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May 11, 2012

By Electronic Filing

Hon. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Subject: Midwest Independent Transmission System Operator, Inc. and
International Transmission Company d/b/a ITCTransmission, Docket
No. ER11-1844-000, PUBLIC Version of Testimony of New York
Independent System Operator, Inc. Witness Robert Pike**

Dear Ms. Bose:

The New York Independent System Operator, Inc. submits by electronic filing the **PUBLIC** version of the attached Prepared Direct and Answering Testimony of Robert Pike (Exhibit NYI-46 for identification), with verification.

The testimony has been served on all parties as required by Rule 2010 of the Commission's Rules of Practice and Procedure. In addition, two three-hole punched chambers copies are being provided to Presiding Administrative Law Judge Steven Sterner, along with a summary of the testimony.

Very truly yours,

/s/ Howard H. Shafferman

Howard H. Shafferman

Cc: Parties of Record
Vintricia Alexander. (Law Clerk to Judge Sterner)

HHS/

DMEAST #15031604 v1

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-46

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Midwest Independent Transmission System
Operator, Inc. and
International Transmission Company d/b/a
*ITCTransmission***

Docket No. ER11-1844-000

SUMMARY OF TESTIMONY OF ROBERT PIKE (EXHIBIT NYI-46)

Mr. Pike is Director of Market Design for the New York Independent System Operator, Inc. (“NYISO”).

By submitting testimony addressing the merits of the MISO/ITC filing, the NYISO is not conceding that the Commission has legal authority under the Federal Power Act to accept the MISO/ITC filing, that the Commission has made the findings necessary to permit the NYISO to recover PAR-related charges it receives from MISO from the NYISO’s customers, or that the collection of any or all the proposed charges – under any circumstance – is just and reasonable and not unduly discriminatory or preferential.

In Section III of his testimony, Mr. Pike reviews the history and purposes of the phase angle regulators (“PARs”) at the Michigan-Ontario interface (the “MI/ON Interface”) (page 3, line 3 through page 11, line 22). Based on testimony from witnesses of the Midwest Independent Transmission System Operator, Inc. (“MISO”) and the International Transmission Company (“ITC”), and MISO and ITC responses to data requests, he explains that Detroit Edison placed a PAR into service on the B3N circuit (one of the four transmission circuits constituting the MI/ON Interface) in 2002 that failed in 2003 after being transferred to ITC ownership (the

“Original PAR”), and that ITC installed two PARs on the B3N circuit as replacements for the Original PAR (the “Replacement PARs”) (page 3, lines 5 through 18).

In 1998, Detroit Edison, Ontario Hydro (the pertinent part of which is now Hydro One Networks Inc.) and Consumers Energy Company entered into an Interconnection Facilities Expansion Agreement (the “1998 Facilities Agreement”) whereby Detroit Edison agreed to install and operate the Original PAR, and Ontario Hydro agreed to install and operate a PAR on the Ontario side of each of the other three MI/ON Interface circuits (the “Hydro One PARs”). (page 3, line 20 through page 4, line 15). In 2007, ITC and Hydro One entered into a new Interconnection Facilities Agreement (the “2007 Facilities Agreement”), under which ITC (due to the failure of the Original PAR) agreed to install one or more PARs on the B3N circuit (*i.e.*, the Replacement PARs).¹ The proposed allocation of the costs of the Replacement PARs to NYISO and PJM customers is at issue in this proceeding (page 4, line 17 through page 5, line 5).

In Section III, Mr. Pike identifies evidence demonstrating that the Replacement PARs perform the same function as the Original PAR (page 5, line 7 through page 7, line 26). He also presents documentation, including regulatory filings, confirming that the purpose of the MI/ON PARs is to facilitate economic trades between Ontario and Michigan, in part through the avoidance of curtailment of Ontario-Michigan transactions via Transmission Loading Relief (“TLR”)² (page 7, line 13 through page 9, line 28). Mr. Pike presents data confirming that TLRs of transactions at the MI/ON Interface remain an obstacle to commerce between the regions of MISO and the Independent Electricity System Operator (Ontario) (“IESO”) today. Reducing the number of TLRs affecting External Transactions at the MI/ON Interface will provide benefits

¹ The Replacement PARs and the Hydro One PARs are referred to collectively in NYISO testimony as the “MI/ON PARs.”

² TLR and its impacts are explained in Mr. Yeoman’s testimony.

to MISO, IESO and their customers that are not provided to NYISO and its customers. (page 10, line 2 through page 11, line 5). Mr. Pike presents information indicating that the MI/ON PARs provide reliability benefits to ITC and its customers and maintains import capability for transactions beneficial to ITC customers. Mr. Pike concludes that the Replacement PARs were built for the benefit of ITC's customers (page 11, lines 7 through 22).

In Section IV of his testimony, Mr. Pike rebuts assertions by MISO/ITC that the MI/ON PARs provide "benefits" to NYISO based on statements made by the NYISO in its July 21, 2008 "exigent circumstances" filing in Docket No. ER08-1281, in which the NYISO proposed tariff changes (subsequently accepted by the Commission and still in place) to prohibit "circuitous" scheduling of external transactions in the control areas around Lake Erie (page 12, line 1 through page 23, line 19). As Mr. Pike explains, the MI/ON PARs were not operated to mitigate that circuitous scheduling problem and would not have been capable of fully "solving" the loop flow problems experienced due to circuitous schedules (page 13, line 10 through page 14, line 14). Instead, the problem was addressed by the NYISO's Tariff revisions (page 13, lines 1 through 8).

In Section IV, Mr. Pike also reviews the market rules identified in the "Broader Regional Markets" ("BRM") initiatives which began in 2008, and in which NYISO, IESO, MISO, PJM, ISO New England and Hydro-Québec are participating. The BRM initiative is an effort to improve coordination between the markets, enhance utilization of existing resources and reduce costs of power consumers. Mr. Pike explains how the new rules that the ISOs and RTOs are developing will tend to reduce Lake Erie unscheduled power flow or permit the ISOs and RTOs to mitigate the impacts on unscheduled Lake Erie power flows at a lower overall cost (page 15, line 3 through page 18, line 22).

In Section IV, Mr. Pike also explains that the allegation in the MISO/ITC filing letter, premised on a study prepared by Potomac Economics, that “congestion relief savings could be approximately \$362 million annually from market mechanisms to control Lake Erie loop flow, over half of which would accrued to the NYISO Region” is patently inaccurate (page 19, line 2 through page 21, line 16). Potomac Economics’ analysis was not a measure of congestion cost impacts impact incurred from historic loop flow, nor was the analysis a measure of what savings would accrue if loop flow were to be eliminated. Rather, Potomac Economics’ analysis was a measure of production cost benefits associated with regional coordination of scheduling actions (page 19, lines 13 through 18). The vast bulk (>85%) of the region-wide savings identified by Potomac Economics are related to improving the economic efficiency of interchange scheduling decisions to ensure that power is transported from the low-cost region to the high-cost region to maximize the utilization of the transmission system, not to removing unscheduled power flows from the interconnected transmission system. The MI/ON PARs do not impact the efficiency measures that Potomac’s study was assessing (page 20, lines 2 through 19). Potomac Economic’s analysis suggests that perfect control of Lake Erie loop flow could deliver a net \$1 million in flowgate value relief to New York, but less than perfect control of Lake Erie unscheduled power flow could actually result in a net detrimental impact to total NYISO congestion costs (page 20, line 21 through page 21, line 16).

In Section IV, Mr. Pike also describes the limited circumstances in which effective, coordinated operation of *all* of the MI/ON PARs *may* benefit New York, namely when (a) the MI/ON PARs are operated to reduce clockwise loop flows, and (b) components of the New York State Transmission System that are substantially affected by unscheduled Lake Erie power flows are constrained (page 21, line 18 through page 22, line 13). New York may be “harmed,”

however, if/when (x) the MI/ON PARs are operated to reduce counterclockwise loop flows, and (y) components of the New York State Transmission System that are substantially affected by unscheduled Lake Erie power flows are constrained (page 22, lines 13 through 16). If the MI/ON PARs are not successfully operated to conform actual power flows to scheduled power flows, but are still declared to be “regulating” for purposes of the NERC Interchange Distribution Calculator (“IDC”), New York may be harmed because it may not be able to use TLR to obtain relief from unscheduled Lake Erie power flows³ (page 23, lines 4 through 9). New York may also be harmed if MISO and IESO do not accurately anticipate power flows and move the MI/ON PARs in a direction that exacerbates unscheduled flows, or if the MI/ON PARs are operated in a manner that regularly causes unscheduled power flows over the New York State Transmission System (page 23, lines 11 through 19).

In Section V of his testimony, Mr. Pike explains the practical significance of the MISO’s March 23, 2012 announcement relating to the initiation of service over the Replacement PARs despite the outage – which continues to the present – of one of the Hydro One PARs (L4D) (page 24, line 1 through page 25, line 15). Specifically, MISO’s announcement that it did not intend to change, on April 5, 2012 (the date on which it initiated Replacement PARs’ operation) the methodology for pricing transactions scheduled across the MI/ON Interface amounts to an admission that MISO does not expect the MI/ON PARs to be able to effectively conform actual power flows to scheduled power flows at the MI/ON Interface without the L4D PAR in service (page 24, line 8 through page 25, line 15).

³ See testimony of NYISO witness Yeomans for additional discussion of TLRs and the IDC.

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Midwest Independent Transmission System
Operator, Inc. and
International Transmission Company d/b/a
ITCTransmission**

Docket No. ER11-1844-000

TESTIMONY OF ROBERT PIKE

I. SUMMARY OF TESTIMONY

A summary precedes my testimony.

II. WITNESS IDENTITY AND QUALIFICATIONS

Q. Please state your name, title and business address.

A. My name is Robert Pike. I am the Director of Market Design for the New York Independent System Operator, Inc. ("NYISO"). My business address is 10 Krey Boulevard, Rensselaer, New York 12144.

Q. Please describe your educational background and work experience.

A. I hold a Bachelor of Science in Electrical and Computer Engineering and Master of Science in Electrical Engineering from Clarkson University and a Master of Business Administration from Union College. I have worked for the NYISO and its predecessor organization, the New York Power Pool, for nearly twenty years. During that time I have held positions in Engineering, Operations, Information Technology and Project and Product Management. For the last 15 years, I have been

1 involved in the design and implementation of electric markets at the NYISO. My
2 current responsibilities include the evaluation and evolution of the capacity, energy
3 and congestion rights markets to achieve improved efficiencies, incorporate desired
4 market features, and address regulatory obligations.

5
6 **Q. What topics do you address in your testimony?**

7 A. My direct testimony addresses:

8 (i) the history and purposes of the phase angle regulators (“PARs”) at the Michigan-
9 Ontario interface (“MI/ON Interface”) (see page 3);

10 (ii) the assertions by the Midwest Independent Transmission System Operator, Inc.
11 (“MISO”) and the International Transmission Company (“ITC”) of “benefits” to
12 NYISO from operation of the PARs whose cost allocation is at issue in this
13 proceeding (the “Replacement PARs”) (see page 12); and

14 (iii) the operation of the Replacement PARs despite the outage of one of the three
15 PARs on the Canadian side of the MI/ON Interface (see page 24).

16
17 **Q. In what context are you addressing these topics?**

18 A. By submitting testimony addressing the merits of the MISO/ITC filing, the NYISO is
19 not conceding that the Commission has legal authority under the Federal Power Act
20 to accept the MISO/ITC filing, that the Commission has made the findings necessary
21 to permit the NYISO to recover PAR-related charges it receives from MISO from the
22 NYISO’s customers, or that the collection of any or all the proposed charges – under
23 any circumstance – is just and reasonable and not unduly discriminatory or

1 preferential.

2
3 **III. HISTORY AND PURPOSES OF THE PARs AT THE MICHIGAN-ONTARIO**
4 **INTERFACE**

5 **Q. Please provide an introduction to the history of the PARs at the MI/ON**
6 **Interface and, in particular, to the PAR on the B3N circuit at the MI/ON**
7 **Interface that was placed into service by Detroit Edison in 2002 and that failed**
8 **in 2003 while under ITC ownership (the “Original PAR”).**

9 A. Based on my review of the testimony of ITC and MISO witnesses, including the
10 testimony of Carlo P. Capra, Jeff Webb and Thomas Mallinger (all submitted on
11 October 20, 2010 in this proceeding) and of Digaunto Chatterjee (submitted on
12 January 31, 2012 in this proceeding), and my review of ITC’s responses to data
13 requests, the Original PAR was installed by Detroit Edison (through its then-
14 subsidiary, ITC) and made operational in 2002 pursuant to plans that were developed
15 in 1998 between Detroit Edison and Ontario Hydro to conform actual flows to
16 scheduled flows across the MI/ON Interface. *See* Capra testimony at 6. The
17 Original PAR was then transferred to ITC as a standalone entity. The Original PAR
18 failed in March 2003. *See* Exhibit NYI-47.

19
20 **Q. Did Detroit Edison enter into an agreement with Ontario Hydro to construct**
21 **the MI/ON PARs in 1998?**

22 A. Yes. In Section 3.2 of the *Interconnection Facilities Expansion Agreement* entered
23 into among Ontario Hydro, Detroit Edison and Consumers Energy Company on
24 December 21, 1998 (the “1998 Facilities Agreement”) (Exhibit NYI-48), Detroit
25 Edison agreed, at its own expense, to “purchase, install, activate and make

1 operational a 230 kV Phase-Shifting 645 MVA Transformer and associated bypass
2 switching facilities in the B3N interconnection terminal at its Bunce Creek Station”
3 (*i.e.*, the Original PAR). In Section 3.1 of the 1998 Facilities Agreement (Exhibit
4 NYI-48), Ontario Hydro (now Hydro One) committed to install and operate three
5 PARs on the Ontario side of the MI/ON Interface. I refer to these three PARs in my
6 testimony as the “Hydro One PARs.” There are four transmission lines at the
7 MI/ON Interface that interconnect Michigan and Ontario. Each of the Hydro One
8 PARs is associated with a distinct transmission line, so three of the four transmission
9 lines at the MI/ON Interface are associated with Hydro One PARs.

10
11 Section 3.7 of the 1998 Facilities Agreement (Exhibit NYI-48) states, “Hydro and
12 Edison shall each be responsible for the performance of operation and maintenance,
13 extraordinary maintenance and repair, which can include replacement, of the New
14 Equipment and New Facilities [defined to include the Original PAR] which are
15 owned by them, including all costs associated therewith.”

16
17 **Q. Did ITC enter into an agreement with Hydro One Networks Inc. (“Hydro One”)**
18 **to construct two PARs on the B3N circuit as replacements for the Original PAR**
19 **(the “Replacement PARs”) in 2007?**

20 A. Yes. On September 20, 2007, ITC entered into the “Interconnection Facilities
21 Agreement Between Hydro One Networks Inc. and ITC *Transmission* Company” (the
22 “2007 Facilities Agreement”), which is included as Exhibit NYI-49 to my testimony.
23 Section 10.3 of the 2007 Facilities Agreement states, “[d]ue to the failure of the
24 Phase Angle Regulator referenced in Subsection 10.2(a) above [*i.e.*, the Original

1 PAR], ITC agrees to install one or more Phase Angle Regulators with a combined
2 total capacity of at least 645 MVA in the B3N Interconnection terminal at its Bunce
3 Creek Station.” ITC decided to install two Replacement PARs at Bunce Creek to
4 replace the Original PAR. The proposed allocation of the costs of the Replacement
5 PARs to NYISO and PJM customers is at issue in this proceeding.
6

7 **Q. Do the Replacement PARs perform the same function as the Original PAR did?**

8 A. MISO and ITC have stated that the Replacement PARs are replacements for the
9 Original PAR and perform the same functions that the Original PAR was expected to
10 perform.
11

12 On page 25 of his testimony, MISO witness Chatterjee states that the Replacement
13 PARs (which he refers to as the “New PARs”) are “replacements” for the Original
14 PAR. Further, as an attachment to MISO’s response to NYISO/MISO 1-7, MISO
15 provided an excerpt from the “MTEP 06 Midwest ISO Transmission Expansion
16 Plan” (“MTEP 06”) which describes Project ID No. 1308 as one that, among other
17 things, “replaces the failed Phase Angle Regulator with 2 new PAR’s in series.” (see
18 pages 11 and 19 of Exhibit NYI-50). The same description is used in Appendix A to
19 MTEP 06 (see page 7 of Exhibit NYI-51), provided as a separate attachment to
20 MISO’s response to NYISO/MISO 1-7. Also, in its response to data request to
21 NYISO/MISO 3-8 (Exhibit NYI-52), MISO also answered “In general, yes” to the
22 NYISO’s question about whether the Replacement PARs were designed and

1 constructed to perform the same function as the Original PAR was designed and
2 constructed to perform.

