

UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY  
OFFICE OF FOSSIL ENERGY

US Department of Energy

MAR 12 2009

Electricity, Delivery and Energy Reliability

International Transmission Company  
d/b/a ITC*Transmission*

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Docket No. PP-230-4

**COMMENTS OF THE MIDWEST INDEPENDENT TRANSMISSION SYSTEM  
OPERATOR, INC. ON INTERNATIONAL TRANSMISSION COMPANY, D/B/A  
ITC*TRANSMISSION*'S REQUEST TO AMEND PRESIDENTIAL PERMIT**

The Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") submits these comments in response to International Transmission Company d/b/a ITC*Transmission*'s request to amend Presidential Permit PP-230-3.

**A. Background**

On January 5, 2009, International Transmission Company, d/b/a ITC*Transmission* ("ITC") filed its request to amend Presidential Permit PP-230-3. As explained in the request, ITC wishes to replace the damaged 675 MVA Bunce Creek Phase Angle Regulator ("PAR") with two 700 MVA PARs in series. *See*, Request of ITC to Amend Presidential Permit ("ITC Request"), p. 1.

The Midwest ISO files these comments in support of the ITC petition. The return to service of the B3N line and the Bunce Creek PAR will provide significant operational and reliability benefits affecting the flow of energy across the interface between the United States and Canada. As noted by ITC, the operation of the PARs have been documented as one important measure that can be used to address the effects of loop flows around Lake Erie. *See*, ITC Request, p. 7, citing the Midwest ISO and PJM study "Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprints."

The Midwest ISO does, however, seek clarification of certain language used to describe the appropriate operation of the PARs, and clarification of the appropriate authority of the Midwest ISO with regard to its role as Reliability Coordinator.

**B. Appropriate Operation of the PARs**

ITC proposes to operate the PARs “to control unscheduled flows so that actual flow matches scheduled flow, to the maximum extent *possible*.” *See*, ITC Request, p. 6. Later, ITC refers to “matching actual power flows to scheduled flows to the maximum *practical* extent.” *See*, ITC Request, p. 7.

The 2003 DOE order amending PP-230-3 provides, in Article 3, at page 4, that ITC shall operate the PARs under normal conditions “such that the electrical flow on the Michigan-Ontario interface will match Michigan-Ontario scheduled transactions across the interface.” At various time since the issuance of that order, ITC has informed the Midwest ISO that ITC reads the 2003 presidential permit as imposing an absolute limit on the operation of the PARs to “match” actual to scheduled flows.

This position has frustrated the implementation by Midwest ISO of an operating instruction with IESO, the Canadian independent system operator, regarding the operation of the PARs.<sup>1</sup> Good utility practice recognizes that PARs cannot be safely operated to continuously and perfectly match actual to scheduled flows. To attempt to do so would damage the PARs. The Midwest ISO cannot unilaterally direct the operation of the PARs under the operating instruction with IESO because the ITC facilities subject to

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<sup>1</sup> See Operating Instruction MISO-IESO-CO2-R0, attached hereto as Exhibit A. Pursuant to a Coordination Agreement between Midwest ISO and IESO, the parties implement certain reliability related activities such as outage coordination and voltage control through detailed Operating Instructions.

the DOE permit have not been transferred to the functional control of the Midwest ISO, as explained in the following section of these comments.<sup>2</sup>

The Midwest ISO respectfully requests that any final order amending permit PP-230-3 clarify that the PARs be operated to match actual power flows to scheduled flows “within practical considerations.” This is consistent with the language found in Exhibit A<sup>3</sup>.

### **C. Functional Control of the Interface Facilities**

#### **1. Legal Status of Facilities Subject to permit PP-230-3**

In reviewing the previous filings in this docket, it appears that ITC made commitments at both FERC and the DOE regarding its intent to transfer functional control of the PARs to the Midwest ISO:

The Purchase Agreement provides that Applicants will use their best efforts to effect the subsequent transfer to the Midwest Independent Transmission Operator, Inc. (“MISO”) of the International Transmission’s operational responsibility and control of the phase angle regulators that comprise part of the facilities owned by International Transmission at the Michigan-Ontario, Canada international border.

