## UNITED STATES OF AMERICA DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

International Transmission Company	)	Docket No. PP-230-
d/b/a ITCTransmission	)	
	)	

SUPPLEMENTAL COMMENTS OF THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR ON INTERNATIONAL TRANSMISSION COMPANY, D/B/A ITCTRANSMISSION'S REQUEST TO AMEND PRESIDENTIAL PERMIT

The Independent Electricity System Operator ("IESO") submits these supplemental comments in light of recent late-filed interventions and comments regarding International Transmission Company d/b/a ITCTransmission's ("ITC's") request to amend Presidential Permit PP-230-3.

## A. Background

The IESO is the Reliability Coordinator and Transmission Operator for the province of Ontario and has a direct and substantial interest in this proceeding and respectfully files these comments with the Department of Energy ("DOE").

On March 25, 2011, PJM Interconnection, L.L.C. ("PJM") filed a motion to intervene and comment on this proceeding. On April 11, 2011, International Transmission Company d/b/a ITCTransmission ("ITC") filed a response to this filing. The IESO is fully supportive of ITC's comments in response to PJM's late motion, PJM's motion to oppose controlling Lake Erie loop flow is contrary to their long-standing historical position and is based on an isolated view that ignores both the wider reliability and market impacts of these loop flows on the New York Independent Transmission System Operator, Inc. ("NYISO"), the Midwest Independent Transmission System Operator, Inc. ("NYISO"), PJM and the IESO.

## B. Discussion

 PARs support reliability by managing uncontrolled loop flows, which helps in ensuring reliability of the interconnected grid.

PJM's motion ignores the impact of uncontrolled loop flows on the reliability of the affected areas. Lake Erie loop flow has posed challenges to system operators since the early days of interconnected system operations. This problem has only grown with the exponential growth in transaction volumes as a result of the introduction of electricity markets. Uncontrolled loop flows are difficult to predict - they arise through the dynamic interplay of load, generation dispatch, interchange between jurisdictions, and the topology of the involved transmission systems. They pose an inherent risk in that they make it difficult for system operators to make accurate predictions of future operating conditions - a key component in managing reliability.

All the parties, NYISO, MISO, IESO, and PJM (until recently) recognized this fact and participated in numerous studies that came to the same conclusion - the need to match flow to schedule across the Michigan-Ontario interface to mitigate loop flow around Lake Erie. A joint study conducted by the all entities involved, in 2007 (and used as basis for further study as part of Phase 2 of the study project, in 2008<sup>1</sup>), noted the following recommendations<sup>2</sup>:

Midwest ISO, PJM, NYISO and IESO recommend the commissioning of the Michigan-Ontario PARs as soon as possible to mitigate the loop flow around the Lake Erie Loop.

On a long term basis (once the B3N PAR has been replaced), all four Ontario-Michigan PARs will operate in regulation mode.

<sup>&</sup>lt;sup>1</sup> Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint, Phase II, at: http://www.miso-pim.com/working-groups/joint-and-common/downloads/20081114-loop-flow-phase-ii-study-report-final-20081112.pdf

<sup>&</sup>lt;sup>2</sup> Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint, at: http://www.jointandcommon.com/working-groups/joint-and-common/downloads/20070525-loop-flow-investigation-report.pdf, Page 41.

From: IESO

The four parties will continue to monitor the Lake Erie Loop Flow prior to, and following, the operation of the Michigan-Ontario PARs to measure how successful

As is indicated above, it was the intention of all parties that the Ontario-Michigan PARs will operate in regulation mode normally, which is basically ensuring that power flows are regulated such that flow equals schedule. These consistent premises, which have been acknowledged by all entities involved, have been reflected in the operating instructions that will govern the collective operation of the new ITC PAR facilities in Michigan and existing PAR facilities in Ontario. PJM's comments that these protocols 'may harm grid operations within the 13-state PJM region' are absent of any corroborating evidence of a negative impact on reliability. As well, PJM's statements clearly contradict what studies, of which PJM was a working partner for many years, have shown.

they are at maintaining schedule equals actual.

II. PJM's statements are self-serving and do not take into consideration the regional benefits to markets of installing PARs and operating them with flow equal to schedule.

PJM states that operating the PARs to flow equals schedule will leave them worse off than today, which is not in the public interest. The implication of PJM's perspective is clear – they are only concerned with the impact on their market and the impact on other markets is unimportant.