3
4 ITC witness Capra states in his testimony (at 9) that “[t]he design of the New PARs
5 will maintain the interface control capability and functionality of the original
6 design.”

REDACTED

7 **REDACTED** ITC’s response to
8 NYISO/ITC 1-14 (Exhibit NYI-54 hereto) states, with reference to the Replacement
9 PAR project’s approval in MTEP 06, that: “The project was approved as a like for
10 like replacement and thus was not eligible for cost sharing within MISO under MISO
11 tariff Attachment FF.” This is consistent with the statements of ITC in its January 5,
12 2009 application to the United States Department of Energy (“DOE”) to amend its
13 Presidential Permit in DOE Docket No. PP230-4 (Exhibit NYI-55 at 1), in which
14 ITC requested “authorization to replace the [Original PAR] with two 700 MVA
15 phase shifting transformers connected in series.” In the application (at 5), ITC cited
16 the then-existing permit as stating that the Original PAR’s purpose was “to help
17 provide ‘enhanced control over the inadvertent power flow between Michigan and
18 Ontario and, by extension, around Lake Erie’ ..., so that ‘under normal operating
19 conditions ... the electrical flow on the Michigan-Ontario interface will match the
20 Michigan-Ontario scheduled transactions across the interface.’” Further, the
21 application states (at 5-6) that:

22 “[i]n recognition of the failure of the original transformer ... ITC chose a
23 differently designed unit and decided to replace the single failed unit with

1 two 700-MVA units connected in series.... Since the two new transformers
2 will nominally have 15 degrees more shifting capability than the failed
3 transformer, they should be capable of providing some increased amount of
4 control over unscheduled electrical flows when necessary. **However, the**
5 **intended function of the new units will be the same as the original unit**
6 **was authorized to provide in 2001 -- to control unscheduled flows so that**
7 **actual flow matches scheduled flow, to the maximum extent possible. In**
8 **that sense, therefore, the new units should perhaps best be viewed as**
9 **replacement facilities providing an already authorized service, rather**
10 **than as new facilities providing a new service.”**

11 The emphasis is mine.

12
13 **Q. Why did Detroit Edison and Ontario Hydro agree to construct the MI/ON**
14 **PARs?**

15 A. Schedule “A” to the 1998 Facilities Agreement, titled “Basic Principles of Ontario-
16 Michigan Phase Shifter Operation,” states (at page 1 of Exhibit NYI-48) that Ontario
17 Hydro and Detroit Edison “intend to improve reliability of bulk power supply by
18 adding and modifying facilities ... to control circulating power flows that would
19 otherwise interfere with the ability to carry out scheduled transactions” and that the
20 PARs would be “operated primarily to control power flow circulating through the
21 electrical systems of the parties in order to protect the parties’ respective
22 transmission facilities and to facilitate transactions between and among the parties.”

23
24 Carlo Capra’s testimony (at 4-5) recognizes that removal of obstacles to Ontario-
25 Michigan trading was the fundamental reason that Ontario Hydro (“OH”) (the
26 predecessor to Hydro One) and Detroit Edison (formerly the parent of ITC) decided
27 to install the Hydro One PARs and the Original PAR on the B3N circuit. Mr.
28 Capra’s testimony states “the fundamental purpose of the joint Detroit Edison

1 Company and Ontario Hydro proposal to add additional PARs on the
2 interconnections between what was then the Detroit Edison Company and Ontario
3 Hydro was to improve the reliability of the bulk power system by controlling
4 circulating loop flows around Lake Erie that would otherwise interfere with the
5 ability to carry out scheduled transactions.”

6
7 Page 6 of Mr. Capra’s testimony quotes from Detroit Edison’s request to the
8 Department of Energy for permission to construct the Original PAR and other
9 facilities at the MI/ON Interface. The application explains that in 1998 over 8,500
10 MW of transactions scheduled between Ontario Hydro and utilities in Michigan were
11 curtailed via Transmission Loading Relief (“TLR”). TLR and its impacts are
12 explained in the testimony of NYISO witness Wesley Yeomans’ (Exhibit NYI-1).

13
14 **Q. Do other documents confirm that the purpose of the MI/ON PARs is to facilitate**
15 **economic trades between Ontario and Michigan?**

16 A. Yes. Documents produced by Detroit Edison in this proceeding similarly show that
17 the purpose of the MI/ON PARs is to facilitate trading between Detroit Edison and
18 Ontario across the MI/ON Interface. Exhibit NYI-56 is a November 12, 1998
19 internal Detroit Edison memorandum that describes the Original PAR (at 1) as part
20 of a project that is the “solution” to an increase in Lake Erie loop flow that “has
21 reduced our ability to import power from Ontario Hydro....This project provides
22 both a benefit in importing more power from OH through increased capacity and by
23 blocking the loop flow and the additional benefit of obtaining more import capability

1 on either the [MI/ON] or Southern Interface, therefore, providing operating
2 flexibility.”

3
4 **Q. Do ITC and Detroit Edison regulatory filings confirm that the purpose of the**
5 **MI/ON PARs is to facilitate economic trades between Ontario and Michigan?**

6 Yes. The construction of the MI/ON PARs to enhance Michigan power supply
7 through increased transactions with Ontario is verified through ITC’s offering of the
8 Original PAR, in the portion submitted by ITC (at that time, a subsidiary of Detroit
9 Edison) of a December 2000 “Joint Report” to the Michigan Public Service
10 Commission (“MPSC”) in Case No. U-12781. The purpose of the Joint Report, filed
11 by several Michigan utilities, was to describe how the utilities would satisfy the
12 requirements of a 2000 Michigan law to increase import capability from Ontario by
13 2000 MW. The brief of Detroit Edison in Case Nos. U-12780 and U-12781 (at page
14 12 of Exhibit NYI-57) states that among the seven (7) projects identified by ITC in
15 the Joint Report was the addition of “a 675 MVA Phase Angle Regulator in the B3N
16 interconnection with Hydro One [*i.e.*, the Original PAR].” In the Joint Report (at
17 page 8 of Exhibit NYI-58), ITC stated that it had installed the Original PAR, which,

18 operating in concert with similar phase angle regulators added by Hydro One
19 in the L4D and L51D interconnections, as well as the existing phase angle
20 regulator in the J5D interconnection, enables the control of 600-700 MW of
21 parallel path flow north of Lake Erie (Lake Erie circulation). As this
22 circulating power was using a significant portion of the International
23 Transmission Company-Ontario interface, the control of 600-700 MW of
24 circulating power translates into an increase in the firm commercial
25 capability of that interface. **In total, the Hydro One to [Michigan] path**
26 **will realize an increase of 820 MW of firm commercial capability from**
27 **2000 to 2002.**

28 The emphasis is mine.

1

2 **Q. To what extent do TLRs of transactions at the MI/ON Interface remain an**
3 **obstacle to commerce between MISO and IESO today?**

4 A. The NYISO obtained from Open Access Technology International, Inc. (“OATI”) a
5 list of all transactions scheduled over the MI/ON Interface that were curtailed via
6 TLR between January 1, 2009 and December 31, 2011. Over that time period, 2213
7 transactions that were scheduled over the MI/ON Interface between Ontario and
8 MISO were curtailed or removed via TLR actions. Those transactions represented
9 more than 246,375 MW of scheduled interchange between Ontario and Michigan
10 that was prevented or interrupted via TLR. See Exhibit NYI-59. TLR actions
11 continue to disrupt transactions scheduled between MISO and the Independent
12 Electricity System Operator of Ontario (“IESO”).

13

14 **Q. Does the reduction of TLRs at the MI/ON Interface provide similar benefits to**
15 **New York?**

16 A. No. Based upon a review of transaction schedule data stored in the NYISO’s Market
17 Information System (“MIS”), for the calendar year 2011, approximately four-tenths
18 of one percent of the NYISO’s total real-time scheduled interchange had a source
19 from, or sink in, MISO. The NYISO implemented schedules for 169,460¹ MWh of
20 MISO-based transactions, out of a total volume of 38,558,805 MWh of all
21 transactions scheduled at its borders. These are the only transactions that would be
22 likely to be scheduled across the MI/ON Interface. A portion of the NYISO/MISO

¹ This information was derived from the NERC e-Tag data recorded for these transactions. The same information should be available from data repositories to which other ISOs/RTOs have access.

1 interchange is scheduled through PJM Interconnection, LLC's ("PJM's") Balancing
2 Authority Area, not over the MI/ON Interface, so the component of NYISO
3 interchange that is scheduled over the MI/ON Interface is a small fraction of one
4 percent of the NYISO's scheduled interchange with its neighbors. The potential
5 economic harm to NYISO from TLRs at the MI/ON Interface is negligible.
6

7 **Q. What other reliability benefits do the MI/ON PARs provide to ITC and its**
8 **customers?**

9 A.

10
11 **REDACTED**
12
13

14 MTEP06 also notes (at page 19 of Exhibit NYI-50) that the Replacement PAR will
15 "increase both MVA capability and phase angle control."
16

17 **Q. Given this information, what do you conclude about the motivations for the**
18 **Replacement PARs?**

19 A. ITC and its predecessor Detroit Edison entered into agreements with Hydro One to
20 construct the MI/ON PARs in order to maintain import capability for transactions
21 beneficial to ITC customers, and to improve the reliability of the ITC system. The
22 Replacement PARs were built for the benefit of ITC's customers.
23

1 **IV. MISO/ITC's ASSERTIONS OF "BENEFITS" TO NYISO AND ITS**
2 **CUSTOMERS**

3 **Q. What does the MISO/ITC Filing utilize as the basis for asserting benefits from**
4 **the Replacement PARs to the NYISO and its customers?**

5 A. MISO and ITC's October 20, 2010 filing letter in this docket asserts (at 3), in
6 connection with the NYISO's July 21, 2008 exigent circumstances filing in Docket
7 No. ER08-1281, that the NYISO "urged the Commission to take an active interest
8 'so that the [New] PARs are placed in operation and are operated to mitigate Lake
9 Erie circulation as soon as possible.'" The MISO/ITC filing letter (at 3-4) also
10 references statements in the NYISO's exigent circumstances filing suggesting that
11 the operation of all of the MI/ON Interface to effectively conform actual power flows
12 to scheduled power flows would be an important component of the solution to Lake
13 Erie unscheduled power flows. *See also* NYISO's July 21, 2008 exigent
14 circumstances filing at p 8 (and n26), 26-27 (Exhibit NYI-61 at 2, 3-4)

15
16 **Q. What unusual conditions were being experienced in the New York Control Area**
17 **("NYCA") in early- to mid-2008, prior to the NYISO's submission of its exigent**
18 **circumstances filing in Commission docket ER08-1281?**

19 A. In 2008, the NYCA was experiencing large deviations between scheduled power
20 flows and actual power flows. The cause of the problem was a seam (gap) in market
21 rules between neighboring ISOs and RTOs, of which market participants were taking
22 advantage by scheduling External Transactions (imports, exports and wheels-
23 through) in the Control Areas around Lake Erie via "circuitous" (indirect) scheduling
24 paths.

25

1 **Q. What measures did the NYISO take to address these problems?**

2 A. On July 21, 2008, the NYISO made its exigent circumstances filing proposing
3 changes to its tariffs to prevent circuitous scheduling of External Transactions in the
4 Control Areas around Lake Erie. The Commission accepted the NYISO's proposed
5 tariff changes for filing on an expedited basis and they took effect on July 22, 2008,
6 one day after the NYISO submitted its filing. The NYISO's tariff changes were later
7 accepted for filing by the Commission on a more permanent basis in an order issued
8 on November 17, 2008 in Docket No. ER09-198.

9

10 **Q. Were the MI/ON PARs used to mitigate the unscheduled power flows that the**
11 **NYISO experienced in 2008?**

12 A. No. There was no attempt made to operate any of the MI/ON PARs to mitigate the
13 circuitous scheduling problem that occurred in early- to mid-2008. The tariff
14 solution that the NYISO developed was the *only* new solution implemented in 2008
15 to address the circuitous scheduling problem. The tariff solution that the NYISO
16 implemented in 2008 effectively limits circuitous scheduling and is still in place
17 today. Had the NYISO chosen to wait for the MI/ON PARs to solve the problem,
18 the NYISO would still be waiting for an effective solution to be implemented.

19

20 **Q. If the Replacement PARs and the Hydro One PARs had all been available,**
21 **would they have been capable of addressed the conditions experienced in 2008?**

22 A. No, they would not have been capable of fully "solving" the loop flow problems that
23 Control Areas around Lake Erie were experiencing due to the circuitous schedules.
24 MISO and ITC have indicated (at page 6 of the filing letter) that the PARs can

1 control up to 600 MW of loop flow. As shown in the data, available on the NYISO's
2 website,

3 [http://www.nyiso.com/public/webdocs/documents/regulatory/filings/2011/02/Attach](http://www.nyiso.com/public/webdocs/documents/regulatory/filings/2011/02/Attachment_II_MMASStudy2008.xls)
4 [ment_II_MMASStudy2008.xls](http://www.nyiso.com/public/webdocs/documents/regulatory/filings/2011/02/Attachment_II_MMASStudy2008.xls) , during the circuitous scheduling period, unscheduled

5 power flows exceeded 1000 MWs, even 2000 MWs, at times in both the clockwise
6 and counter-clockwise directions around Lake Erie. Clockwise unscheduled power
7 flows were between 1000 MWs and 2000MWs in 684 hours from December 29,
8 2007 to May 31, 2008, and exceeded 2000 MWs in 48 hours during May 2008.

9 Counter-clockwise unscheduled power flows were between 1000 MWs and
10 2000MWs in 774 hours from October 1, 2007 to April 4, 2008, and exceeded 2000
11 MWs in 21 hours during December 2007. In addition, on 81 days between October
12 1, 2007 and May 31, 2008, unscheduled power flows changed by more than 1000
13 MWs and flowed in both the clockwise and counter-clockwise directions around
14 Lake Erie.

15
16 **Q. Have the conditions in which the NYISO made the statements cited by**
17 **MISO/ITC persisted?**

18 A. No. The circuitous scheduling prohibitions have proven sufficient – in conjunction
19 with the occasional use of TLR procedures – to prevent/remediate extreme Lake Erie
20 loop flow impacts on the NYCA. Since 2008, the NYISO, PJM, IESO and MISO
21 and others have been working together to develop more consistent market rules in
22 order to remove the incentive for market participants to engage in circuitous
23 scheduling, or similar practices that are designed to take advantage of seams between

1 the market rules implemented by the ISOs and RTOs around Lake Erie.

2

3 **Q. What are some of the new market rules identified in the Broader Regional**
4 **Market initiative that the ISOs and RTOs have developed since 2008? How will**
5 **the new rules tend to reduce Lake Erie unscheduled power flow or permit the**
6 **ISOs and RTOs to mitigate the impacts of unscheduled Lake Erie power flows**
7 **at a lower overall cost?**

8 A. The Broader Regional Markets (“BRM”) initiative is an effort to improve
9 coordination between the markets, enhance utilization of existing resources, and
10 reduce costs for power consumers. In addition to the NYISO, the regional initiative
11 involves IESO, MISO, PJM, ISO New England, and Hydro-Québec. The market
12 enhancements are provided by a number of different improvements.

