⁴⁴ The scaling factor methodology was based on data from the Linden VFT, which was reasonable given the similarities between the HTP Project and the Linden VFT pertinent to this analysis, and the differences between the HTP Project and other merchant transmission facilities, which are described above

The *Supporting and Confirming Affidavit of Daniel A. Jerke* that accompanies this filing as Attachment E verifies and supports the NYISO’s analysis that resulted in its development and application of the scaling factor described above to the HTP Project.

III. ISSUES CONCERNING THE FOURTH COMPLIANCE DIRECTIVE

A. Future Commission Guidance on Scaling Factor Tariff Language

For the reasons set forth above, the scaling factor methodology that the NYISO applied to the HTP Project was entirely appropriate given the HTP Project’s individual characteristics and should be upheld by the Commission. Nevertheless, the methodology that was used to determine the net Energy revenues for the HTP Project should not, and practically could not, be applied mechanically to other UDR projects in future determinations under the BSM Rules. This is because: (i) different UDR projects will have different attributes than the HTP Project; and (ii) the scaling factor methodology was developed specifically to compliment NERA’s estimation of DAM net Energy revenues using its econometric model for the HTP determination.

The November Order recognized that to reasonably estimate net Energy and Ancillary Services revenues (“Net E&AS Revenues”) for a future UDR project, a methodology that differs from the one used for generation projects is warranted.⁴⁵ Such a methodology should reflect the unique attributes of each future UDR project and the interactions between the system with which it is interconnecting and the NYISO.⁴⁶ Future UDR projects may interconnect the NYISO not only with PJM, but with ISO-NE and Hydro Quebec each of which “are governed by different market rules and structures, and, in the case of Hydro Quebec, operate within completely different regulatory constructs.”⁴⁷ Furthermore, the differences between rules in neighboring systems are likely to change over time as different regions pursue different policy initiatives, including efforts to ameliorate inter-regional seams. Thus, applying the scaling factor methodology that was developed for the HTP Project, or even a modified version of it, to estimate net revenues for future UDR projects could result in the a suboptimal or even an unreasonable estimate of net revenues. Moreover, an appropriate data source might not be available.

⁴⁴ MMU Report at 9.

⁴⁵ See November Order at P 90.

⁴⁶ The NYISO notes that UDR projects may not be capable of providing Ancillary Services. If a project can provide Ancillary Services, the methodology to reasonably estimate such Ancillary Services revenues may be dependent of the characteristics of the project and the neighboring Control Area with which it is interconnected.

⁴⁷ NYISO Motion at 3.

In addition, to the extent that future UDR projects have other unique operational challenges that could not easily be captured, the application of a methodology based on a scaling factor appropriate for an earlier BSM Rule determination could result in the omission of those operational challenges from anticipated Net E&AS Revenues. This could be the case even for future UDR projects that had reasonably similar interconnection points and for which there was sufficient data for a period during which the NYISO's and neighboring region's rules had not varied. Additionally, there might be an opportunity to use a more suitable alternative approach for the later evaluated project that would be foreclosed by overly restrictive tariff rules.⁴⁸

Accordingly, the NYISO respectfully asks that if the Commission chooses to provide "further guidance regarding tariff submissions"⁴⁹ to determine Net E&AS Revenue estimates, that it permit the NYISO to develop a compliance proposal that is sufficiently broad and flexible to allow for the kinds of variations described above in the estimation of likely Net E&AS Revenues. That flexibility should apply both now and in the future.

Prior to the Extension Order the NYISO made substantial progress towards the development of a conceptual basis and general framework for estimating Net E&AS Revenues for UDR projects that could accommodate different projects with unique attributes from various neighboring systems, while providing sufficient notice, clarity, and transparency to stakeholders. Guidance provided by the Commission on the fourth compliance directive that allows the NYISO to utilize its analysis and work developed to date to finalize and propose such revisions could be beneficial to all stakeholders.

B. Timing Issues

The November Order specified that for future buyer-side mitigation determinations for UDR projects a tariff-based scaling factor is to be applied.⁵⁰ The Extension Order, however, appears to envision the completion of multiple steps before a prospective methodology is incorporated into the Services Tariff. That is, the Commission indicated that it will first review this filing regarding the first three directives, then issue an order to provide the NYISO with further guidance regarding the fourth compliance directive, and then review and act on a later NYISO compliance filing in response to that order.

