UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.	)	Docket No(s) ER08-1281-005, -006,-007 and -010

PROTEST OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rule 211 of the Commission's Rules and Regulations,[1] Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM[2] ("Market Monitor"), protests the Compliance Notice regarding the development of new interface pricing software filed by the New York Independent System Operator, Inc. ("NYISO") on December 22, 2011 (December 22nd Filing) in compliance with prior orders in the above captioned proceeding.[3]

The Interface Pricing methodology proposed by the NYISO does not comply with FERC's Order of December 30, 2010. In response to the comments provided by the Independent Market Monitor for PJM and Potomac Economics, in its capacity as the Independent Market Monitor for the Midwest Independent System Operator ("MISO"), regarding PJM's and MISO's use of information about the actual source and sink of a transaction, regardless of its scheduled path, to determine the price, FERC recognized that

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1 18 CFR § 385.211 (2011).

2 PJM Interconnection, L.L.C. is a FERC-approved Regional Transmission Organization. Capitalized terms used herein and not otherwise defined have the meaning provide in the PJM Open Access Transmission Tariff ("OATT") or the PJM Operating Agreement.

3 *New York Independent System Operator, Inc.*, 133 FERC ¶61,276 at PP 27, 31 (2010), *order on reh'g*, 136 FERC ¶61,011 at P 15 (2011).

the NYISO method of interface pricing created incentive issues related to loop flows and made revisions to the NYISO's method interface pricing a heightened priority.

The Commission stated (at P 27):

> In one set of questions, the Commission asked about the differences in the way the RTOs/ISOs price transactions at their borders and how revisions to interface pricing would address the incentives for scheduling circuitous transactions. The NYISO's response indicates that there are differences between the interface pricing methods used in PJM and the NYISO. PJM and Midwest ISO use NERC tag information regarding the source and sink of a transaction to determine the price the transaction receives or pays. In contrast, the NYISO and IESO base the price on the path over which the external transaction is scheduled into their respective control areas. The NYISO acknowledges that this difference creates incentives for market participants to schedule circuitous transactions which can exacerbate loop flow. The NYISO's comments indicate that a change to their pricing methodology may reduce the incentives for scheduling these transactions, and has agreed to evaluate what changes are necessary. Further, the analysis by the NYISO IMM states that changes to market rules regarding the interfaces would address most of the problems associated with Lake Erie loop flow. [Footnote omitted.] Similarly, the PJM IMM states that interface pricing reform could be implemented immediately and at minimal cost. We concur with the two IMMs and will thus make revisions to interface pricing a heightened priority, as outlined in our compliance directives below.

In directing the expedited resolution of the interface pricing issue, the Commission stated (at P 31):

> First, we require that interface pricing revisions be completed concurrently for the Commission-jurisdictional RTO/ISOs by the second quarter of 2011. [Footnote omitted.] As noted by the PJM IMM, this method has been used by PJM and the Midwest ISO for years and could be implemented by other RTOs/ISOs at minimal cost. [Footnote omitted.] We note that this required date, now Commission-mandated, still allows an additional year beyond the date for interface pricing revisions (design) included in the NYISO

> Report, which was originally proposed for the second quarter of 2010.

The methodology described in the Compliance Notice and implemented by the NYISO does not meet the Commission's directive.

Rather than utilizing NERC tag information to determine the actual source and sink of the transaction, the NYISO created a method that will utilize historical data to infer the future performance of the system, and assign one of two scheduling modes to calculate interface prices. Once a scheduling mode is selected, it is expected to remain in place for a three month period. These scheduling modes are "Conforming" and "Non-Conforming".[4] The "Conforming" scheduling mode will be utilized when the historical data shows that the actual hourly flows at the NYISO/IESO Interface were within +/- 200 MW of the scheduled power in at least 65 percent of the hours. If the historical data shows that this is not the case, the NYISO will implement the "Non-Conforming" scheduling mode.