13

14 Market-to-Market Coordination (“M2M”) increases the level of collaboration
15 between ISOs and RTOs to jointly address transmission constraints using the most
16 cost-effective generation in the participating ISOs/RTOs. Enhanced Interregional
17 Transaction Coordination (“EITC”) reduces the need to use more expensive local
18 power if less costly power is available from a neighboring grid operator, shortens the
19 time commitment for moving power between Balancing Authorities and enables
20 faster responses to changing conditions. Interface Pricing establishes efficient and
21 compatible interface proxy bus prices to better reflect the value of moving energy
22 between regions. I discuss each of these below. One of the originally identified
23 BRM solutions, Buy-Through of Congestion, which would have assigned the off-
24 contract path congestion charges to the entity that schedules a transaction that has
25 unscheduled, parallel path impacts, was deferred by the Commission.

1
2 The BRM solutions recognize that generation dispatch and transaction schedules
3 have flow impacts beyond the native regions within which they are scheduled, and
4 incorporate the regional cost impacts into the scheduling process to improve the
5 efficiency of the scheduling outcomes throughout the region. BRM is not expected
6 to require fundamental changes to any of the underlying market rules of the
7 ISOs/RTOs, but rather to improve the set of rules for coordinating operation,
8 scheduling and pricing decisions between the interconnected markets. M2M
9 provides for coordinated re-dispatch of assets within neighboring control areas to
10 address transmission constraints, rather than having each ISO or RTO rely solely on
11 its own internal resources to address constraints on its transmission system. M2M
12 delivers a broader regional view of transmission system congestion, encourages
13 generation dispatch instructions to be consistent with the impact each resource has
14 on inter-regional transmission system loadings, and encourages the scheduling of
15 inter-regional transactions to be consistent with the region-to-region costs and the
16 impacts those power deliveries have on network constraints. The approach is
17 expected to more cost-effectively utilize the region's collective assets to address
18 constraints across multiple systems, resulting in lower congestion costs to
19 consumers, and to provide a more consistent pricing profile across markets. It also
20 tends to discourage the use of resources, or the scheduling of transactions, that have
21 significant impacts on neighboring regions. In other words, M2M provides

1 economic incentives not to create unscheduled power flows that will harm other
2 M2M participants.
3

4 To facilitate more efficient use of transmission connections across the ISO/RTO
5 boundaries, the NYISO has moved to allow the scheduling of transactions with
6 neighboring electric systems on a more frequent basis. In July 2011, EITC was
7 implemented at the Chateauguay interface between New York and Québec,
8 decreasing the scheduling interval from one hour to 15 minutes. The NYISO and
9 PJM plan to implement this same capability at their common border in mid-2012. In
10 addition, the Commission's recent approval of Coordinated Transaction Scheduling
11 ("CTS") between the NYISO and ISO New England will allow more efficient use of
12 the transmission lines that connect the two ISOs. Enhancements include increasing
13 the frequency of scheduling energy transactions between regions, implementing
14 software changes to enable the two grid operators to coordinate supply costs into the
15 selection of the most economic transactions, and eliminating several fees that impede
16 efficient trade between regions. This initiative and related measures are intended to
17 reduce transmission congestion costs, provide better integration of renewable
18 resources, and lower total system operating costs. MISO and PJM have been
19 pursuing similar initiatives for the scheduling of interchange on their border.
20 Similarly, the NYISO and PJM expect to pursue a CTS option and to initiate
21 discussions with stakeholder in late 2012.
22

1 Finally, the NYISO has completed and implemented a preliminary set of Interface
2 Pricing revisions to its procedures for establishing interface (proxy bus) prices that
3 recognize the incremental distribution of power flows around Lake Erie when
4 evaluating and pricing the marginal impacts of transaction and generation schedules.
5 The NYISO's compliance obligation to develop corresponding tariff revisions is
6 being addressed by the Commission in Docket No. ER08-1281. Interface Pricing is
7 expected to result in efficient and compatible interface proxy bus prices between the
8 markets that will improve the interconnected markets' ability to efficiently transfer
9 power between the ISO/RTO regions. Better aligning prices at the interface between
10 markets will provide the correct signals to market participants, and better reflect the
11 value of moving energy between regions.

12
13 The BRM solutions described above are designed to ensure that scheduling decisions
14 are made with a more complete understanding of the full impacts of scheduling
15 decisions on other markets. In some cases (M2M, for example), the financial impact
16 of a scheduling decision on another participating ISO/RTO may be assessed against
17 the scheduling ISO or RTO. The additional information that is being made available,
18 along with the newly developed financial incentives are expected to change
19 scheduling decisions by improving recognition of cross-border impacts. The
20 ultimate result of these initiatives will be that ISOs and RTOs will take into account
21 the expected impacts of their resource and transaction scheduling decisions on
22 affected regions.

1

2 **Q. Please respond to the allegation on page 6 of the filing letter that the potential**
3 **annual congestion relief savings from operation of the MI/ON PARs would be**
4 **approximately \$362 million?**

5 A. The allegation that the potential congestion relief savings to NYISO customers
6 resulting from the operation of the MI/ON PARs to control Lake Erie unscheduled
7 power flows would be approximately \$181 million (approximately half of the total
8 estimated savings of \$362 million) is incorrect for a number of reasons.

9

10 The \$362 million estimate was the “high gas price” estimate Potomac Economics
11 prepared, based on \$6/MMBtu natural gas. The estimate Potomac Economics
12 prepared based on historical gas prices was \$297 million. Given the low natural gas
13 prices we are experiencing today, I address the \$297 million estimate. Potomac
14 Economics’ analysis was not a measure of congestion cost impacts incurred from
15 historic loop flow, nor was the analysis a measure of what savings would accrue if
16 loop flow were to be eliminated. Rather, Potomac Economics’ analysis was a
17 measure of production costs benefits associated with regional coordination of
18 scheduling actions. The analysis recognized the regional transmission system
19 impacts associated with both generation dispatch and transaction scheduling and
20 assumed that the interconnected ISOs and RTOs would implement regional
21 congestion management coordination actions to make the most economically
22 efficient resource scheduling decisions in recognition of those impacts. Effective
23 coordination will replace higher-cost resources with lower-cost resources, lowering
24 total resource production costs across the region.

1
2 The vast bulk of the region-wide savings identified (greater than 85%) are related to
3 improving the economic efficiency of interchange scheduling decisions to ensure
4 that power is transported from the low-cost region to the high-cost region to
5 maximize the utilization of the transmission system. As noted above, NYISO is
6 pursuing these benefits by implementing EITC and CTS with its neighbors. NYISO
7 and HQ have already implemented, and NYISO and PJM will shortly implement,
8 more frequent inter-Control Area scheduling actions and shorter durations of
9 schedules (*see* FERC Docket No. ER11-2547). NYISO and ISO-NE (*see* FERC
10 Docket Nos. ER12-701 and ER12-1155) and NYISO and PJM are pursuing CTS
11 solutions that improves the scheduling process by coordinating the participating
12 ISOs/RTOs' supply curves in order to identify the most economic inter-regional
13 transactions to schedule.

14
15 The MI/ON PARs do not impact these measures. Indeed, to the extent that 15-
16 minute or 5-minute scheduling in *all* of the Balancing Authorities around Lake Erie
17 would be necessary to achieve some of the savings that the Potomac Economics
18 study identifies, the MI/ON PARs could actually prove to be an impediment to
19 achieving the savings that Potomac Economics projects.

20
21 Of the remaining \$42.7 million in production cost savings identified in Potomac
22 Economics' analysis, only \$14.0 million is associated with the NYISO. Coordinated

1 congestion management between PJM and NYISO accounts for \$10.1 million of that
2 \$14 million in expected savings. As noted above, NYISO and PJM have already
3 moved forward with M2M to capture those benefits. The NYISO and PJM have
4 asked the Commission for permission to implement M2M on January 15, 2013. The
5 remaining cross-border loop flow impacts from MISO and Ontario native
6 generation-to-load impacts, and transaction impacts on NYISO congestion, are
7 nearly equally divided between forward direction impacts (contribute to congestion)
8 and reverse direction impacts (relieve congestion), with corresponding calculated
9 flowgate values² of \$20 million and \$19 million, respectively. This one-time
10 analysis suggests that perfect control of Lake Erie loop flow, and removal of the
11 impacts on NYISO congestion costs from these sources, could deliver a net \$1
12 million in flowgate value relief to New York. Less than perfect control of Lake Erie
13 loop flow would result in different impacts that would depend on the correlation of
14 time period and magnitude of uncontrolled loop flow with NYISO transmission
15 constraints, and could result in a net detrimental impact to total NYISO congestion
16 costs if the MI/ON PARs are not operated efficiently.

17
18 **Q. Could there be benefits to New York if MISO, ITC, IESO and Hydro One are**
19 **able to get all five of the MI/ON PARs into service simultaneously?**

20 Possibly. New York *may* benefit from the effective, coordinated operation of all of
21 the MI/ON PARs at all four interties between Michigan and Ontario. As NYISO

² Potomac Economics' analysis contemplated a potential production cost benefit of 10% of the value of flowgate impact from loop flow, thereby \$3.9 million of production cost savings is derived from \$39 million in flowgate value.

1 witness Wesley Yeomans explains in his direct testimony (Exhibit NYI-1), New
2 York will not benefit from the operation of ITC's Replacement PARs in isolation,
3 and does not see a potential for significant "benefits" when only three of the four
4 transmission lines at the MI/ON Interface are subject to effective PAR control.

5
6 Possible benefits to New York would depend on how the MI/ON PARs are operated
7 (*i.e.*, what their mission is) and how effectively they are able to achieve their
8 intended function. If all of the MI/ON PARs are operated to, and are able to,
9 successfully conform actual power flows to scheduled power flows at the MI/ON
10 Interface, New York may "benefit" if/when (a) the MI/ON PARs are operated to
11 reduce clockwise loop flows, and (b) components of the New York State
12 Transmission System that are substantially affected by unscheduled Lake Erie power
13 flows are constrained. New York may be "harmed" if/when (x) the MI/ON PARs
14 are operated to reduce counterclockwise loop flows, and (y) components of the New
15 York State Transmission System that are substantially affected by unscheduled Lake
16 Erie power flows are constrained.

17
18 New York may benefit if the MI/ON PARs are successfully operated to better
19 conform actual power flows to scheduled power flows and the PARs operation
20 consistently reduces the observed magnitude and volatility of loop flows around
21 Lake Erie. In order to achieve benefits related to more consistent power flows, the
22 NYISO would need to be able to reserve less transmission system capacity to protect

1 against the uncertainty of encountering large (magnitude) or more volatile loop flows
2 without creating additional reliability risks.

3
4 If the MI/ON PARs are not successfully operated to conform actual power flows to
5 scheduled power flows, but are still declared to be “regulating” for purposes of the
6 NERC Interchange Distribution Calculator (“IDC”), then New York may be harmed
7 because it may not be able to use TLR to obtain relief from unscheduled Lake Erie
8 power flows. NYISO witness Wesley Yeomans explains TLR and the NERC IDC in
9 his direct testimony in this proceeding.

10
11 New York could also be harmed if the operators of the MI/ON PARs (MISO and
12 IESO) do not accurately anticipate power flows and move the PARs in a direction
13 that exacerbates, rather than reduces, unscheduled power flows. New York may also
14 be harmed if MISO and IESO operate the MI/ON PARs in a manner that regularly
15 causes unscheduled power flows over the New York State Transmission System (if
16 the MI/ON PARs are not operated in a “neutral” manner). If New York reserves less
17 transmission system capacity to protect against the uncertainty of encountering large
18 (magnitude) or more volatile loop flows, the impacts of unexpectedly large or
19 volatile power flows on New York will be more significant when they occur.

20

1 **V. OPERATION OF THE REPLACEMENT PARs WITHOUT THE L4D**
2 **HYDRO ONE PAR**

3 **Q. Since the Replacement PARs were placed into service, have all of the other**
4 **PARs at the Michigan-Ontario Interface been operable?**

5 A. No. The PAR on the L4D circuit owned by Hydro One (the “L4D PAR”) has been
6 out of service since December of 2011.

7
8 **Q. Has MISO made statements about the impacts on the MISO market of**
9 **operating with less than the full complement of MI/ON PARs in service?**

10 A. Yes. On March 23, 2012, the MISO announced on its OASIS: “Testing on the L4D
11 PAR will continue through mid-May, and the L4D is not expected to be available for
12 use prior to the commissioning of the [Replacement PARs].... As a result, MISO
13 **does not** intend to change the methodology for pricing transactions scheduled across
14 the Michigan-Ontario interface in conjunction with the start of coordinated
15 operations (April 5th) as originally planned. The existing pricing methodology will
16 remain in place until further notice.” See Exhibit NYI-21.

17
18 **Q. How did MISO explain its announcement?**

19 A. In MISO’s response to data request NYISO/MISO 7-1 (Exhibit NYI-62), MISO
20 explained that its intent in changing the method used to price transactions scheduled
21 across the MI/ON Interface was to “align the pricing of transactions scheduled across
22 the interface with actual power flows created by those transactions, to the extent
23 practical. As of April 5th [that is, the date on which the Replacement PARs went into
24 operation, with the L4D PAR out of service], actual power flow associated with

1 transactions scheduled across the Michigan-Ontario interface was not expected to
2 flow across the interface to a sufficient degree to warrant the pricing of such
3 transactions at the interface price.”
4

5 **Q. What is the practical implication of the MISO’s announcement?**

6 MISO’s announcement explicitly recognizes that MISO does not expect the MI/ON
7 PARs to be able to effectively conform actual power flows to scheduled power flows
8 at the MI/ON Interface without the L4D PAR in service. MISO has developed two
9 methods for pricing External Transactions at the MI/ON Interface. MISO intends to
10 use a newly developed “interface price” at times when the MI/ON PARs are
11 expected to be able to conform actual power flows to scheduled power flows. When
12 the “interface price” method is not in effect, MISO will revert to the pricing method
13 it has employed for the past four-to-six years, which I will refer to as MISO’s
14 “traditional method.” MISO’s traditional method of pricing transactions assumes
15 unscheduled Lake Erie power flows will not be controlled by the MI/ON PARs.
16

17 **VI. CONCLUSION**

18 **Q. Does this conclude your testimony?**

19 A. Yes.

AFFIDAVIT OF ROBERT PIKE

State of New York §
 §
County of Rensselaer §

I, Robert Pike, being duly sworn, depose and state that I prepared the Testimony of Robert Pike and the statements contained therein are true and correct, to the best of my knowledge, information and belief.

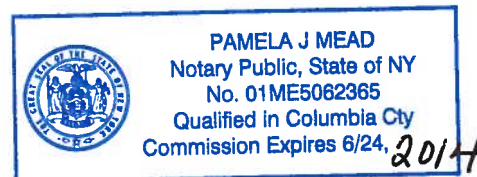


Robert Pike
Director, Market Design
New York Independent System Operator, Inc.

SUBSCRIBED AND SWORN BEFORE ME, this 11 day of May, 2012.



Pamela Mead
Notary Public for the State of New York



My Commission Expires on: 6/24/2014

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-47

NYTO/ITC 1-44. How long were the Original PARs in service?

Response NYTO/ITC 1-44: ITC believes the Original PAR went into service under DTE's ownership in January 2002. It failed in March 2003, shortly after ITC came into existence as a stand-alone company. As an ITC asset, therefore, the Original PAR was in service for less than one month.

Response prepared by: Mike Moltane

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-48

THIS INTERCONNECTION FACILITIES EXPANSION AGREEMENT made in triplicate as of the 21st day of December, 1998 between Ontario Hydro ("Hydro"), Detroit Edison Company ("Edison") and Consumers Energy Company formerly Consumers Power Company ("Consumers") with Consumers and Edison being collectively referred to as "Michigan".

WHEREAS Michigan and Hydro are parties to an Interconnection Agreement wherein Hydro owns the interconnection facilities located in Ontario and Edison owns the interconnection facilities located in the State of Michigan;

WHEREAS Hydro and Edison wish to make improvements to the existing interconnections described in section 1 of Supplement A to the Interconnection Agreement as described herein;

WHEREAS pursuant to section 1(e) of Supplement A to the Interconnection Agreement, Edison and Hydro shall provide such additional equipment and facilities for metering, telemetering, relaying, load control, communication or other purposes as are deemed necessary by the parties to effect adequate and satisfactory operation of the interconnections;

NOW THEREFORE in consideration of the mutual covenants, agreements, terms and conditions herein and other good and valuable consideration, the receipt and sufficiency of which is hereby irrevocably acknowledged, the parties agree as follows:

1.0 DEFINITIONS:

1.1 "Communication Facilities" means the transmitters, communication medium (fiber optics, twisted pair, radio frequency, power line carrier, microwave, etc.), and receivers, such that a signal can be transmitted from one device over the communication medium and received by another device. This definition implies that there is a common protocol for each device to ensure interoperability and that a receiving device understands, or can interpret the signal sent from the transmitting device.