It is possible that these steps will not be completed before the NYISO must make a determination under the BSM Rules for an Examined Facility in the on-going Class Year 2012 process,

⁴⁸ For example, the NYISO made changes to its dispatch model to accommodate how the Berrians Facility would optimize its operations in order to qualify for the New York City property tax abatement when the NYISO performed the mitigation exemption test for that facility. *Assessment of the Buyer-Side Mitigation Exemption Test for the Berrians Facility* at 28 (Oct. 2013), available at: <http://www.nyiso.com/public/webdocs/markets_operations/documents/Studies_and_Reports/Reports/Market_Monitoring_Unit_Reports/2012/NYISO2012StateofMarketReport.pdf>

⁴⁹ See Extension Order at P 11.

⁵⁰ See November Order at P 90.

i.e., a determination for a UDR project (not involving HTP.) The BSM Rules require the NYISO to issue determinations to Examined Facilities in relation to the Class Year Project Cost Allocation process.⁵¹ It is possible that the NYISO would have to make such a determination by July 18, 2014. Depending on the progress of the NYISO's Class Year analysis, it is also possible that the NYISO would not have to make that determination until a later date, and that such later date would still precede Commission acceptance of NYISO tariff revisions addressing the fourth compliance directive.

The NYISO reads the Extension Order's "suspension" of the fourth compliance directive as permitting it to use its existing Services Tariff authority to reasonably project likely Net E&AS revenues in order to calculate net CONE for a UDR project in the event that it must make another determination under the BSM Rules before the Commission has resolved all questions regarding the fourth compliance directive. The NYISO interpretation would avoid a conflict between the Extension Order, the November Order's finding that accounting for attributes unique to UDR projects is necessary to making reasonable estimates of "likely" net Energy revenues, and Services Tariff provisions dictating the timing of determinations under the BSM Rules.⁵² In addition, the Commission has previously noted the importance of the timing of the issuance of determinations under the BSM Rules in relation to the Class Year Project Cost Allocation process. That timing is tariff-based because it is considered to be the go-forward date for an investment decision. Thus, the tariff provides for the two events to coincide.⁵³

If the NYISO were required to project the likely Energy and Ancillary Services revenues for a future UDR project under its existing tariff authority, it would take measures to ensure the transparency of that determination to the applicant and to other stakeholders. Consistent with Commission precedent, the NYISO's estimation of Net E&AS Revenues would be informed by the input of the independent MMU and subject to MMU review.

⁵¹ See Services Tariff Sections 23.4.5.7.3.2 and 23.4.5.7.3.3.

⁵² See *e.g.*, November Order at P 83; Extension Order at P 11; and Services Tariff Sections 23.4.5.7.2.1. and 23.4.5.7.3.

⁵³ See *e.g. Astoria Generating Company L.P., et al. v. New York Independent System Operator, Inc.*, 139 FERC ¶ 61,244 at PP 35, 50 (2012) (directing the NYISO to provide an example and analysis on its website that illustrate how the mitigation exemption test is performed "because increased clarity and a better understanding of how the rules will be applied to benefit both new entrants and existing market participants").

The Honorable Kimberly D. Bose
February 21, 2014

**PUBLIC VERSION:
PROTECTED MATERIALS AND CONFIDENTIAL
INFORMATION HAVE BEEN REDACTED PURSUANT
TO PROTECTIVE ORDER IN DOCKET NO EL12-98-000
AND TO 18 C.F.R. §388.112**

IV. SERVICE

This filing will be posted on the NYISO's website at www.nyiso.com. In addition, the NYISO will e-mail an electronic link to this filing to the official representative of each party to this proceeding, to each of its customers, to each participant on its stakeholder committees, to the New York Public Service Commission, and to the New Jersey Board of Public Utilities.

V. CONCLUSION

For the reasons specified above, the New York Independent System Operator, Inc. respectfully requests that the Commission issue an order accepting this compliance filing without imposing any conditions.

Respectfully submitted,

/s/ Gloria Kavanah

Gloria Kavanah

New York Independent System Operator, Inc.

Dated: February 21, 2014

cc: Michael A. Bardee
Gregory Berson
Anna Cochrane
Jignasa Gadani
Morris Margolis
David Morenoff
Michael McLaughlin
Daniel Nowak

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing document to be served upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Commission Rules of Practice and Procedure, 18 C.F.R. § 385.2010 (2013).

Dated at Washington, D.C. this 21st day of February, 2014.

/s/ Catherine Karimi
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