NYISO's approach ignores the power flows on the other NYISO interfaces and, even if history were a perfect predictor of the future, assures that prices will be wrong for 35 percent of the hours in a quarter. The NYISO does not provide details on what historical data will be evaluated in the determination of which scheduling mode will be used. The Draft Technical Bulletin, distributed by the NYISO, claims that:[5]

> When the Scheduling Mode is "Conforming", the NYISO/PJM and NYISO/IESO interface power flows and internal NYCA power flows will reflect the measured value of Lake Erie circulation applied over all relevant RTC/RTD intervals. All NYCA generator, NYCA load and external proxy generator shift factors and loss

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4 Draft NYISO Technical Bulletin 213. Attached.

5 Draft NYISO Technical Bulletin 213. Attached.

> delivery (penalty) factors will be determined such that no incremental unscheduled power flows other than the measured Lake Erie Circulation value are reflected across the NYISO/IESO and NYISO/PJM interfaces.
>
> When the Scheduling Mode is "Non-Conforming", the NYISO/PJM and NYISO/IESO interface power flows and internal NYCA power flows will reflect the measured value of Lake Erie circulation modified to reflect the impact of incremental unscheduled power flows resulting from changes in the NYISO/PJM and NYISO/IESO interchange over all relevant RTC/RTD intervals. All NYCA generator, NYCA load and external proxy generator bus shift factors and loss delivery (penalty) factors will be determined such that incremental unscheduled power flows in addition to the measured Lake Erie circulation value will be reflected across the NYISO/IESO and NYISO/PJM interfaces.

Not only is there no data to support these claims, the "Conforming" Scheduling Mode leaves in place the current, faulty methodology when actual power flows "are expected to closely conform to scheduled power flows." There is no support provided for this approach, which, during periods when NYISO expects conforming flows, will result in interface prices which are exactly the same they were prior to any changes to interface pricing. Under the NYISO's approach, it is possible that the "Conforming" Scheduling Mode for determining interface prices will remain in place permanently and, therefore, entirely fail to address any Lake Erie circulation issues.

The method implemented by NYISO fails to address the issues identified by the Commission in its prior orders and leaves in place the potential incentives to inefficient scheduling and gaming that the changes were intended to address. When the existing interface pricing method is selected as the Scheduling Mode (the "Conforming" Mode), which could be all the time, there will be continued incentives for market participants to

schedule along inefficient paths to garner the higher interface price and opportunities to exploit for gaming purposes.

The NYISO filing does not explain how interface prices would be calculated and how the method of calculation compares to the PJM or MISO methods. The filing refers to determining "unscheduled power flow" but does not explain how interface prices will be calculated. The compliance filing, including attachments and the Draft Technical Bulletin, does not provide sufficient details on how the interface prices will be determined even when the NYISO "expects significant unscheduled power flows" and switches to the "Non-Conforming" Scheduling Mode. Therefore, it is not possible to know whether its approach will effectively price energy at the NYISO interfaces, even when it is recognized that actual flows do not equal scheduled flows. NYISO's compliance filing does not provide a reasonable opportunity for stakeholders, the parties to this proceeding or the Commission to evaluate and provide comments.

The Market Monitor requests that FERC direct the NYISO to implement an interface pricing method that matches the methods successfully implemented by PJM and MISO. These methods provide a dynamic, real-time approach to defining and modifying the interface definitions, which reflect the actual flows on the PJM or MISO systems resulting from generation sources at their actual locations serving loads at their actual locations, as appropriate whether the PARs are operational or not and whether scheduled flows equal actual flows.

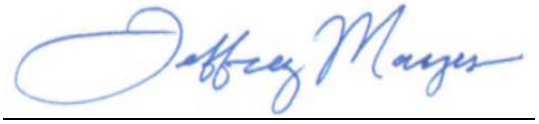
The impact of PARs on system flows is reflected in the distribution factor values used to determine interface prices under the PJM method. NYISO has failed to identify any material issue with this approach. If NYISO could show a deficiency in the method used by PJM, then all of the markets should use the best method.