However, electricity markets have constantly been evolving and are increasingly interlinked with each other. Electricity traders will transact energy across the broader region, leading to uncontrolled loop flows because energy does not flow according to scheduled paths but based on the laws of physics. These loop flows lead to congestion across the system as a whole and drives system operators to issue Transmission Loading Reliefs (TLRs) to relieve congestion; since TLRs are

uneconomic measures they negatively impact market efficiencies. This impact is also clearly stated in a joint study undertaken by PJM and MISO. The study notes<sup>3</sup>:

On the northern interfaces, however, a different phenomenon occurs on the Lake Erie Loop. PJM, NYISO, IESO and Midwest ISO each operate independent markets and direct transmission operations around Lake Erie in a diamond formation, but only PJM and Midwest ISO have a Joint Operating Agreement that requires reporting generation-to-load impacts for constraints. If one market has excess generation, it will attempt to sell it to a neighbor but actual flow of the energy will take a different path. If there is a transmission constraint, the entities have no choice but to issue a TLR action to curtail schedules, an economically undesirable event.

Congestion is not a PJM-only issue but something that clearly affects all entities involved.

PJM also posits that operating the PARS to 'flow equals schedule' will impact them regardless of whether Canadian systems are congested or not. What they fail to recognize is that the lack of congestion is often due to proactive congestion management steps that the IESO takes to predict and accommodate anticipated loop flows. The IESO routinely takes actions such as redispatching generation, pre-emptively cutting transactions, or and reducing scheduling limits on the interties.

Because the direction of the loop flows are generally consistent with power flows brought about through domestic use of transmission facilities, loop flows also cause incremental losses, which must be made up by the systems suffering the loop flow. In Ontario, both the proactive management of loop flows and increased incremental losses result in additional costs that must be borne by Ontario ratepayers.

Another consideration missing from PJM's comments is that markets are dynamic - they respond to changing conditions. Their estimate of cost to the market does not account for the fact that

<sup>&</sup>lt;sup>3</sup> Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint, Phase II, at: http://www.miso-pim.com/working-groups/joint-and-common/downloads/20081114-loop-flow-phase-ii-study-report-final-20081112-pdf

traders will modify their behavior if they no longer have a free-ride through the transmission systems outside of PJM. This dynamic market reaction also means that by freeing up transmission in MISO, NYISO, and IESO markets, efficient supply will be allowed to be scheduled from these markets to PJM – an opportunity currently unavailable because of PJMs usage of these other markets' transmission systems for its transactions and for which these other markets are not compensated.

Ontario's Market Surveillance Panel ("Panel"), an independent market monitor that reports to the Ontario Energy Board ("OEB"), has repeatedly commented on the impact of the lack of Michigan-Ontario PARs. They recommend that the bypassed and non-activated PARs be brought into service as soon as possible and practicable, because of the large efficiency gains to Ontario as well as external markets.<sup>5</sup>

On the topic of FERC's order to NYISO of July 16, 2009, the Panel observed:

On July 16, 2009, FERC issued an order to NYISO to work with neighboring markets to develop long-term comprehensive solutions to the "loop flow problem". The Panel understands that the IESO is actively engaged in this process with its counterparts (including NYISO, MISO, and PJM). The fundamental concept is that traders are responsible and thus should be appropriately charged for congestion that is induced by the loop flow that their transactions cause. <sup>6</sup>

Also, in their report of January 2010, which reviewed market operation from May to October 2009, the Panel noted:

The PARs offer potentially significant market efficiency/benefits. Had all PARs been in place, a significant amount of LEC (about 600 MW in either direction) could have been controlled. This would have facilitated more imports or exports, both through scheduling additional transactions and fewer curtailments. More transactions across

<sup>&</sup>lt;sup>4</sup> See the Panel's December 2005 Monitoring Report, pp 79-82; July 2006 Monitoring Report, pp 100-102; January 2008 Monitoring Report, pp 146-151; July 2009 Monitoring Report, pp 164-181; and January 2010 Monitoring Report, pp 69-84.

<sup>&</sup>lt;sup>5</sup> See the Panel's January 2010 Monitoring Report, p 82

<sup>&</sup>lt;sup>6</sup> See the Panel's January 2010 Monitoring Report, p 72

markets move power from low cost areas to high cost areas and thus improve market efficiency (in all neighboring markets, not just Ontario)?

## C. Conclusion

For the reasons set forth above, the IESO respectfully requests that the Motion filed in this case by PJM on March 25, 2011 should be denied in its entirety and that the DOE should approve the ITC request to amend PP-230-3 to permit the PARs to be placed in service as proposed.

Respectfully Submitted:

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<sup>&</sup>lt;sup>7</sup> See the Panel's January 2010 Report, p82