"Communication Terminal Equipment" means the transmitter and receiver portion of the Communication Facilities, excluding the

communication medium.

"Constructing Party" means Hydro or Edison.

"Interconnection Agreement" means the agreement made between Hydro and Michigan on January 29, 1975 as amended by Amendment No. 1 dated July 20, 1976, Amendment No. 2 dated June 21, 1979, Amendment No. 3 dated April 1, 1985, Amendment No. 4 dated October 3, 1988 and Amendment No. 5 dated February 1, 1991.

"Interconnection Expansion Facilities" means the facilities and equipment to be reconfigured and installed by Hydro and/or Edison described in Sections 3.1 and 3.2 of this Agreement.

"Interconnection Facilities" means the facilities and equipment specified in Section 1 of Supplement A to the Interconnection Agreement and the Interconnection Expansion Facilities.

"Investment" means \$16,000,000.00 (US) in the case of Edison and \$21,000,000.00 (US) in the case of Hydro.

"New Facilities and New Equipment" means the facilities and equipment to be reconfigured and installed by Hydro and/or Edison described in Sections 3.1 and 3.2 of this Agreement with the exception of the facilities and equipment specified in sub-Sections 3.1(a) and (g).

2.0 BINDING EFFECT:

2.1 This Agreement shall be of full force and effect and binding on the parties as of the date first written above when executed by all the parties.

3.0 TERMS AND CONDITIONS:

3.1 Hydro shall, at its own expense:

- (a) reconfigure the existing 230/345 kV Voltage-Regulating 600 MVA Autotransformer in the L51D interconnection such that it will operate in parallel with the existing 230/345 kV Voltage-Regulating 600 MVA Autotransformer in the L4D interconnection,

- (b) purchase, install, activate and make operational a 230 kV Phase-Shifting 850 MVA Transformer and associated bypass switching facilities in the L4D interconnection terminal at its Lambton Generating Station,
- (c) purchase, install, activate and make operational a 230 kV Phase-Shifting 850 MVA Transformer and associated bypass switching facilities in the L51D interconnection terminal at its Lambton Generating Station,
- (d) purchase, install, activate and make operational integrated phase-angle control facilities and suitable Communication Facilities at its Windsor or other electric power system control center suitable for remote control of the Phase-Shifting Transformers in the J5D, L4D, L51D and B3N interconnections,
- (e) purchase, install, activate and make operational Communication Terminal Equipment suitable for receiving control signals from, and transmitting Phase-Shifting Transformer tap position status to, the remote control location in Windsor or other electric power system control center in Ontario, and the remote control location at Edison's system operation center in Detroit for the existing Phase-Shifting Transformer in the J5D interconnection, and the new Phase-Shifting Transformers in the L4D and L51D interconnections installed pursuant to Sub-sections (b) and (c) above,
- (f) purchase, install, activate and make operational local phase-angle control facilities suitable for control of the Phase-Shifting Transformers in the L4D and L51D interconnections installed pursuant to Sub-sections (b) and (c) above, and
- (g) activate and make operational the existing LTC controls for the two Voltage-Regulating 600 MVA Autotransformers installed in the L4D interconnection reconfigured pursuant to Sub-section (a) above.

3.2 Edison shall, at its own expense:

- (a) purchase, install, activate and make operational a 230 kV Phase-Shifting 645 MVA Transformer

and associated bypass switching facilities in the B3N interconnection terminal at its Bunce Creek Station,

- (b) purchase, install, activate and make operational local phase-angle control facilities suitable for control of the Phase-Shifting Transformer in the B3N interconnection installed pursuant to Sub-section (a) above,
- (c) purchase, install, activate and make operational integrated phase-angle control facilities and suitable Communication Facilities at its system operation center in Detroit suitable for remote control of the Phase-Shifting Transformers in the J5D, L4D, L51D and B3N interconnections,
- (d) purchase, install, activate and make operational Communication Terminal Equipment suitable for receiving control signals from, and transmitting Phase-Shifting Transformer tap position status to, the remote control location in Windsor or other electric power system control center in Ontario, and the remote control location at Edison's system operation center in Detroit for the Phase-Shifting Transformer in the B3N interconnection installed pursuant to Sub-section (a) above, and
- (e) purchase, install, activate and make operational a 230/345 kV Voltage-Regulating 1000 MVA Autotransformer in the L51D interconnection at its St. Clair Power Plant.

3.3 (a) By December 15, 2001, Hydro shall provide controllable reactive power supply capability sufficient to fully compensate for reactive power losses at the maximum expected loading and maximum phase angle of the Phase-Shifting Transformers installed pursuant to Sub-sections 3.1 (b) and 3.1 (c) above.

(b) By December 15, 2001, Edison shall provide controllable reactive power supply capability sufficient to fully compensate for reactive power losses at the maximum expected loading and maximum phase angle of the Phase-Shifting Transformer and the Voltage-Regulating Autotransformer installed pursuant to Sub-sections 3.2 (a) and 3.2 (e) above.

3.4 Hydro and Edison shall each use reasonable efforts to complete the installation of the Interconnection Expansion Facilities and place them in operation by May 31, 2000 (the "In-Service Date").

3.5 The design, construction, installation and maintenance of the Interconnection Expansion Facilities shall be in accordance with prudent North American electric utility practices and meet industry codes applicable in the country where the Interconnection Expansion Facilities are located.

3.6 The ownership of the New Equipment and New Facilities shall be such that Hydro will own the New Equipment and New Facilities located in Ontario and Edison will own the New Equipment and New Facilities located in Michigan.

3.7 Notwithstanding the provisions of Section 3 of Supplement A to the Interconnection Agreement, Hydro and Edison shall each be responsible for the performance of operation and maintenance, extraordinary maintenance and repair, which can include replacement, of the New Equipment and New Facilities which are owned by them, including all costs associated therewith.

3.8 Consumers shall not be responsible for any costs associated with the purchase, installation, activation, design, construction, operation or maintenance of the New Equipment and New Facilities.

3.9 Recognizing the need for a compatible protocol for Communication Facilities between controlling station and remote stations, Edison and Hydro agree to collaborate fully to develop functional design specifications for the integrated phase-angle controller and associated Communication Facilities identified in Sub-sections 3.1(d), 3.2(c) and the Communication Terminal Equipment in Sub-sections 3.1(e) and 3.2(d) required for the remote control of the Phase Shifting Transformers from the remote control locations identified in Sub-sections 3.1(d) and 3.2(c).

Edison and Hydro shall make full use of existing Edison owned or Hydro owned communication infrastructure as much as practical to minimize

purchasing of new Communication Facilities. If either Constructing Party has to purchase or lease new Communication Facilities, excluding Communication Terminal Equipment, for the purpose of this Agreement, Edison and Hydro shall share the cost equally.

3.10 The parties hereto agree to comply with and operate the Interconnection Facilities in accordance with the operating principles set forth in the Standard Operating Practice attached hereto as Schedule "A" and which forms part of this Agreement (the "Standard Operating Practice - Principles").

3.11(a) The parties shall develop detailed operating instructions to implement the Standard Operating Practice - Principles by no later than thirty (30) days before the In-Service Date in a manner that enhances the operating security and load supply reliability of the parties hereto (the "Standard Operating Practice - Procedures").

(b) The parties hereto agree to comply with and operate the Interconnection Facilities in accordance with the Standard Operating Practice - Procedures.

(c) The parties agree that if there is a conflict between the Standard Operating Practice - Principles and the Standard Operating Practice - Procedures, the Standard Operating Practice - Principles shall govern.

3.12 Any party may, upon seven days prior written notice, audit the operating records of the other party to verify the other party's claims of reliability problems, interference with existing transactions or committed transmission service, emergency conditions or other operating conditions that constrain the operation of the Phase-Shifting Transformers in the J5D, L4D, L51D and B3N interconnections.

3.13 Edison and Hydro will alternate control of the operation of the Phase-Shifting Transformers in the J5D, L4D, L51D and B3N interconnections every twelve-month period after the In-Service Date. Commencing on the In-Service Date, Hydro will have control of the operation and Edison will provide backup. When Edison has control of the operation, Hydro will provide backup.

4.0 LIABILITY:

4.1 The Parties agree that Article VIII of the Interconnection Agreement will continue to apply in full force and effect except as provided below.

4.2 Notwithstanding Article VIII of the Interconnection Agreement if a party does not comply with or operate in accordance with this Agreement, the Standard Operating Practice, or Operating Instructions and an express remedy or measure of damages is provided in this Agreement, the Standard Operating Practice, or the Operating Instructions, the limitation of liability of the defaulting party shall be limited as set forth in such provision; and if no express remedy or measure of damages is expressly provided, the liability of the defaulting party shall be limited to direct damages and, as a part of the consideration for the Agreement, each party waives all other types of damages or remedies to which it might be entitled for such breach. Under no circumstances shall a party be liable to the other party(ies), and as a part of the consideration for this Agreement, each party agrees to waive any right to special, indirect, incidental, punitive, or consequential damages (including, without limitation, loss of sales, loss of revenue, and loss of use) arising out of the performance or non-performance of any obligation under the Standard Operating Practice or the Operating Instructions or the breach of any representation, warranty, or covenant under the Standard Operating Practice or the Operating Instructions.

5.0 FORCE MAJEURE:

5.1 No party shall be deemed to be in default of this Agreement where the failure to perform or the delay in performing any obligation is due wholly or in part to a cause beyond its reasonable control and without the fault or negligence of the party claiming force majeure, which shall include but not be limited to an act of God, act of any federal, provincial, state, municipal or government authority, civil commotion, strikes by its own employees, lockouts of its own employees and other labour disputes with or between its own employees, fires, floods, sabotage, earthquakes, storms, epidemics or other similar or dissimilar events beyond the reasonable control of the party affected,

which in any of the foregoing cases by the exercise of due diligence, it is unable to overcome.

The party subject to such an event of force majeure shall promptly notify the other parties of its inability to perform or of any delay in performing due to an event of force majeure and shall provide an estimate, as soon as practicable, as to when the obligation will be performed. The time for performing the obligation shall be extended for a period equal to the time during which the party was subject to the event of force majeure. The parties shall explore all reasonable avenues available to avoid or resolve events of force majeure in the shortest time possible.

5.2 The parties agree that one party's failure to obtain permission to have their own Interconnection Expansion Facilities included in their rate base for cost recovery purposes does not constitute an event of force majeure.

6.0 REMEDIES FOR DEFAULT:

6.1 Subject to Section 5.1 above, in the event that Hydro or Edison has not completed the installation of its respective Interconnection Expansion Facilities (the "Defaulting Party") and the other party had its respective Interconnection Expansion Facilities installed by December 15, 2000 (the "Other Party"), then the Defaulting Party shall pay as a sole and exclusive remedy for the Other Party, as liquidated damages and not as a penalty, the Other Party's carrying costs on the Other Party's Investment from December 15, 2000 to the date upon which installation by the Defaulting Party is complete.

The daily charge for such carrying costs shall be the product of the Other Party's Investment and the Other Party's annual interest rate as herein provided divided by 365. The carrying costs shall be paid to the Other Party by the Defaulting Party monthly with the first payment to be made 30 days after December 15, 2000, if applicable.

Hydro's annual interest rate is 2% above the Prime Rate of the Canadian Imperial Bank of Commerce or its successor and Edison's annual interest rate is 2% above the Prime Rate of First of Chicago NBD or its successor.

7.0 LICENSES AND GOVERNMENTAL AUTHORITY:

7.1 This Agreement and the Operating Instructions is subject to the initial and continuing governmental permissions and the obtaining of all requisite approvals and authority to establish, construct and maintain interconnections and to interchange electrical energy.

8.0 NOTICE:

8.1 Any notice required by this Agreement shall be deemed properly given only if in writing, and either mailed or delivered to, The Secretary, Ontario Hydro, 700 University Avenue, Toronto, Ontario, M5G 1X6 on behalf of Ontario Hydro, The Secretary, The Detroit Edison Company, 2000 2nd Avenue, Detroit, Michigan, 48226 on behalf of Edison, and The Secretary, Consumers Energy, 212 West Michigan Avenue, Jackson, Michigan, 49201-2277 on behalf of Consumers. Notices sent by courier or registered mail shall be deemed to have been received on the date indicated on the delivery receipt. The designation of the person to be so notified or the address of such person may be changed at any time by either party by written notice. The parties agree that a request made pursuant to the Operating Instructions or the Standard Operating Practice shall not be construed as a notice required by this Agreement.

9.0 SUCCESSORS AND ASSIGNS:

9.1 This Agreement shall extend to, be binding upon and enure to the benefit of the respective successors and assigns of Consumers, Edison and Hydro.

10.0 ENTIRE AGREEMENT:

10.1 This Agreement and the Interconnection Agreement, constitutes the entire agreement between the parties with respect to the subject matter of this Agreement and supersedes all prior oral or written representations and agreements concerning the subject matter of this Agreement.

11.0 AMENDMENTS:

11.1 No amendment, modification or supplement to this Agreement shall be valid or binding unless set out

in writing and executed by the parties with the same degree of formality as the execution of this Agreement.

11.2 Notwithstanding Section 11.1, the parties agree that Sections 3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.9, 3.13, and 6.1 of this Agreement may be amended, modified or supplemented by Edison and Hydro and will be valid and binding on Hydro and Edison so long as such amendment, modification or supplement to this Agreement does not materially expand the scope of the Interconnection Expansion Facilities and is set out in writing and executed by Edison and Hydro with the same degree of formality as the execution of this Agreement.

11.3 The parties agree to amend of Supplement "A" to the Interconnection Agreement to reflect the Interconnection Expansion Facilities, Sections 3.7 and 3.8 of this Agreement after the Interconnection Expansion Facilities are in operation.

12.0 WAIVER:

12.1 The failure of any party hereto to enforce at any time any of the provisions of this Agreement or to exercise any right or option which is herein provided shall in no way be construed to be a waiver of such provision or any other provision nor in any way affect the validity of this Agreement or any part hereof or the right of any party to enforce thereafter each and every provision and to exercise any right or option. The waiver of any breach of this Agreement shall not be held to be a waiver of any other or subsequent breach. Nothing shall construe or have the effect of a waiver except an instrument in writing signed by a duly authorized officer of the party against whom such waiver is sought to be enforced which expressly waives a right or rights or an option or options under this Agreement.

13.0 RECITALS:

13.1 Each of the Parties hereto confirms the truth and accuracy of the above recitals to this Agreement and agrees that the recitals form part of this Agreement.

14.0 CONTRA PROFERENTEM:

14.1 Each party acknowledges and agrees that it has participated in the drafting of this Agreement and that no portion of this Agreement shall be interpreted less favourably to either party because that party or its counsel was primarily responsible for the drafting of that portion.

15.0 COUNTERPARTS:

15.1 This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which shall together constitute one and the same agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in triplicate by the affixing of their Seals attested by the signatures of their proper officers, as of the day and year first written above.

ONTARIO HYDRO

_____/s_____
Name: Ron Stewart Date
Title: Chief Operating Officer
Ontario Hydro Services Company
Ontario Hydro

DETROIT EDISON COMPANY

_____/s_____
Name: Robert J. Buckler Date
Title: President and Chief Operating Officer
DTE Energy Distribution
Detroit Edison

CONSUMERS ENERGY COMPANY

_____/s_____
Name: David W. Joos Date
Title: President & Chief Executive Officer - Electric
Consumers Energy

original, but all of which shall together constitute one and the same agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in triplicate by the affixing of their Seals attested by the signatures of their proper officers, as of the day and year first written above.