Regardless of which approach the Commission accepts, the NYISO should be required to submit a detailed design document explaining how interface prices will be determined, so that stakeholders and parties to this proceeding have a fair opportunity to evaluate it.

The trading activities, whether the result of flawed interface pricing rules or the gaming of flawed interface pricing rules, harmed the operation of the markets in all of the affected regional transmission operators. Real action is needed to ensure that the interface pricing methodology employed by the NYISO is compliant, effective and transparent. NYISO must accept that it cannot continue to employ the same market rules rejected by the Commission.

The Market Monitor respectfully requests that the Commission afford due consideration to this protest as it resolves the issues raised in this proceeding.

Respectfully submitted,



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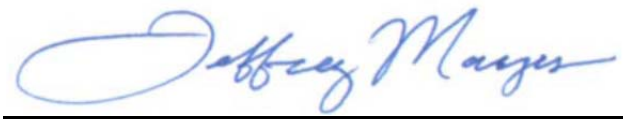
Dated: January 12, 2012

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania,
this 12th day of January, 2012.



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ATTACHMENT

Subject: (Interface Pricing) Method for Modeling Unscheduled Power Flows

This Technical Bulletin describes how the NYISO will account for expected unscheduled power flows across the NYISO/IESO and NYISO/PJM interfaces in the Day-Ahead and Real-Time Markets in its pricing and scheduling.

Date Effective: January 31, 2012 Implementation Effective for Day-Ahead and Real-Time Market Day February 1, 2012

Method to Determine Scheduling Mode

The NYISO is capable of implementing two distinct methods of pricing and scheduling ("Scheduling Modes"). If actual power flows across the NYISO/IESO and NYISO/PJM interfaces are expected to closely conform to scheduled power flows, the NYISO's pricing and scheduling will incorporate that expectation ("Conforming"). If the NYISO expects significant unscheduled power flows across the NYISO/IESO and NYISO/PJM interfaces, the NYISO's pricing and scheduling will anticipate and account for those unscheduled power flows ("Non-Conforming"). The NYISO will determine the appropriate Scheduling Mode as follows:

- The year will be divided into 4 quarters for evaluation, February – April, May – July, August – October, and November - January.
- Approximately thirty days prior to the beginning of each quarter, the NYISO will evaluate operating history to determine if actual power flows ordinarily conformed to scheduled power flows for the prior 12 months.
    - If the operating history demonstrates that actual average hourly power flows at the NYISO/IESO Interface were within +/-200 MWs of scheduled power flows in at least 65% of hours, then the Scheduling Mode will be set to "Conforming" for the upcoming quarter. Otherwise, the Scheduling Mode will be set to "Non-Conforming" for the upcoming quarter.
- Revisions to the Scheduling Mode will ordinarily be applied to the first Day-Ahead and Real-Time market day in the quarter that coincides with the weekly update of the Unscheduled Power Flow (UPF) value. See below for a description of the UPF value.
- The NYISO will communicate to its Market Participants and to neighboring Balancing authorities the Scheduling Mode it intends to employ.
- The ISO retains the discretion to make adjustments to the Scheduling Mode when historic operation is not expected to provide an accurate prediction of future performance.

Day-Ahead Market

In order to account in the Day-Ahead Market for the expected Unscheduled Power Flow (UPF) through the interconnected transmission system around Lake Erie, the NYISO will develop and communicate to its Market Participants expected UPF, based on recently observed historic data. A UPF is calculated for both the Conforming and Non-Conforming Scheduling Modes. As explained below, the method used to calculate the UPF differs between the two Scheduling Modes.