Joint Application, DOE Docket No. PP-230-3, p. 4.

At the same time, similar representations were made to the FERC regarding functional control of the PARs, as indicated by the final order of the Commission:

Applicants also emphasize that International Transmission would continue as a member of the Midwest ISO, in accordance with ITC-MISO Agreement approved by the Commission. Applicants state that there will be no effect on the terms or conditions of transmission services that are currently provided to customers over the International Transmission system under the Midwest ISO OATT and Midwest ISO JOATT. *In addition, Applicants assert that*

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<sup>2</sup> See also, Application of the Midwest ISO to Export Electric Energy to Canada, Docket No. EA-343, July 10, 2008. As noted in Exhibit C to the July 10 Application, Midwest ISO members Northern States Power and Minnesota Power have transferred functional control of their border facilities to the RTO. Minnkota Power Cooperative is not a Midwest ISO member.

<sup>3</sup> See Exhibit A, Section 5.1 (d).

*they will use their best efforts to facilitate the transfer to the Midwest ISO of International Transmission's operational responsibility and control of the phase angle regulators (PARs) that comprise part of the facilities owned by International Transmission at the Michigan-Ontario, Canada international border.*

*ITC Holdings Corp., et al*, 102 FERC ¶ 61, 182, at P. 12 (emphasis added).

Finally, the Presidential Permits issued by DOE in both 2001 and 2003 appear to contemplate a transfer of functional control, presumably on the basis of these representations, when the DOE conditioned the orders on operation of the PARS in compliance with policies and standards of Midwest ISO, among others:

The facilities described in Article 2 above, including the phase-shifting transformer in the B3N circuit, shall be designed and operated in compliance with all policies and standards of NERC or its successor, Regional Councils, *or independent system operators, as appropriate*, on such terms as expressed therein, and as such criteria, standards, and guides may be amended from time to time.

DOE Order, Docket No. PP-230-3, Article 3, at p. 4 (2003) and Docket No. PP-230-2, Article 3, at p. 6 (2001) (emphasis added).

In previous discussions regarding the PARs, ITC has expressed its view that FERC lacks jurisdiction to order the transfer of functional control of the PARs, because the PARs are subject to DOE jurisdiction. However, a transfer of functional control no longer requires FERC approval under Section 203 after the decision in *Atlantic City Electric Company, et al. v. FERC*, 295 F.3d 1 (D.C. Cir. 2002), and the Commission's subsequent *Guidance On Regional Transmission Organization And Independent System Operator Filing Requirements Under The Federal Power Act*, 104 FERC ¶ 61, 248 (2003).

Now that transfer of functional control is a matter of contract (i.e., pursuant to the TO Agreement) there is no legal barrier to ITC simply indicating its desire to have the

PARs entered into the ITC facilities list maintained by the Midwest ISO for facilities under its functional control. That would provide ITC with the same level of assurance afforded other Transmission Owning members regarding the operation of their facilities subject to, and within the limits imposed by, various regulatory and operating restrictions applicable to physical plant:

By this Agreement, each of the Owners authorizes the Midwest ISO to exercise functional control over the operation of the Transmission System as necessary to effectuate transmission transactions administered by the Midwest ISO. Such control shall be exercised in accordance with Good Utility Practice and *shall conform to applicable reliability guidelines, policies, standards, rules, regulations, orders, license requirements* and all other requirements of the North American Electric Reliability Council, applicable regional reliability councils, or any successor organizations, each Owner's specific reliability requirements and operating guidelines, *and all applicable requirements of federal or state laws or regulatory authorities.*

Transmission Owners Agreement, Article Three, I. A. (emphasis added).

Thus, all restrictions applicable to the facilities that are the subject of the Presidential Permit must be observed by the Midwest ISO in performing its duties as the independent system operator, and a NERC registered reliability coordinator.