ONTARIO HYDRO

Name: Ron Stewart c/s Date
Title: Chief Operating Officer
Ontario Hydro Services Company
Ontario Hydro

DETROIT EDISON COMPANY

Name: Robert J. Buckler c/s Date
Title: President and Chief Operating Officer
DTE Energy Distribution
Detroit Edison

CONSUMERS ENERGY COMPANY

by *UEG*
David W. Joos c/s *12/22/98*
Name: David W. Joos Date
Title: President & Chief Executive Officer -
Electric
Consumers Energy

NOTED AS TO FORM
912K

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in triplicate by the affixing of their Seals attested by the signatures of their proper officers, as of the day and year first written above.

ONTARIO HYDRO

Ron Stewart c/s Dec 21/98
Name: Ron Stewart Date
Title: Chief Operating Officer
Ontario Hydro Services Company
Ontario Hydro

DETROIT EDISON COMPANY

____ c/s ____
Name: Robert J. Buckler Date
Title: President and Chief Operating Officer
DTE Energy Distribution
Detroit Edison

CONSUMERS ENERGY COMPANY

____ c/s ____
Name: David W. Joos Date
Title: President & Chief Executive Officer -
Electric
Consumers Energy

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P.06

Standard Operating Practice MH-D1
Michigan-Hydro Interconnection
Agreement of January 1, 1975, as amended

Basic Principles of Ontario-Michigan Phase Shifter Operation

General

Hydro and Edison intend to improve reliability of bulk power supply by adding and modifying transmission facilities pursuant to an Interconnection Facilities Expansion Agreement dated December 21, 1998 to control circulating power flows that would otherwise interfere with the ability to carry out scheduled transactions. Through the additions and modifications of transmission facilities detailed in the Interconnection Facilities Expansion Agreement, Hydro and Edison also intend to increase the capability of the transmission facilities between Hydro and Edison for the purpose of expanding opportunities for transactions involving the use of those facilities.

Therefore, in accordance with the provisions of the Interconnection Agreement, the parties hereby agree to modify existing operating practices to accommodate the additions and modifications of transmission facilities detailed in the Interconnection Facilities Expansion Agreement in a manner consistent with the principles set forth herein.

Terms not defined in this Operating Practice will have the same meaning defined in the Interconnection Facilities Expansion Agreement.

Operating Principles:

1. Phase-Shifting Transformers shall be operated primarily to control power flow circulating through the electrical systems of the parties in order to protect the parties' respective transmission facilities and to facilitate transactions between and among the parties. 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 relief of reliability constraints in Michigan or Ontario affecting the use of transmission facilities of the parties,
 - c. the facilitation of scheduled transfers of electric power and energy between Ontario and Michigan, and
 - d. the facilitation of scheduled transfers of electric power and energy between Ontario, Michigan and third party systems.
2. In the absence of the need for corrective action to achieve the objectives set forth in Section 1, a Base Control Strategy shall be employed. When there is a need for corrective action, deviations from the Base Control Strategy shall be limited to the amount of phase angle adjustment required to achieve the objectives set forth in Section 1 above. The Base Control Strategy is the requirement that the Phase-Shifting Transformer taps shall be set to control power flow on the Ontario-Michigan Interface to the net scheduled power exchange between Ontario and Michigan.
 - (a) An operating "Dead Band" shall be established in order to preserve the life expectancy of the Phase-Shifting Transformers by avoiding an excessive number of tap changes. The initial Dead Band shall be +/- 50 MW for the entire Ontario-Michigan Interface and tap changes on Phase-Shifting Transformers would not be signaled until the registered deviation between the target setting and the actual flow exceeds 50 MW. The Dead Band amount may be modified upon written agreement of Hydro and Edison.
 - (b) Deviations from the Base Control Strategy may be requested at any time by transmission system operators in Ontario or Michigan to support the objectives established in Section 1 so long as the

deviations from the Base Control Strategy are limited to the amount of phase angle adjustment required to achieve the objectives set forth in Section 1 above. Such requests shall be honored unless the requested change:

- (i) creates reliability problems on the power systems in Ontario or Michigan;
 - (ii) or interferes with existing firm transactions or committed firm transmission service in Ontario or Michigan.
- 3. Upon mutual agreement of the parties, in writing, the Base Control Strategy established in Section 2 shall be revised, as necessary, to accommodate changes in transmission or transaction scheduling arrangements adopted by the parties.
- 4. Subject to applicable transmission orders or regulation issued by government agencies, if emergency conditions are declared in both Ontario and Michigan, tap positions for the Phase-Shifting Transformers shall be set in accordance with the following criteria in descending order of priority:
 - a. first, to minimize the interruption of firm customer load in Ontario and Michigan and other firm customer load solely dependent upon firm transmission services provided by Ontario and Michigan,
 - b. second, to minimize the interruption or curtailment of firm transmission services on a scheduled MW basis,
 - c. third, to minimize the interruption of non-firm customer load in Michigan and Ontario on a MW basis, and
 - d. fourth, to minimize the interruption of non-firm transmission service on a scheduled MW basis.
- 5. The Standard Operating Practice - Procedures shall comply with the priorities and procedures set forth on the Flow Diagram on Attachment A and shall be consistent with the Situational Examples set forth on Attachment B.
- 6. The Voltage-Regulating Autotransformers installed in the J5D, L4D, L51D and B3N interconnections shall normally be controlled and operated to minimize the exchange of VARS over these interconnections.
- 7. This Operating Practice is based on the existing transmission reservation and energy scheduling method. If in the future other methods are mandated by regulating authorities that exercise control over how the Eastern Interconnection will be operated, then this Operating Practice will be revised to reflect the new mandated methods.

Situational Examples

The situational examples are based on the following assumptions under emergency conditions:

- 1) Once an emergency is declared by one party, then the other party will do whatever it can, up to but not including shedding of load in their own system, to assist the other.
- 2) Based on existing operating procedures, when either Ontario or Michigan declares an emergency, then both transmission systems would be operated to provide relief. For example, if the Queenston Flow West (QFW) flow gate is a limit, then the QFW will be operated to the emergency rating, and an increase of about 400 MW of transfer capability is expected.
- 3) If one party requests the QFW relief and associated phase shifter change, then this party is solely responsible for all firm load loss due to any further contingencies on that party's system. The one party is also responsible for one half of the firm load loss of the other party affected by the phase shifter deviation as follows:

Under emergency conditions and after all remedies to reduce load loss have been accomplished:

For Counterclockwise (CCW) Lake Erie Circulation (LEC)

- **Michigan's exposure** to interrupting load in Michigan due to a supply deficiency in Ontario is equal to one half the reduction in the base control strategy.

Example:

- Michigan requested a Phase Shifting Transformers setting of 100 MW Block. This is a reduction of 400 MW from the base control strategy of 500 MW Block for LEC in excess of 500 MW CCW. Michigan's **maximum** exposure to interrupting load in Michigan for this supply deficiency is equal to one half of 400 MW or 200 MW.
- **Ontario's exposure** to interrupting load in Ontario due to a supply deficiency in Michigan is equal to one half of the Block setting that exists at the time of the Michigan supply deficiency.

Example:

- The Phase Shifting Transformers are set at 400 MW Block. Ontario's **maximum** exposure to interrupting load in Ontario for this supply deficiency is equal to one half of 400 MW or 200 MW.

Note: Michigan or Ontario's exposure can not exceed one half of the capability of the Phase Shifting Transformers (one half of 500MW or 250 MW).

- 4) "Blocking Phase Shifter Adjustment" is reducing counter-clockwise LEC flow.
- 5) "Encourage Phase Shifter Adjustment" is reducing clockwise LEC flow.

Examples for Emergency Conditions

Example #1:

Initial Conditions:

- LEC (without Blocking) is 1000 MW counter-clockwise.
- Phase Shifting Transformers are set at maximum "Blocking" to retard Ontario to Michigan flow.
- Michigan – Ontario Schedule = 0.
- QFW is at its limit.
- Michigan Southern Interface is at its limit.
- Michigan Operating Reserves = 0 (on verge of firm load loss).
- Ontario Operating Reserves = 0 (on verge of firm load loss).
- Ontario is purchasing 500 MW from the East for Firm Load Customers.
- Michigan declares an emergency.
- Ontario declares an emergency.

1st Contingency: Michigan loses 500 MW Generator.

- Ontario operates QFW under emergency limit (a nominal increase of about 400 MW).
- Michigan requests Phase Shifting Transformers adjustment to enable import of 400 MW from either South and/or East (Phase Shifting Transformers are adjusted from 500MW Block to 100 MW Block).
- Michigan sheds 100 MW of firm load.

2nd Contingency: Michigan loses another 500MW Generator.

- Michigan sheds an additional 500 MW of firm load.

Example #1A:

Initial Conditions: Same as Example #1

1st Contingency: Ontario loses 500 MW Generator.

- Ontario operates QFW under emergency limit.
- Ontario requests Phase Shifting Transformers adjustment to relieve Michigan Southern limit (this avoids a Transmission Loading Relief (TLR) on the Southern Interface).
- Ontario imports 400 MW generation from New York.
- Ontario sheds 100 MW of firm load.

2nd Contingency: Ontario loses another 500 MW Generator

- Ontario sheds an additional 500 MW of firm load.

Example #1B:

Initial Conditions: Same as Example #1

1st Contingency: Michigan loses 500 MW Generator.

- Ontario operates QFW under emergency limit.
- Michigan requests Phase Shifting Transformers adjustment to enable import of 400MW from either South and/or East (Phase Shifting Transformers are adjusted from 500 MW Block to 100 MW Block).
- Michigan sheds 100 MW of firm load.

2nd Contingency: Ontario loses 500 MW Generator.

- Ontario sheds 300 MW of firm load.
- Michigan sheds an additional 200 MW of firm load (this is one half of the reduction from control strategy which is one half of 400 MW).

Example #1C:

Initial Conditions: Same as Example #1

1st Contingency: Ontario loses 500 MW Generator

- Ontario operates QFW under emergency limit.
- Ontario requests Phase Shifting Transformers adjustment to 350 MW Block to relieve Michigan Southern limit.
- Ontario imports 400 MW generation from New York.
- Ontario sheds 100 MW of firm load.

2nd Contingency: Michigan loses 500 MW Generator

- Ontario sheds 175 MW of firm load (one half of the Block setting at the time of deficiency or one half of 350 MW).
- Michigan sheds 325 MW of firm load.

Example #2:

Initial Conditions:

- LEC (without Blocking) is 1000 MW counter-clockwise.
- Phase Shifting Transformers Shifter is set at maximum "Blocking" to retard Ontario to Michigan flow.
- Michigan – Ontario Schedule = 0
- QFW is at its limit
- Michigan Southern Interface is at its limit
- Michigan Operating Reserves = 0 (on verge of firm load loss)
- Ontario Generation Available = 500 MW
- Ontario is conducting an economy purchase of least 500 MW from the East.
- Michigan declares an emergency.

Contingency: Michigan loses 500 MW Generator

- Either :
 - (a) Ontario operates QFW under emergency limit, and Michigan purchases 500 MW from either Ontario or Southern Interface if available, or
 - (b) If the 400 MW of QFW relief has already been requested, then Michigan would request Ontario to re-dispatches generation to further relieve the QFW in order that the Phase Shifting Transformers could be moved to accommodate a Michigan 500 MW purchase from the South.
- Michigan would compensate the appropriate party(ies) for the cost of re-dispatch.

Example #3:

Initial Conditions:

- LEC (without Blocking) is 1000 MW counter-clockwise.
- Phase Shifting Transformers are set at maximum "Blocking" to retard Ontario to Michigan flow.
- Michigan – Ontario Schedule = 0.
- QFW is at its limit.
- Michigan Southern Interface is at its limit.
- Michigan Operating Reserves = 0 (on verge of firm load loss).
- Ontario Operating Reserves = 0 (on verge of firm load loss).
- Generation available for purchase from the South = 0.
- Ontario is purchasing 500 MW from the East for firm load Customers.
- Michigan declares an emergency.
- Ontario declares an emergency.
- No generation is available from Ontario.

Contingency: Michigan loses 500 MW Generator.

- Michigan sheds 500 MW of firm load (Phase Shifting Transformers change can only provide access to generation, but no generation is available from any source, therefore, Michigan sheds 500 MW of firm load)

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-49

Interconnection Facilities Agreement

Between

Hydro One Networks Inc.

and

***ITCTransmission* Company**

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Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission

THIS INTERCONNECTION FACILITIES AGREEMENT made this 20TH day of September, 2007.

BETWEEN:

HYDRO ONE NETWORKS INC., a corporation incorporated under the laws of the Province of Ontario (hereinafter referred to as "Hydro One Networks")

PARTY OF THE FIRST PART;

- and -

INTERNATIONAL TRANSMISSION COMPANY, a corporation incorporated under the laws of Michigan dba *ITC Transmission* (hereinafter referred to as "ITC")

PARTY OF THE SECOND PART.

Individually referred to as *Party* or collectively as *Parties*

WHEREAS Hydro One Inc. (formerly named Ontario Hydro Services Company Inc.) was established pursuant to the *Electricity Act, 1998* as a successor company to Ontario Hydro and certain assets, rights and obligations of Ontario Hydro were transferred to Hydro One Inc. by or pursuant to transfer orders made under Part X of the Act;

WHEREAS Hydro One Networks is a wholly owned subsidiary of Hydro One Inc., and the successor company to which the transmission and distribution assets of Ontario Hydro were transferred;

WHEREAS ITC and Hydro One Networks are the owners and operators of transmission facilities in the United States and in Canada respectively;

WHEREAS the transmission facilities of ITC and Hydro One Networks are interconnected pursuant to an agreement dated January 29th, 1975 and entitled Interconnection Agreement between Consumers Power Company, The Detroit Edison Company and Ontario Hydro as amended from time to time (*the "1975 Agreement"*) to permit the coordinated operation of their respective transmission systems;

WHEREAS Ontario Hydro, Detroit Edison Company and Consumers Energy Company entered into an agreement dated December 21st, 1998 and entitled Interconnection Facilities Expansion Agreement (*the "1998 Expansion Agreement"*) for the purpose of Ontario Hydro and Detroit Edison Company making certain improvements to the then existing *Interconnection Facilities*.

WHEREAS in accordance with the *Electricity Act, 1998* (Ontario), the *Independent Electricity System Operator* (the "*IESO*") directs the operation of the *IESO-Controlled Grid* including Hydro One Networks' assets that form the part of the *Interconnection Facilities* located in the Province of Ontario;

WHEREAS pursuant to certain Federal Energy Regulatory Commission ("FERC") authorizations, the Regional Transmission Organization ("RTO") directs the operation of the various portions of the ITC transmission system with the exception of the facilities in the State of Michigan covered under this *Agreement* which are under the jurisdiction of the United States Department of Energy;

WHEREAS the *Parties* wish to permit their respective *Transmission Systems* to remain interconnected upon entering into this *Agreement* to describe the terms and conditions applicable to the operation of the *Interconnected Facilities* and the *Interconnection* of each *Party's Transmission Systems* to the other's.

NOW THEREFORE in consideration of the foregoing, and the mutual covenants, agreements, terms and conditions herein contained, the *Parties* intending to be legally bound hereby agree as follows:

ARTICLE I: GENERAL

1.1 This *Agreement* constitutes the entire agreement between the *Parties* with respect to the *Interconnection Facilities* and supersedes all prior oral or written representations and agreements concerning the subject matter of this *Agreement*.

1.2 Notices

Any written notice required by this *Agreement* shall be deemed properly given and delivered if sent by registered mail, facsimile or delivered to the addresses specified in Schedule "D". Notices shall be deemed to have been received on the date indicated on the delivery receipt if sent by registered mail; or on the date indicated on the delivery receipt or transmission slip if sent by courier or facsimile if delivered during normal business hours. If not delivered during normal business hours, delivery shall be deemed to have occurred on the next *Business Day*.

1.3 Person to be Notified

The designation of the person to be so notified or the address or facsimile number of such person may be changed at any time by either *Party* by written notice.

1.4 References

Unless otherwise specified, references in this *Agreement* to "Sections" or "Articles" are to sections and articles of this *Agreement*. Any reference in this *Agreement* to any statute or any section thereof will, unless otherwise expressly stated, be deemed to be a reference to such statute or section as amended, restated or re-enacted from time to time. The division of this *Agreement* into Articles and Sections is for convenience only, and shall not affect the interpretation of this *Agreement*. Unless the context requires otherwise, words importing the singular include the plural and vice versa and words importing gender include all genders. Where the word "including" or "includes" is used in this *Agreement* it means "including (or includes) without limitation".