Determining the Expected Unscheduled Power Flow (UPF)

- The expected UPF will be calculated on a weekly basis. The UPF will be determined based on 30-day rolling historical on-peak and off-peak hourly averages.
    - "On Peak" will include Monday - Saturday HB07 - HB22.
    - "Off Peak" will include Monday - Saturday HB23 - HB06 & Sunday HB00 - HB23.
- The treatment of the NYISO/PJM and NYISO/IESO scheduled interchange in the calculation of the expected UPF will be based on the Scheduling Mode.
    - When the Scheduling Mode is set to "Conforming", the expected UPF will be calculated based on all observed differences between NYISO/IESO scheduled interchange and actual power flows, *i.e.* "Lake Erie Circulation".
    - When the Scheduling Mode is set to "Non-Conforming", the expected UPF will be calculated based on observed Lake Erie Circulation less the estimated power flow contribution associated with NYISO/PJM and NYISO/IESO scheduled interchange.
- The NYISO will communicate the expected UPF for both Scheduling Modes along with the Scheduling Mode that is in effect.
- Revised expectations of the UPF for the upcoming week will ordinarily be calculated on the first business day of each week, and applied in the Day-Ahead Market evaluation performed on the subsequent day.
- In cases of known market rule or operational changes that would be expected to cause significant changes in the UPF, the frequency and/or period used to determine the historical average that is used to develop the UPF may be modified.

Treatment in the Day-Ahead Market

In the Day-Ahead Market, for the purposes of scheduling and pricing, Security Constrained Unit Commitment (SCUC) power flows around Lake Erie will be established based on the following:

- When the Scheduling Mode is "Conforming", the NYISO/PJM and NYISO/IESO interface power flows and internal NYCA power flows will reflect the expected value of UPF as

defined above. All NYCA generator, NYCA load and external proxy generator bus shift factors and loss delivery (penalty) factors will be determined such that no incremental unscheduled power flows, other than the expected value of UPF, is reflected across the NYISO/IESO and NYISO/PJM interfaces.

- When the Scheduling mode is "Non-Conforming", the NYISO/PJM and NYISO/IESO interface power flows and internal NYCA power flows will reflect incremental unscheduled power flows resulting from NYISO/PJM and NYISO/IESO interchange, in addition to the expected value of UPF. All NYCA generator, NYCA load and external proxy generator bus shift factors and loss delivery (penalty) factors will be determined such that incremental unscheduled power flows, in addition to the expected value of UPF, will be reflected across the NYISO/IESO and NYISO/PJM interfaces.

Real-Time Market

In the Real-Time Commitment/Real-Time Dispatch (RTC/RTD), for the purposes of scheduling and pricing, expected power flows around Lake Erie will be established as follows:

- The value of Lake Erie Circulation will be measured in real-time via telemetry as the difference between NYISO/IESO scheduled interchange and actual power flows.

- When the Scheduling Mode is "Conforming", the NYISO/PJM and NYISO/IESO interface power flows and internal NYCA power flows will reflect the measured value of Lake Erie circulation applied over all relevant RTC/RTD intervals. All NYCA generator, NYCA load and external proxy generator bus shift factors and loss delivery (penalty) factors will be determined such that no incremental unscheduled power flows other than the measured Lake Erie Circulation value are reflected across the NYISO/IESO and NYISO/PJM interfaces.

- When the Scheduling Mode is "Non-Conforming", the NYISO/PJM and NYISO/IESO interface power flows and internal NYCA power flows will reflect the measured value of Lake Erie circulation modified to reflect the impact of incremental unscheduled power flows resulting from changes in the NYISO/PJM and NYISO/IESO interchange over all relevant RTC/RTD intervals. All NYCA generator, NYCA load and external proxy generator bus shift factors and loss delivery (penalty) factors will be determined such that incremental unscheduled power flows in addition to the measured Lake Erie circulation value will be reflected across the NYISO/IESO and NYISO/PJM interfaces.

The NYISO anticipates that this Technical Bulletin will be incorporated into the Day-Ahead Scheduling Manual and the Transmission and Dispatching Operations Manual during their next available recertification periods.