In the absence of functional control of these facilities it is unclear how transmission service transactions across the interface are completed, since the Midwest ISO has authority over, and schedules transmission service over, only those facilities under its functional control. This creates a legal gap between the point at which the Midwest ISO's functional control ends, and the point of interconnection with facilities controlled by IESO on the Canadian side of the interface.

Because it lacks the normal RTO authority over the PARs that comes with functional control, the Midwest ISO respectfully requests that the DOE clarify in its final order that the terms of Exhibit A are consistent with any permit limitations that may be

imposed in PP-230, and that the Midwest ISO may implement the Operating Instruction with IESO for the safe and reliable operation of the PARs, as set forth in Exhibit A.

2. Authority of the Midwest ISO as Reliability Coordinator

While the characteristics of an Alternating Current system are suitably accommodating to permit the flow of energy across the B3N circuit despite the legal lacuna, an equally significant difficulty arises from the statement in ITC's petition that the facilities will be operated to comply with the "directives of the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO"), the NERC-registered Reliability Coordinator *for the Interconnection Facilities*." ITC Request, p. 2 (emphasis added).

In a letter to the FERC dated August 26, 2004, ITC and the Midwest ISO informed the FERC that they had resolved their differences with regard to the ITC-IESO interface, in order to satisfy an outstanding NERC audit recommendation related to the 2003 Blackout. That letter stated that ITC "acknowledges the authority of the Midwest ISO, acting as the Reliability Coordinator for the International Transmission system, to direct any and all actions regarding the interface that are required or authorized by NERC Policy 9." Unfortunately, that letter predates the passage the Energy Policy Act of 2005, and the subsequent adoption of enforceable reliability standards, and it fails to allocate risks that may arise under the new penalty regime.

Under the Transmission Owners Agreement, consistent with Order No. 2000, the Midwest ISO is the Reliability Coordinator for those facilities, and only those facilities, transferred to its functional control: "The Midwest ISO is hereby designated and shall be

the Security Coordinator<sup>4</sup> of the Transmission System for the Owners.” TO Agreement, Appendix E, V.A.3. The term “Transmission System” is defined as the “transmission facilities of the Owners which are committed to the operation of the Midwest ISO by this Agreement.” Transmission Owners Agreement, Article One, I.M.

The Midwest ISO Tariff accommodates independent transmission system ownership through Appendix I. This arrangement permits an independent system owner, such as ITC, to retain certain authority for the operation and planning of its system that would normally be done by the RTO. Although ITC and the Midwest ISO entered into an Appendix I Agreement dated August 31, 2001, and that agreement was approved by FERC, the definitions and operative provisions of that agreement reach the same point—the Midwest ISO is the Reliability Coordinator only for those facilities which ITC has transferred to its functional control.

Schedule 2 of the Appendix I Agreement provides: “MISO is hereby designated and shall be the Security Coordinator for the International System.” The term “International System” is a defined term which “shall have the meaning set forth in Section 4.1.2 hereof.” Section 4.1.2 reads:

MISO shall promptly notify International in writing of the satisfaction of all applicable legal requirements necessary for MISO to assume functional control of the Facilities. On the fifth day following the date of such notice by MISO (the “Control Date”), *International will transfer and MISO shall assume functional control of the Facilities constituting the International transmission system (the “International System”)*, consistent with Article Two, Section X.B of the MISO Agreement. MISO will thereafter exercise such functional control over the Facilities and the International System consistent with its responsibilities under Article Three, Section I.A of the MISO Agreement.

Appendix I Agreement (emphasis added).

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<sup>4</sup> The term “Security Coordinator” was changed by the industry to “Reliability Coordinator” following the terrorist attacks of September 11, 2001 to avoid possible confusion with Homeland Security activities. The functions are the same.



Because ITC has not transferred functional control of the facilities that are the subject of this Presidential Permit, those facilities are not within the definition of the “International System” and there is no clear legal relationship between those facilities and the Midwest ISO. The 2004 joint letter to FERC states only that ITC will operate the PARS “to comply with” directives issued by the Reliability Coordinator. It does not address the legal status of those facilities or allocate liability for negligence.