1.5 Assignment

Either *Party* may assign this *Agreement* upon obtaining the consent of the other *Party*, which consent shall not be unreasonably withheld. This *Agreement* shall extend to, be binding upon and enure to the benefit of the said assigns and the respective successors of ITC and Hydro One Networks.

1.6 Rights and Remedies

Neither this *Agreement* nor any provision hereof is intended to confer upon any person other than the *Parties* hereto any rights or remedies hereunder.

1.7 Governing Law

Any actions arising under or pursuant to this *Agreement* may be initiated by a *Party* in the forum in which the other *Party* is resident. The *Agreement* shall be interpreted under and governed by the law of the State of New York, United States of America without regard to its law on conflict of laws.

1.8 Illegal, Invalid or Unenforceable

Any Article or Section of this *Agreement* or any other provision of this *Agreement* which is, or becomes, illegal, invalid or unenforceable shall be severed from this *Agreement*, and shall be ineffective to the extent of such illegality, invalidity or unenforceability, and shall not affect or impair the remaining provisions hereof.

1.9 Jurisdictions Incorporation

The *Parties* hereby agree to be bound by all regulatory requirements, codes, statutes and laws applicable to their jurisdiction which are hereby incorporated by reference into, and form part of this *Agreement*.

1.10 Modifications and Supplements

Except as otherwise provided herein, no modification or supplement to this *Agreement* shall be valid or binding unless set out in writing and executed by the *Parties* with the same degree of formality as the execution of this *Agreement*.

1.11 Licenses and Governmental Authority

This *Agreement* is subject to the initial and continuing governmental permissions and the obtaining of all requisite approvals and authority to establish, construct and maintain interconnections to interchange electrical energy.

1.12 If the *OEB*, the *NEB*, *FERC* or the United States Department of Energy (or any successor boards or agencies), a court of competent jurisdiction or other governmental entity with the appropriate jurisdiction (collectively, the "Regulatory Bodies") issues a rule, regulation, law or order that has the effect of canceling, changing or superseding any term or provision of this *Agreement* (the "Regulatory Requirement"), then this *Agreement* will be deemed modified to the extent necessary to comply with the Regulatory Requirement. Notwithstanding the foregoing, if the Regulatory Body materially modifies the terms and conditions of this *Agreement* and such modification(s) materially affect the benefits flowing to one or both of the *Parties*, the *Parties* agree to attempt in good faith to negotiate an amendment or amendments to this *Agreement* or take other appropriate action(s) so as to put each *Party* in effectively the same position in which the *Parties* would have been had such modification not been made. In the event that, within sixty (60) days or some other time period mutually agreed upon by the *Parties* after such modification has been made, the *Parties* are unable to reach agreement as to what, if any, amendments are necessary and fail to take other appropriate action to put each *Party* in effectively the same position in which the *Parties* would have been had such modification not been made, then either *Party* shall have the right to unilaterally terminate this *Agreement*.

Nothing in this *Agreement* shall be construed as affecting in any way the rights of either *Party* to unilaterally make application to any one or more of the Regulatory Bodies having jurisdiction over the *Party* for a change in rates, terms and conditions, charges, classifications of service, rule or regulation.

1.13 IESO and Hydro One Networks

Nothing in this *Agreement* shall be construed as requiring Hydro One Networks to act contrary to or refrain from acting in accordance with the IESO's direction.

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission

ARTICLE II: DEFINITIONS

2.1 Defined Terms

In addition to the terms defined in Schedule "F", the following terms, wherever used in this *Agreement*, shall have the following meanings and are equally applicable to both the singular and plural form:

"Agent" means a *Qualified* person duly authorized by a *Party* to perform specific limited operations for the *Controlling Authority/Operating Authority*;

"Agreement" means this Agreement, the schedules attached hereto and all amendments made hereto by written agreement between the *Parties* in accordance with the terms of this *Agreement*;

"Automated Mode" means an arrangement which provides for automatically controlling the operation of *Equipment* under predetermined conditions;

"Business Day" means a day other than a Saturday, a Sunday or a public holiday in the Province of Ontario or the State of Michigan;

"Communication Facilities" means the transmitters, communication medium (fiber optics, twisted pair, radio frequency, power line carrier, microwave, etc.) and receivers, such that a signal can be transmitted from one device over the communication medium and received by another device. This definition implies that there is a common protocol for each device to ensure interoperability and that a receiving device understands, or can interpret the signal sent from the transmitting device;

"Communication Terminal Equipment" means the transmitter and receiver portion of the *Communication Facilities*, excluding the communication medium;

"Confidential Information" means:

- (i) the terms of this *Agreement* and the operations and dealings under this *Agreement*;
- (ii) all information disclosed by a *Party* to the other *Party* under this *Agreement* or in negotiating this *Agreement* which by its nature is confidential to the *Party* disclosing the information; and
- (iii) all interpretative reports or other data generated by a *Party* that are based in whole or in part on information that is made *Confidential Information* by clauses (i) and (ii);

"Continuous Rating" as used in Schedule "G" for ratings of the *Interconnection* circuits is defined as the maximum load that may be carried continuously on the

circuit (For ITC, this is the normal or day-to-day rating of the circuit);

"Electricity Act, 1998" or "**Act**" means the Electricity Act, 1998 being Schedule "A" of the Energy Competition Act, S.O. 1998, c. 15, as amended (Ontario);

"Effective Date" means the date that this Agreement is effective being the date that the *1975 Agreement* and the *1998 Expansion Agreement* were terminated;

"Emergency" means any abnormal system condition that requires remedial action to:

- (a) ensure worker and public safety;
- (b) protect the integrity of the interconnected system;
- (c) protect the environment; or
- (d) protect Equipment;

"End of Life" means the state where:

1. (a) the original in-service capabilities of equipment have been (or are expected to be) substantially diminished, and
(b) the cost of restoring or purchasing equipment to achieve the original in-service capabilities exceeds the cost of other viable alternatives, or
2. new physical requirements exceed the original in-service capabilities of the equipment;

"End of Life Replacement" means where *Equipment* needs to be replaced because the *Equipment* has reached *End of Life*;

"Equipment" means any structures, transmission lines or cables, transformers, breakers, disconnect switches, buses for the purpose of conveying electricity; and their related voltage/current transformers, protection systems, telecommunications systems, or any other auxiliary equipment;

"Extraordinary Maintenance or Repair" means an unexpected activity or activities required to be performed in response to unforeseen circumstances which include but are not limited to:

- (a) Force Majeure;
- (b) manufacturer's defect; or
- (c) work other than *Routine Maintenance*.

For clarity, Extraordinary Maintenance or Repair does not include:

- (a) damage that resulted from negligent operating, maintenance or construction practices;
- (b) damage that resulted from failure to ensure physical security of the site (breach of security, e.g. trespassing/vandalism); and

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission

- (c) unit retrofit to increase life expectancy unless agreed by both *Parties*;

“FERC” means the Federal Energy Regulatory Commission established pursuant to the *Federal Power Act* (United States);

“Force Majeure Event” means, in relation to a person, any event or circumstance, or combination of events or circumstances,

- (i) that is beyond the reasonable control of the person;
- (ii) that adversely affects the performance by the person of its obligations under this *Agreement*; and
- (iii) the adverse effects of which could not have been foreseen or prevented, overcome, remedied or mitigated in whole or in part by the person through the exercise of diligence and reasonable care and includes, but is not limited to, acts of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, civil disobedience or disturbances, vandalism or acts of terrorism, strikes, lockouts, restrictive work practices or other labour disturbances, unlawful arrests or restraints by government or governmental, administrative or regulatory agencies or authorities unless the result of a violation by the person of a permit, licence or other authorization or of any applicable law, and acts of God including lightning, earthquake, fire, flood, landslide, unusually heavy or prolonged rain or accumulation of snow or ice or lack of water arising from weather or environmental problems; provided however, for greater certainty, that the lack, insufficiency or non-availability of funds shall not constitute a *Force Majeure Event*;

“Forced Outage” means an unscheduled *Outage* due to the actual or potential failure of *Equipment*;

“Good Utility Practice” means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in North America during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgement in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. *Good Utility Practice* is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in North America;

“IESO” means the Independent Electricity System Operator established under Part II of the *Electricity Act*,

1998 (Ontario) that directs the operations of Hydro One Networks’ *Transmission System*;

“IESO-Controlled Grid” means the *Transmission Systems* with respect to which, pursuant to operating agreements, the *IESO* has authority to direct operations. For the purpose of this *Agreement*, *IESO-Controlled Grid* means those *Transmission Facilities* owned by Hydro One Networks that are part of the *IESO-Controlled Grid*;

“Interconnection” means the physical link to or through Hydro One Networks’ *Transmission Facilities* and ITC’s *Transmission Facilities*;

“Interconnection Facilities” means those facilities described in Schedule “A”;

“Interconnection Point” means a point (or points as the case may be) of connection between Hydro One Networks’ *Interconnection Facilities* and ITC’s *Interconnection Facilities*;

“Long Term Emergency (LTE) Rating” as used in Schedule “G” for ratings of the *Interconnection* circuits is defined as the maximum load that may be carried on the circuit for up to 24 hours (For ITC, this is the emergency rating of the circuit);

“Maintenance” includes, but is not limited to, routine maintenance, *Extraordinary Maintenance or Repair*, *End of Life Replacement*, troubleshooting, repairs, approved changes, and such other modifications as may be required for the safe and efficient operation of the *Equipment*;

“Manual Mode” means the control of the operation of *Equipment* manually by operator action;

“Market Rules” means the rules made by the IESO under Section 32 of the *Electricity Act*, 1998 (Ontario) applicable to Hydro One Networks and entities that are registered as market participants in accordance with the Market Rules;

“NEB” means the National Energy Board established pursuant to the *National Energy Board Act* (Canada);

“NERC” means the North American Electric Reliability Corporation.

“OEB” means the Ontario Energy Board established pursuant to the *Ontario Energy Board Act*, 1998 (Ontario);

“Ontario Energy Board Act, 1998” means the *Ontario Energy Board Act*, 1998 being Schedule “B” of the

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Energy Competition Act, S.O. 1998, c. 15, as amended (Ontario);

“Operating Orders” are orders issued by a *Controlling Authority/Operating Authority* to facilitate the removal or restoration of *Equipment* or to establish the necessary conditions for *Work Protection*;

“Outage” means the removal of *Equipment* from service, unavailability of *Equipment* connection or temporary de-rating, restriction of use, or reduction in performance of *Equipment* for any reason including, but not limited to, permitting the inspection, testing, maintenance or repair of *Equipment*;

“PARS” or **“Phase Angle Regulators”** means the Phase Angle Regulators installed in the J5D, L4D, L51D *Interconnections* as more particularly described in Schedule “A” and the Phase Angle Regulator(s) to be installed in the B3N *Interconnection* in accordance with the terms of this *Agreement*;

“PAR Controlling Entity” means the *Party* that has the authority to determine the operation of the *Phase Angle Regulators* in accordance with the terms of this *Agreement*;

“Planned Outage” means an *Outage* that is scheduled, in advance, to occur at a pre-selected time, usually for construction, preventive maintenance or repair;

“Promptly” means performed in an expeditious manner and without undue delay, using due diligence, and with the intent of completing the required act or task as quickly as practicable;

“Protections” (Hydro One Networks) means *Equipment* designed to detect and isolate failed or faulted elements (ITC equivalent term is *Relays*);

“Qualified” means assessed by a *Party* in personal competency, familiarity with the knowledge of all applicable rules, regulations, guidelines, policies, codes, procedures, apparatus and *Equipment*, and dangers with respect to work and operation;

“Relays” (ITC) means equipment designed to detect and isolate failed or faulted elements (Hydro One Networks equivalent term is *Protections*);

“Regional Transmission Organization” or **“RTO”** means the large-scale (primarily multi-state) electric transmission system operator who is the Reliability Coordinator and the Market Operator for scheduled transactions over the ITC transmission system assets in the State of Michigan which is, as of the *Effective Date*, the Midwest Independent Transmission System Operator Inc., a Delaware non-stock corporation;

“Routine Maintenance” means work performed on a regular basis including without limitation:

- (a) routine scheduled oil analysis;
- (b) routine scheduled oil processing;
- (c) routine scheduled inspections and checks including but not limited to visual and infra-red visual inspection;
- (d) routine scheduled function and diagnostic tests;
- (e) normal preventive cosmetic maintenance, corrosion touch up paint and corrective actions;
- (f) minor oil leakage repairs;
- (g) alarm/protection system checks; and
- (h) minor-ancillary/equipment/component repair/replacement;

“Site” means the premises and the buildings on, in or around which *Transmission Facilities* are located;

“Transmission Facilities” means any and all equipment of any kind whatsoever owned by either *Party* and used in their respective *Transmission Systems* including, but not limited to, the *Interconnection Facilities* and associated protection and control facilities;

“Transmission System” means a system for transmitting electricity and includes any structures, *Equipment* or other things used for that purpose; and

“Transmission System Control Center” means:

- (a) for Hydro One Networks, the Ontario Grid Control Centre (“OGCC”) and Hydro One Networks’ back up control centers; and
- (b) for ITC, its Operations Control Room (“OCR”) and ITC’s back up control centers.

ARTICLE III: SCOPE OF AGREEMENT

3.1 Scope

3.1.1 This *Agreement* provides the basis for operating and maintaining the *Interconnection Facilities*. Specifically, it describes:

- (a) the requirements for the safe operation, switching, notification, response to emergencies, and isolation of the *Interconnection Facilities*;
- (b) the circumstances under which the *Interconnection Facilities*, in whole or in part, can be disconnected and the remedial actions required in order to permit the restoration of the operation of the *Interconnection Facilities* so disconnected; and
- (c) the *Equipment* comprising the *Interconnection Facilities* and how it shall be operated for the mutual advantage and benefit of both *Parties*.

Schedule “A” contains a detailed description of the *Interconnection Facilities*.

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ARTICLE IV: TERM

4.1 This *Agreement* shall take effect as of the *Effective Date* and shall continue in full force and effect until terminated.

4.2 Termination

4.2.1 This *Agreement* may be terminated at any time by mutual agreement. It may also be terminated upon at least one year prior notice in writing given by either *Party* to the other, provided that such unilateral termination shall not prejudice any outstanding obligations entered into under this *Agreement* that have accrued as of the date of termination. Without limiting the generality of the foregoing, the liability provisions, the confidentiality provisions and the obligations to pay monies owed prior to termination shall survive termination.

4.2.2 Neither *Party* may terminate this *Agreement* other than in accordance with the provisions providing for such termination set out in this *Agreement*.

ARTICLE V: ASSET OWNERS' COMMITTEE

5.1 General

Each *Party* shall assign, within 30 days of this *Agreement* becoming effective, a member and an alternate to an Asset Owners' Committee with the authority to act on their behalf with respect to actions or decisions taken by the Asset Owners' Committee. The members of the Asset Owners' Committee shall meet from time to time but at least once per calendar year unless delayed by mutual agreement to review issues of interest to the *Parties* in relation to the *Interconnection Facilities*. The Asset Owners' Committee may invite guests to their meetings. Invitations shall be by mutual agreement of the Asset Owners' Committee. Request for guest attendance approval shall be submitted by a *Party* at least two business days in advance to the meeting.

The Asset Owners' Committee shall review and address:

- (a) *Interconnection Facilities'* utilization policies and principles;
- (b) Deficiencies identified in the operation of the *Interconnection Facilities*;
- (c) Opportunities to improve the operation of the *Interconnection Facilities* under the responsibilities of the *Parties* under this *Agreement*;
- (d) *Equipment* ratings and operating restrictions;
- (e) The *Outage* planning process used by the *Parties* and *Planned Outages*;
- (f) Plans for changes on Hydro One Networks' *Transmission System* or ITC's *Transmission System* that may affect the operation of the *Interconnection Facilities*;

- (g) Proposed upgrades or modifications to the *Protections, Relays* or communications facilities for the *Interconnection Facilities*;
- (h) The impact on the *Interconnection Facilities* of the requirements of regulatory and reliability bodies including, but not limited to the *NERC*, the *IESO*, the *RTO*, the *NEB*, the *OEB*, *FERC* and the U.S. Department of Energy and their successor or replacement agencies;
- (i) Incidents affecting the operation or performance of the *Interconnection Facilities*;
- (j) Operating procedures, constraints and conditions for an *Emergency* operating mode on an annual basis; and
- (k) Proposed revisions to this *Agreement*.