In 2008 the Midwest ISO obtained FERC approval of Tariff amendments to permit it to act as the Reliability Coordinator for third party contract customers, subject to the terms and conditions set forth in the Midwest ISO Tariff—i.e., the same provisions governing liability, indemnity, force majeure and other provisions applicable to Transmission Owning members that have transferred functional control of their facilities. These Tariff provisions are essential to implement the FERC approved allocation of risk between the Midwest ISO and its Tariff customers.

The Midwest ISO respectfully requests that any amended permit issued in this docket include one of the following conditions: (1) that ITC transfer functional control of the interface facilities to the Midwest ISO, or (2) that ITC execute a Service Agreement KK-1 to provide for Reliability Coordination services on the same non-discriminatory terms and conditions applicable to all other facilities and customers of the Midwest ISO, or (3) that ITC agree in writing that the facilities governed by PP-230 are deemed to be a part of the “International System” (even though not transferred to the Midwest ISO’s functional control) and thus subject to the hold harmless, indemnity, and other provisions of the 2001 Appendix I Agreement between ITC and the Midwest ISO.



Of the three, the Midwest ISO respectfully requests the DOE to strongly consider the first. Transferring functional control of these international facilities, under the terms and conditions of the 2001 Appendix I Agreement, appears to be consistent with the agency's understanding of their status in the 2003 Order in Docket No. PP-230-3. It is consistent with current FERC policy that does not require FERC approval for such transfers; it clarifies the rights duties and obligations of the parties consistent with regard to Reliability Coordination; and it eliminates the legal gap between the US end of the B3N circuit, and their point of interconnection with the Canadian facilities of the IESO for the purpose of granting transmission service.<sup>5</sup>

The implementation of enforceable reliability standards and possible financial penalties has created significant risks for each owner, operator and user of the Bulk Electric System. Absent transfer of functional control, or application for service under Module F of the Tariff, or the protections of indemnity, there is no justification for ITC to unilaterally shift these risks to the Midwest ISO, effectively obtaining terms and conditions that are preferential.

#### **D. Conclusion**

The Midwest ISO strongly urges the DOE to approve the ITC request to amend PP-230 to permit the return to service of the B3N circuit and Phase Angle Regulators. The evolution of RTOs and the significant changes that have occurred in the industry in just the last few years have created areas of confusion regarding the operation of facilities

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<sup>5</sup> This also would eliminate a barrier to complying with Section 11.6 of the Appendix I Agreement. That section obligated Midwest ISO to develop a tariff proposal to compensate ITC for parallel flows on the interface. Because Midwest ISO's tariff authority extends only to facilities under its functional control, there was no practical way to establish standing at FERC to do so. The Midwest ISO agrees with the premise of Section 11.6 that some form of compensation would be appropriate, given the lack of incentive for IESO to join a congestion management process that would otherwise control these flows. *See Answer of the Midwest ISO to Comments of NEMA, FERC Docket No. ER08-1281-000, August 15, 2008.*

which are part of the Bulk Electric System, but which are also used to export electric energy across international borders. Because the trend following the adoption of enforceable reliability standards is to eliminate all grey areas with regard to the Bulk Electric System, the Midwest ISO respectfully requests the DOE to clarify in its final order the issues raised by the Midwest ISO in these comments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'G. Troxell', with a stylized, flowing script.

Gregory A. Troxell  
Assistant General Counsel  
Midwest Independent Transmission  
System Operator, Inc.  
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March 12, 2009

## **EXHIBIT A**

**3.0 MAXIMUM NET SCHEDULED INTERCHANGE**

- 3.1 The maximum Net Scheduled Interchange between the Midwest ISO and IESO on the Michigan-Ontario interface shall follow the NERC Reliability Standard INT-003, as amended.

**4.0 REACTIVE TRANSFER**

- 4.1 Reactive transfers on the Michigan-Ontario interface shall be arranged in accordance with instruction MISO-IESO-C03 Michigan-Ontario Interface Voltage Control Procedure.

**5.0 PRINCIPLES FOR UTILIZING THE PHASE ANGLE REGULATING TRANSFORMERS**

- 5.1 The following sets forth operating principles for the Phase Angle Regulator ("PAR") transformers installed as part of the Michigan-Ontario Interconnection Facilities. Phase Angle Regulators shall be operated primarily to control power flow circulating through the electrical systems of Ontario and Michigan while protecting respective Michigan and Ontario transmission facilities. Control strategies for the operation of such facilities shall recognize the following objectives, in descending order of priority:

- a) The resolution of declared emergency operating situations or conditions affecting Ontario or Michigan;
- b) The resolution of a declared emergency operating state, for an entity outside of Ontario or Michigan, that will result in the necessity of shedding firm customer load, in accordance with section 8.1. In these circumstances, the PARs may be adjusted to assist the affected system to the extent practical, without creating additional security violations. The PARs shall be considered as one of the control actions available to assist the affected system. The type of assistance shall be agreed upon by MISO and the IESO.
- c) When effective, relieve constraints within the MISO Transmission Owners' area of Michigan, or within Ontario.
- d) Facilitate scheduled transfers between the areas in which MISO and IESO operate, by operating the PARs such that the flow over the Michigan-Ontario interface matches, within practical considerations, the net scheduled interchange over the interface.

In applying each of the above principles, if there are conflicting requirements for adjusting the PAR tap positions, the request that directs the flow towards the net schedule shall take priority.

It is recognized that the above principles remain valid but will be difficult to achieve when an in-line PAR is out-of-service or by-passed.

- 5.2 In the day-ahead(s) or future operational planning time frame, forecasts of tie line flows shall account for any anticipated uncontrolled loop flows. The Parties agree to discuss day-ahead operations and share their assumptions when determining these expected flows.

In the operating day time frame, the markets shall be scheduled accounting for expected uncontrolled loop flows after full utilization of PARs control capability and implementation of TLR3a.

- 5.3** The parties that participate in and consent to the adjustments of the PARs are defined in Appendix B.

## **6.0 COMMUNICATIONS**

Communications will be via a telephone conference (“blast call”), as outlined in Appendix B, Table B.1. ITC, Midwest ISO, or IESO may initiate a blast call. Any party may initiate a call if flows are causing or are anticipated to cause a reliability or operational concern.

### **6.1 Real-Time Operations**

MISO and IESO shall mutually agree to operate the PARs in order to meet the Operating Principles contained in section 5.1. All parties identified in Appendix B will normally be included in these discussions.

### **6.2 Scheduling:**

The IESO and MISO shall jointly approve and confirm the MISO-IESO schedules (on the Michigan interface) prior to schedule implementation.

### **6.3 Setting Target Flow:**

All parties shall discuss and agree on target flow for the interface and the individual circuits (J5D, L4D, L51D, B3N). This will normally be done during a blast call at 15 minutes prior to the dispatch hour.

### **6.4 Third Party Communications:**

Interchange Distribution Calculator (IDC)

If the parties determine that PAR control is unavailable or ineffective, the IESO shall make the appropriate changes in the IDC.

Reliability Coordinator Information System (RCIS)

If the parties determine that PAR control is unavailable or ineffective, the IESO shall make the appropriate notifications via the RCIS.

## **7.0 NORMAL OPERATING STATE**

PAR changes shall normally occur once an hour based on a best estimate of the next hour target flows to meet the agreed upon schedule. There should be no consideration of a dead band when determining target flows.

Under normal operating conditions, intra hour changes to target flows will not be implemented. Intra hour changes will normally only be implemented to achieve the principles identified in section 5.1 (a), 5.1 (b), or 5.1 (c).

To the extent possible given equipment or other limitations, and consistent with the principles outlined in Section 5.1, the PARs shall be adjusted coincident with the normal interchange schedule ramping period (i.e. 5 minutes prior to the hour to 5 minutes after the hour).

## **7.1 Scheduling**

Consistent with Section 5.1, the interface capability should normally assume flow equals schedule. During periods when the ability to fully control the interface flow is unavailable (either due to equipment outages or circulation in excess of the ability of the PARs to control) the interface flow should be managed to maximise the transfer capability, provided there is no adverse impact on Interconnection reliability.