5.2 Authority

The Asset Owners' Committee shall have the authority to:

- (a) approve and release changes to any or all of the schedules in this *Agreement* save and except for Schedules "I", as required from time to time to reflect changes in the operation of the *Interconnection*;
- (b) write, approve and release new schedules to be part of this *Agreement* as required from time to time;
- (c) determine and revise acceptable remedial actions required to ensure the acceptable operation and performance of the *Interconnection Facilities*;
- (d) identify measures and technologies to be applied to minimize the risk of failure of *Equipment* that is subject to cost sharing arrangements;
- (e) monitor *Maintenance* procedures on *Equipment* subject to cost sharing arrangements to ensure that *Good Utility Practice* is followed in the operation and *Maintenance* of such *Equipment*;
- (f) address issues including, but not limited to, deficiencies associated with the protection, isolation, or control equipment for the *Interconnection Facilities* that impacts the operation of the *Transmission Systems* of either *Party*;
- (g) resolve disputed matters submitted to the Asset Owners Committee as part of the Dispute Resolution Process;
- (h) establish such other committees, subcommittees, task forces, working groups or other bodies, as it deems appropriate for purposes of administering this *Agreement*; and
- (i) negotiate alternatives to cost sharing arrangements in the event that *Extraordinary Maintenance* or *Repair* or *End-of-Life Replacement* is required on the *Interconnection Facilities* in accordance with the cost sharing provisions found in Section 6.1.1 and Schedule B.

ARTICLE VI: OBLIGATIONS

6.1 General

6.1.1 Except as specifically provided herein, each *Party* shall bear their own costs of compliance with this *Agreement*. These include, but are not limited to, costs associated with the operation, inspection and *Maintenance* of their respective assets comprising the *Interconnection Facilities* including associated protection control and communication equipment, in the manner described in this *Agreement*.

Each of ITC and Hydro One Networks shall be responsible individually for the performance of operation and *Maintenance* of the *Interconnection Facilities* owned by it, including all costs associated therewith. However, in the case of *Extraordinary Maintenance* or *Repair* or *End-of-Life Replacement* associated with the *Phase Angle Regulators* and the voltage regulating autotransformers described in Schedule "B" hereto, certain costs shall be shared equally as provided for in Schedule "B" provided that such equipment shall have been placed and remained in service under normal conditions, including regular under-load tap changing, where applicable, for at least one year.

The need for such *Extraordinary Maintenance* or *Repair*, or *End-of-Life Replacement*, the scope of work and the estimated costs therefore shall be agreed by the Asset Owners' Committee in advance, unless an *Emergency* makes the work necessary before review and concurrence of the Asset Owners' Committee can be obtained. In such case, the *Party* performing the *Extraordinary Maintenance* or *Repair* or *End-of-Life Replacement* shall notify the other *Party* as soon as it is practicable, of the scope of work and the reason(s) the *Extraordinary Maintenance* or *Repair* *End-of-Life Replacement* is necessary. The shared costs of *Extraordinary Maintenance* or *Repair* or *End-of-Life Replacement* shall include associated expenses for removal (if necessary), transportation and re-installation.

Schedule "B" contains the list of *Equipment* subject to cost sharing arrangements as well as details of inclusions and exclusions of shared cost.

6.1.2 Each *Party* shall follow *Good Utility Practice* in (a) the selection of, inspection and maintenance of *Equipment* comprising the *Interconnection Facilities*; (b) undertaking repairs required to correct any deficiencies; and (c) performing its obligations under this *Agreement*.

6.1.3 Each *Party* is responsible for ensuring that grounding devices on their *Equipment* have been removed prior to being placed on potential.

6.1.4 Each *Party* shall make reasonable attempts to accommodate the other *Party's* interests when planning changes to the *Interconnection Facilities*.

6.1.5 Each *Party* shall ensure that their respective staff or *Agents* are *Qualified* as having sufficient knowledge of the *Equipment*, policies and procedures described in this *Agreement* and that this knowledge will be monitored and applied. Evidence of staff or *Agents'* qualification shall be made available upon request.

6.1.6 In order to ensure the safe, efficient and effective operation of ITC's *Interconnection Facilities* and Hydro One Networks' *Interconnection Facilities*, ITC and Hydro One Networks hereby agree to disclose to each other operating data and other relevant information that may affect the operations of their respective *Interconnected Facilities*.

6.1.7 Duty to Repair

The *Parties* recognize the mutual benefit of operation with all *Interconnection Facilities* operational and all *Equipment* in service. Therefore, subject to Section 1.11 hereof, both *Parties* have a duty to repair any *Equipment* that is a part of the *Interconnection Facilities* as soon as practical using commercially reasonable efforts.

6.2 Normal Operations

6.2.1 Each *Party* shall remove *Equipment* or *Interconnection Facilities* from service in accordance with their reporting and scheduling obligations described in this *Agreement*. However, if removal from service is necessary to prevent damage to either *Party's* equipment or *Interconnection Facilities* or to protect the safety of employees, the public or the environment, the removing *Party* shall *Promptly* notify the other *Party's* *Controlling Authority/Operating Authority*.

6.2.2 The *Parties* shall cooperate to establish equipment ratings and monitor power flows for their respective *Interconnection Facilities*.

6.2.3 The *Parties* agree that *Equipment* in the *Interconnection Facilities* shall be operated within *Continuous Ratings* for normal operating conditions.

6.2.4 When potential is being applied to *Equipment*, which extends into the other *Party's* *Transmission System*, the *Controlling Authority/Operating Authority* of the *Party* applying potential shall obtain approval from his/her counterpart.

6.3 Equipment Protections / Relays Settings

The *Parties* shall cooperate in determining and establishing the settings of *Protections* and *Relays* to preserve the integrity of its assets and security of their respective *Transmission Systems*. This cooperation may include submission to the other *Party* of relevant

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electrical drawings and proposed settings of the *Protections* and *Relays* associated with the *Interconnection Facilities* for their review prior to their implementation.

6.4 Emergency Operations (Preparedness)

6.4.1 The operating procedures, constraints and conditions for an *Emergency* operating mode are described in Schedule "E", including reporting instructions and *Emergency* contacts.

6.4.2 Each *Party* shall provide the other *Party* with all necessary instructions and phone numbers for Emergency responses and mutual assistance including reporting procedures. This information will be kept up to date by each *Party* and is found in Schedule "C".

6.4.3 Each *Party* agrees that *Equipment* in the *Interconnection Facilities* shall be operated within post contingency ratings for the prescribed period of time immediately after the occurrence of a contingency event affecting the *Interconnection Facilities*. Operation of *Equipment* beyond agreed upon post-contingency ratings shall be at the owner's discretion.

ARTICLE VII: PLANNING FOR NEW OR MODIFIED CONNECTION FACILITIES

7.1 Each *Party* shall provide written notice to the other *Party's* Asset Owners' Committee member of proposed new or modified connection facilities (generation, load and/or transmission) that may affect the other *Party's* *Transmission System* as soon as the proposed new or modified connection facilities are public knowledge or sooner if the *Party* is able to obtain any required authorization to disclose information that might be deemed confidential or proprietary by the third party proposing the proposed new or modified connection facilities.

7.2 The *Parties* agree to cooperate in the undertaking of studies to assess the impact that new or modified connection facilities may have in the other *Party's* *Transmission System*.

7.3 Each *Party* shall provide further written notice to the other *Party's* Asset Owners' Committee member, when a facility study has been completed and when a connection/construction agreement has been signed and/or regulatory approval has been granted for the proposed new or modified connection facilities that may affect the other *Party's* *Transmission System*.

7.4 Each *Party* shall determine the cost of modifications, enhancements and reinforcements on the *Party's* *Transmission Facilities* required to accommodate new or modified connection facilities in the other *Party's* *Transmission System*. Such modifications, enhancements

and reinforcements include but are not limited to the following:

- (a) protective relay and control facilities, and associated telecommunications attributed to the project;
- (b) modifying existing connection lines attributed to the project;
- (c) breakers attributed to the project;
- (d) disconnect switches; and
- (e) bus sections at the terminal stations in the network pool attributed to the project.

7.5 The following factors shall be considered in calculating the costs applicable to section 7.4:

- (a) advancement costs of replacing existing breakers and switches before the end of their useful life; and
- (b) the costs of upgrading the *Equipment* to the next practical rating, including, but not limited to, removal and decommissioning cost less any salvage value of the removed facilities.

7.6 Each *Party* agrees to submit the cost recovery issues of the other *Party* to the regulatory bodies in their respective jurisdictions and, if permissible, support recovery of such costs, where one *Party* is affected by a proposed new or modified connection to the other *Party's* *Transmissions System*.

7.7 Each *Party* shall be required to, on a reasonably practical basis but no less than once per year, provide the other *Party* with system information which might affect the flow patterns and ratings of the *Interconnection*. Hydro One Networks will provide ITC with system information pertaining to changes to transmission system equipment which affects impedance values or ratings. However, information that pertains to changes to Ontario generator and load will be provided to ITC after Hydro One Networks has obtained it from publicly available sources. Each *Party* will actively support the other *Party* in their endeavors to obtain all necessary information from the respective reliability coordinator to conduct system impact and/ or other reliability studies.

ARTICLE VIII: COMMUNICATION

8.1 Compliance

The *Parties* agree to comply with their obligations regarding operational requirements, reporting standards, and communications protocol as described in Schedule "E".

8.2 Information

Each *Party* shall endeavour to maintain an ongoing interchange of information about operation (including *Planned Outages* and *Forced Outages*, system tests, etc.)

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which could reflect into, or be of significance to, either *Transmission System* prior to the actual operation when appropriate.

8.3 Organizations and Authorities

The operating organizations and *Controlling and Operating Authorities* involved in the operation of the *Interconnection Facilities* are described in Schedule "E".

8.4 Telephone Numbers

A list of important business telephone numbers pertinent to this *Agreement* is attached as Schedule "C".

8.5 Communication Path

The Communication path for the operation of the *Interconnected Facilities* under normal and *Emergency* conditions is attached as Schedule "E".

8.6 Terminology

Schedule "F" summarizes the approved operating terminology and their meanings to be used in communication between *Controlling and Operating Authorities*.

ARTICLE IX: OUTAGE COORDINATION

9.1 Obligations

9.1 ITC and Hydro One Networks shall use reasonable efforts to coordinate any required *Planned Outages* to maximize the availability of the *Interconnection Facilities*. Typically, this will include all *Interconnection Facilities* and any equipment within each *Transmission System* which may have a direct impact on the transmission capability of the *Interconnection*.

9.2 ITC and Hydro One Networks shall establish an *Outage* planning process to comply with the reporting and scheduling obligations set out in Schedule "H".

ARTICLE X: PHASE ANGLE REGULATORS

10.1 In accordance with the terms of the *1998 Expansion Agreement*, Hydro One Networks:

- (a) installed a 230 kV 850 MVA *Phase Angle Regulator* and associated bypass switching facilities in the L4D *Interconnection* terminal at the Lambton Generating Station;
- (b) installed a 230 kV 850 MVA *Phase Angle Regulator* and associated bypass switching facilities in the L51D *Interconnection* terminal at the Lambton Generating Station; and

- (c) reconfigured the existing 230/345 kV voltage-regulating 600 MVA autotransformer in the L51D *Interconnection* such that it will operate in parallel with the existing 230/345 kV voltage-regulating 600 MVA autotransformer in the L4D *Interconnection*.

10.2 In accordance with the terms of the *1998 Expansion Agreement*, ITC installed:

- (a) a 230 kV 645 MVA *Phase Angle Regulator* and associated bypass switching facilities in the B3N *Interconnection* terminal at its Bunce Creek Station which later failed; and
- (b) a 230/345 kV voltage-regulating 1000 MVA autotransformer in the L51D *Interconnection* at its St. Clair Power Plant facility.

10.3 Due to the failure of the *Phase Angle Regulator* referenced in Subsection 10.2(a) above, ITC agrees to install one or more *Phase Angle Regulators* with a combined total capacity of at least 645 MVA in the B3N *Interconnection* terminal at its Bunce Creek Station.

10.4 To the extent that that they have not already done so for their respective *Phase Angle Regulators*, the *Parties* shall make reasonable commercial efforts to establish automatic and manual control of the *Phase Angle Regulators* including, but not limited to installing and making operational:

- (a) integrated phase-angle control facilities and suitable *Communication Facilities* at their respective *Transmission System Control Centers* suitable for control of the *Phase Angle Regulators* in *Automated Mode* and *Manual Mode*; and
- (b) *Communication Terminal Equipment* suitable for receiving control signals from, and transmitting *Phase Angle Regulator* tap position status to, the remote control location between the *Parties* respective *Transmission System Control Centers* for all of the *Phase Angle Regulators* in operation.

To this end and in recognition of the need for a compatible protocol for *Communication Facilities* between controlling stations and remote stations, the *Parties* agree to collaborate fully to develop functional design specifications for the *Communication Facilities* and the *Communication Terminal Equipment* referenced in 10.4 (a) and (b) above.

Furthermore, if either *Party* has to purchase or lease new *Communication Facilities*, excluding *Communication Terminal Equipment*, for the purpose of this Section 10.4, the *Parties* shall share such costs equally.

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10.5 At any time when the *Phase Angle Regulators* are being controlled in *Manual Mode*, the *Parties* agree that control of the *Phase Angle Regulators* in *Manual Mode* will be implemented by the *PAR Controlling Entity* giving operating orders to the entity(ies) with the physical control of the *Phase Angle Regulators* in operation. Each of the *Parties* hereby agrees to *Promptly* respond to the operating orders of the *PAR Controlling Entity*. However, if a *Party* does not respond to the operating orders of the *PAR Controlling Entity* because responding may cause damage to that *Party's* equipment or *Interconnection Facilities* or endanger the safety of employees, the public or the environment, the non-responding *Party* shall *Promptly* notify the *PAR Controlling Entity*.

10.6 The *Parties* agree that control of the *Phase Angle Regulators* in *Manual Mode* is an interim measure and they shall make reasonable commercial efforts to establish control of the *Phase Angle Regulators* in *Automated Mode*.

To this end, the *Parties* agree to collaborate fully to develop functional design specifications for, and install and make operational, an integrated automated controller for the *Phase Angle Regulators* and any additional associated *Communication Facilities* and *Communication Terminal Equipment* that might be required in this regard.

10.7 The *Parties* agree to comply with and operate the *Phase Angle Regulators* in accordance with:

- (a) the operating principles set forth in Schedule "I" (the "*Principles*"); and
- (b) the direction for the normal operation of the *Phase Angle Regulators* agreed by ITC and Hydro One Networks as set out in the Standard Operating Practice described in Section 10.8 below

10.8 The *Parties* agree to use their best efforts to develop a detailed standard operating practice (the "*PAR SOP*"), to implement the *Principles* no later than thirty days following the *Effective Date*. Thereafter, the *Parties* agree to comply with and operate the *Phase Angle Regulators* in accordance with the *PAR SOP*.

The *Parties* agree that if there is a conflict between the *Principles* and the *PAR SOP*, the *Principles* shall govern.

10.9 The *Parties* will alternate being the *PAR Controlling Entity* every twelve-month period commencing on the *Effective Date*. Commencing on the *Effective Date*, Hydro One Networks will be the *PAR Controlling Entity* and ITC will provide backup. When ITC is the *PAR Controlling Entity*, Hydro One Networks will provide backup.

ARTICLE XI: REQUIREMENTS FOR WORK SAFETY CONDITIONS

11.1 The execution of all work, whether planned or *Emergency*, shall be performed under safe working conditions on *Interconnections* or *Equipment* connected to them.

11.2 Each *Party* shall have and maintain documented procedures to establish and maintain specified safety conditions until all working personnel have been reported clear of the *Equipment* and the *Work Protection* has been surrendered.