Normal scheduling limits will reflect all known restrictions, outages or deratings to equipment that form part of the interconnection as per operating agreements. Normal scheduling limits include an allowance for normal variations in flow.

## **7.2 IDC/RCIS Inputs**

The IDC flag for the control of the Michigan-Ontario interface should be set to reflect the ability of the PARs to control actual flow to scheduled flow. The flag should be set to non-regulating whenever the expected capability of the PARs to do so is in excess of 200 MW.

Whenever possible, this flag should be set in sufficient time to allow other RCs to understand the impact of the PARs and incorporate those impacts on their operation (i.e. TLRs).

Whenever the flag is changed in IDC, an RCIS message should be sent using the free form section to advise the Eastern Interconnection RCs of the change in control of the Michigan-Ontario PARs.

## **8.0 ABNORMAL OPERATING STATE**

For the purposes of this instruction an abnormal operating state is considered to exist when the conditions identified in Section 5.1 (a), 5.1 (b), or 5.1 (c) exist or are expected to exist.

### **8.1 PAR Operations**

The PARs should be adjusted to assist in relieving IROL/SOL violations, including moving away from scheduled flows if such action contributes to relieving the IROL/SOL violations.

If and when sufficient relief has been effected, or when the limit violation has been corrected such that off-schedule PAR operation is no longer required, the PARs shall be re-adjusted such that the flow of energy over the Michigan-Ontario interface matches, within practical considerations, the net scheduled interchange over the interface.

It is acceptable to change the target flow on a single line to address an IROL/SOL violation (i.e. tap J5D) without moving the remaining PARs.

The PARs may be operated to assist an entity outside of Michigan and Ontario to avoid shedding firm load, under the following conditions:

1. The entity has taken all mitigating steps up to, but not including, shedding of firm load.

2. PAR operation being considered to assist another entity will not result in firm load shedding in Michigan or Ontario,
3. The entity makes every available effort following the implementation of the PAR operation modification to quickly restore their system to a position such that normal flow to schedule PAR operation has resumed.

## **9.0 DISPUTE RESOLUTION – REAL-TIME OPERATIONS**

The Parties agree to make reasonable attempts to accommodate requested tap changes, consistent with the Operating Principles outlined in 5.1. In the event that parties are unable to agree on an appropriate action in real-time, shift staff should not spend an inordinate amount of time discussing conflicts.

In the event of a disagreement, the tap position that would result in a flow equal to schedule should be the default position, unless this will cause a reliability concern. On-shift staff should make reasonable attempts to accommodate requested tap changes unless the proposed action will cause undue equipment or safety concerns.

The dispute will be reviewed by the management of parties during the next business day. If necessary, changes will be implemented to mitigate future similar disputes.

## **10.0 TERMINATION, REPLACEMENT OR REVISION OF OPERATING INSTRUCTION**

This Operating Instruction shall remain in full force for the period as specified above unless terminated in advance by mutual agreement of the Parties or cancelled by either Party by sending a 30-day prior written notice to the other Party.



Approved by the Coordination Committee:



Dated: \_\_\_\_\_



Dated: \_\_\_\_\_

**APPENDIX A:**

DRAFT

**Communications and Operating Procedures****Table B.1:**

<b>Initiator (tap change):</b>	<b>IESO</b>	<b>MISO</b>	<b>ITC - TO</b>
<b>Originating entity contacts (single call):</b>	MISO ITC-TO ITC-BA (MECS) HONI	IESO ITC-TO ITC-BA (MECS) HONI	IESO MISO ITC-BA (MECS) HONI

**Contact Information:**

IESO                      - Markets (Schedules)  
                               - System (Reliability)

MISO                     - Reliability

ITC-TO                  - Senior Transmission System Coordinator

ITC-BA (MECS)        - Senior BA Controller

Hydro One Networks - Sector 1 Controller

**Day-Ahead Planning/Scheduling (not included in Real-Time Blast Call):**

IESO                     -Market Forecasts & Integration

MISO                    -Operations Engineering  
                               - Scheduling