11.3 Each *Party* shall carry out work on its *Equipment* in accordance with their safety and *Work Protection* practices as described in Schedule "F".

ARTICLE XII: LIABILITY AND FORCE MAJEURE

12.1 Liability

Other than for sums payable under this *Agreement*, a *Party* will only be liable to the other *Party* for any damages that arise directly out of willful misconduct or gross negligence in meeting their respective obligations under this *Agreement*. Despite the foregoing, neither *Party* shall be liable under any circumstances whatsoever for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for any indirect, consequential, special or incidental damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in statute, contract, tort or otherwise.

12.2 Force Majeure

Neither *Party* shall be in default or deemed to be in default in the performance of its obligations under this *Agreement*, to the extent that performance of any such obligation is prevented or delayed by *Force Majeure Event*. If a *Party* is prevented or delayed in the performance of any such obligation by a *Force Majeure Event*, such *Party* shall immediately provide notice to the other *Party* of the circumstances preventing or delaying performance and the expected duration thereof. Such notice shall be confirmed *promptly* in writing. The *Party* so affected by the *Force Majeure Event* shall endeavour to remove the obstacles, which prevent performance and shall resume performance of its obligations as soon as reasonably practicable. The time for performing the obligation shall be extended for a period equal to the time during which the *Party* was subject to the *Force Majeure Event*. Both *Parties* shall explore all reasonable avenues available to avoid or resolve *Force Majeure Events* in the shortest time possible, but this requirement shall not oblige the *Party* suffering a strike, lockout or

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labour dispute to compromise its position in such dispute.

ARTICLE XIII: DEFAULT

13.1 General

If either *Party* fails to or neglects at any time to fully perform, observe and comply with all the terms, conditions and covenants herein, then the non-defaulting *Party* shall as soon as practicable, notify the defaulting *Party* in writing of such default and the defaulting *Party* shall correct such default to the satisfaction of the non-defaulting *Party* within thirty (30) days of the issuance of such notice or sooner in the case of an emergency, as may be determined by the non-defaulting *Party* or within a longer time period if agreeable to the other *Party*, failing which the non-defaulting *Party* may forthwith terminate this *Agreement* and the rights and privileges herein granted.

13.2 Termination Due to Bankruptcy or Insolvency of a Party

Either *Party* shall be entitled, at its option, to terminate this *Agreement* immediately upon written notice to the other *Party* upon the other *Party* becoming bankrupt or insolvent or upon the other *Party* ceasing to carry on business.

13.3 Disconnect

When a non-defaulting *Party* has terminated the *Agreement* under Sections 4.2, 13.1 or 13.2, the non-defaulting *Party* may disconnect the *Interconnection Point* and shall be entitled to de-commission and remove any of its *Equipment* associated with the *Interconnection Facilities* and the *Interconnection Point*.

13.4 Force and Effect

If this *Agreement* is terminated under Sections 4.2, 13.1 or 13.2, then upon termination the *Agreement* will, subject to Section 13.5, be of no further force and effect.

13.5 Rights and Obligations

If this *Agreement* is terminated under Sections 4.2, 13.1 or 13.2, the termination of this *Agreement* shall not affect any rights or obligations of either *Party* that may have accrued before termination, nor affect either *Party's* rights or obligations of this *Agreement*, which will continue in full force and effect notwithstanding the termination of this *Agreement* (such as, but not limited to the liability provisions in Section 12.1).

13.6 Exercising Rights and Remedies

Subject to the limitation of liability in Section 12.1 hereof, the rights and remedies of the *Parties* in this

Agreement are not intended to be exclusive but rather are cumulative and are in addition to any other right or remedy otherwise available to the *Parties* at law or in equity. Either *Party* may exercise one or more of its rights and remedies from time to time, independently or in combination, without prejudice to any other right or remedy that either *Party* may have exercised. This subsection shall not operate to void the application of Article XV of this *Agreement*, to any dispute arising between the *Parties*.

13.7 Other Rights and Remedies

If any of the remedies provided for and chosen by a non-defaulting *Party* are found to be unenforceable, the non-defaulting *Party* may exercise any other right or remedy available to it at law or in equity.

ARTICLE XIV: CONFIDENTIAL INFORMATION

14.1 General

All *Confidential Information* shall at all times be treated as confidential, and shall be prepared, given, and used in good faith. The *Parties* shall use the *Confidential Information* only for the requirements of the work being performed including, but not limited to, planning or operating the *Parties' Interconnection Facilities* or *Transmission Systems*, and not for any other purpose, and shall not disclose it to any third party, directly or indirectly, without the prior written consent of the *Party* that provided the *Confidential Information*, and in such events the third party must agree to use the *Confidential Information* solely for the requirements of the work as specified. *Confidential Information* shall not be used for any commercial purpose of any kind whatsoever other than contemplated herein.

14.2 Exclusions

"*Confidential Information*" does not include:

- (a) information that is in the public domain, provided that specific items of information shall not be considered to be in the public domain merely because more general information about a given item is in the public domain, and provided that the information is not in the public domain as a result of a breach of confidence by the *Party* seeking to disclose the information or a person to whom it has disclosed the information;
- (b) information that is, at the time of the disclosure, in the possession of the recipient, provided that it was lawfully obtained either from the other *Party* or from sources, who did not acquire it directly or indirectly from the other *Party* under an obligation of confidence; and

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission

- (c) information that must be disclosed in compliance with a judicial or governmental order or other legal process.

14.3 Exceptions

Each *Party* shall keep *Confidential Information* confidential except:

- (a) as may be necessary in an *Emergency*;
- (b) to the extent required by law;
- (c) if required in connection with legal proceedings, arbitration or any expert determination relating to the subject matter of this *Agreement*, or for the purpose of advising a party in relation thereto;
- (d) to the extent required by the *Party's* license; or
- (e) to the extent required by the *Market Rules* or as may be required to enable a *Party* to fulfill its obligation to any reliability organization.

14.4 Disclosure

In the event the Receiving *Party* is required to disclose *Confidential Information* of the Disclosing *Party*, the Receiving *Party* shall *Promptly* notify the Disclosing *Party* prior to disclosing the *Confidential Information*, to the extent practicable, so that the Disclosing *Party* may seek an appropriate protective order or other appropriate protection and/or waive the Receiving *Party's* compliance with this *Agreement*. Unless the Disclosing *Party* agrees that all *Confidential Information* may be disclosed, the Receiving *Party* shall furnish only that portion of the *Confidential Information* which it is legally required to disclose, and will exercise all reasonable efforts to obtain reliable assurance that confidential treatment will be accorded the *Confidential Information*.

14.5 Co-operation

The *Parties* shall make any information required to be provided or communicated under the terms of this *Agreement* available to each other in a timely and co-operative manner.

14.6 Duration of Survival

The confidentiality provisions of this Article XV will continue and survive for a period of 6 years after the termination of this *Agreement*.

ARTICLE XV: DISPUTE RESOLUTION

15.1 Role of Asset Owners' Committee

All disputes shall first be submitted for resolution to the Asset Owners' Committee. Any dispute submitted for resolution to the Asset Owners' Committee which is not

resolved by the Asset Owners' Committee within five (5) Business Days following submission of the dispute to the Asset Owners' Committee and any disputes of the Asset Owners' Committee itself, shall be submitted to the designated corporate officer(s) of each *Party* for resolution by good faith negotiations.

15.2 Arbitration Notice

15.2.1 Failing resolution of the dispute by the corporate officers pursuant to Section 15.1 within twenty (20) *Business Days* following the first notice of submission of the dispute to them, the *Parties* may mutually agree to submit the dispute to final and binding arbitration to be conducted in Ontario or Michigan in accordance with this *Agreement* and the commercial Arbitration Rules of the American Arbitration Association. If both *Parties* are agreeable to submit the dispute to final and binding arbitration but cannot agree on the location, the *Parties* agree that the arbitration will be conducted in the State of New York.

15.2.2 The *Parties* shall meet within ten *Business Days* of agreeing to submit the dispute to arbitration, to attempt to agree on an arbitrator *Qualified* by experience, education and training to arbitrate the dispute. If the *Parties* fail to meet, or otherwise are unable to agree on the selection of a single arbitrator within those ten Business Days, each *Party* will select one arbitrator. The two arbitrators so selected shall, within ten Business Days following their selection, jointly appoint a third arbitrator to be the sole arbitrator, after which appointment the role of the first two arbitrators shall end. If the two arbitrators selected by the *Parties* are unable to agree on the selection of the third arbitrator within ten Business Days following their selection, those two arbitrators may apply to a court of competent jurisdiction to appoint the sole arbitrator within ten Business Days following the request. Each arbitrator must be qualified by education, training and experience to pass upon the particular matter to be decided and shall have no relationship, direct or indirect, with either of the *Parties*.

15.2.3 The arbitrator(s) will be instructed that time is of the essence in the arbitration proceeding. The arbitrator shall proceed as soon as is practicable to hear and determine the dispute, and shall be directed by the *Parties* to provide a written decision resolving the dispute within 60 days following his or her appointment or such other date as may be agreed in writing by the *Parties*. The *Parties* shall provide such assistance and information as may be reasonably necessary to enable the arbitrator to determine the dispute. Any decision of the arbitrator will be in writing and will be final and binding upon the *Parties*, with no right of appeal from it and subject to Section 15.4 below, shall deal with the question of costs of arbitration and all related matters.

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission

15.3 Performance During Dispute Resolution

While any dispute (other than a dispute that a *Party* has reasonable grounds for alleging is a fundamental breach of this *Agreement*) is being resolved, the *Parties* shall continue to perform all obligations under this *Agreement* with due diligence and continue to comply with all terms of this *Agreement* to preserve the integrity of the *Interconnection Facilities*.

15.4 Legal Costs of Dispute

Each *Party* shall be liable for all legal, expert and other costs incurred by it in resolving any dispute under this Article XV and the decision of the arbitrator relating to

costs shall deal only with the fees and expenses of the arbitrator(s).


IN WITNESS WHEREOF, the *Parties* hereto have caused this *Agreement* to be executed in duplicate attested by the signatures of their duly authorized officers, as of the day and year first written above.



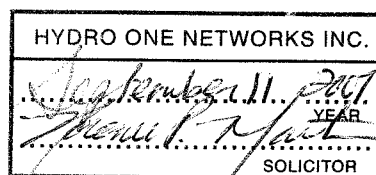
I have the authority to bind International Transmission Company

Joseph L. Welch
President and CEO




I have the authority to bind Hydro One Networks Inc.

Laura Formusa
President and CEO (Acting)



Interconnection Facilities Agreement between Hydro One Networks Inc. and ITCTransmission

IN WITNESS WHEREOF, the *Parties* hereto have caused this *Agreement* to be executed in duplicate attested by the signatures of their duly authorized officers, as of the day and year first written above.



A handwritten signature in black ink, appearing to read "Joseph L. Welch".

I have the authority to bind International Transmission Company

Joseph L. Welch
President and CEO



I have the authority to bind Hydro One Networks Inc.

Laura Formosa
President and CEO (Acting)

SCHEDULE "A" Brief Description of the Interconnection Facilities.

A1.0 General

ITC and Hydro One Networks are interconnected via four transmission circuits between Michigan and Ontario. The circuits are designated as follows:

L4D: Lambton – St. Clair Line,
L51D: Lambton – St. Clair Line,
B3N: Bunce Creek – Scott Line, and
J5D: Keith – Waterman Line.

Single line diagrams of the J5D and B3N Interconnection Facilities are shown in Figure A-1.

Single line diagrams of the L4D and L51D Interconnection Facilities are shown in Figure A-2.

Figure A-3 shows the ITC and Hydro One Networks symbol conventions used in the above figures.

Detailed technical characteristics of the Interconnection Facilities are contained in Schedule "G".

A2.0 Circuit L4D

A2.1 L4D Configuration

Circuit L4D is normally operated at 345 kV. The 4.71 km (2.94 miles) circuit is carried on a single circuit tower line between Lambton Switchyard in Ontario and St. Clair Switchyard in Michigan. About 4.0 km of this circuit is owned and maintained by Hydro One Networks and 0.71 km of this circuit is owned and maintained by ITC.

The St. Clair terminal is not equipped with a line disconnect switch, so an outage to the circuit requires the St. Clair Breakers DM and DF to be open.

The normal energizing direction for circuit L4D shall be from St. Clair.

A2.2 Autotransformers T7 and T8

Two in-line autotransformers (T7 and T8) rated at 346/225 kV, 600 MVA, owned and maintained by Hydro One Networks, are normally operated in parallel at Lambton Switchyard. Each transformer can provide voltage regulation in a range of $\pm 17.9\%$ (284 - 408 kV) via a 35 tap Under Load Tap Changer (ULTC). The

ULTC can be normally operated remotely from Hydro One Networks' *Transmission System Control Center*.

A2.3 Phase Angle Regulator PS4

An in-line *Phase Angle Regulator* (PS4) rated at 240/240 kV, 845 MVA is installed at Lambton Switchyard. Phase angle shifts of $\pm 47^\circ$ in 33 positions, 32 steps, can be done under load. PS4 is owned and maintained by Hydro One Networks and can be by-passed.

The *Phase Angle Regulator* can be normally operated remotely (in Manual Mode as of the *Effective Date* of this *Agreement*) from Hydro One Networks' *Transmission System Control Center*.

A3.0 Circuit L51D

A3.1 L51D Configuration

Circuit L51D is normally operated at 230 kV. The circuit is 6.24 km (3.88 miles) long and carried on a single circuit tower between Lambton Switchyard in Ontario and St. Clair Switchyard in Michigan. About 1.1 km of this circuit is owned and maintained by Hydro One Networks and 5.1 km is owned and maintained by ITC. There is a disconnect between L51D and transformer 351 at St. Clair.

The normal energizing direction for circuit L51D shall be from St. Clair.

A3.2 Autotransformer 351

An in-line autotransformer (351), owned and maintained by ITC, rated at 346/225 kV, 1000 MVA is installed at St. Clair Switchyard. Voltage regulation in a range of $\pm 17.9\%$ (284 - 408 kV) is provided by a 35 tap ULTC. The ULTC can be normally operated by remote control from ITC's *Transmission System Control Center*.

A3.3 Phase Angle Regulator PS51

An in-line *Phase Angle Regulator* (PS51) rated at 240/240 kV, 845 MVA is installed at Lambton Switchyard. Phase angle shifts of $\pm 47^\circ$ in 33 positions, 32 steps, can be done under load. PS51 is owned and maintained by Hydro One Networks and can be by-passed.

The *Phase Angle Regulator* can be normally operated remotely (in Manual Mode as of the *Effective Date* of this *Agreement*) from Hydro One Networks' *Transmission System Control Center*.

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC *Transmission*

A4.0 Circuit B3N

Mode as of the *Effective Date* of this Agreement) from Hydro One Networks' *Transmission System Control Center*

A4.1 B3N Configuration

Circuit B3N is normally operated at 230 kV and it runs 7.23 km (4.49 miles) from Scott TS in Ontario to Bunce Creek station in Michigan. For the first 2.82 km (1.75 miles) out from Scott TS, Circuit B3N is carried on the same double circuit tower as 230 kV Circuit N6S. About 2.8 km of this circuit is owned and maintained by Hydro One Networks and 3.1 km of this circuit is owned and maintained by ITC.

The normal energizing direction for circuit B3N shall be from Bunce Creek.

A4.2 Autotransformer (201)

An in-line autotransformer (201) owned and maintained by ITC, rated at 235.75/126 kV, 675 MVA is installed at Bunce Creek Station. Voltage regulation in a range of $\pm 10\%$ (212 - 259 kV) is provided by an Under Load Tap Changer (ULTC). The ULTC (8 steps in either direction) can be normally operated remotely from ITC's *Transmission System Control Center*.

A5.0 Circuit J5D

A5.1 J5D Configuration

Circuit J5D is normally operated at 230 kV and it is carried 2.7 km (1.68 miles) by a single circuit tower line from Keith TS, in Ontario to Waterman station in Michigan. About 1.9 km of this circuit is owned and maintained by Hydro One Networks and 0.8 km of this circuit is owned and maintained by ITC. The Waterman station switchyard is normally operated remotely from ITC's *Transmission System Control Center*.

The normal energizing direction for circuit J5D shall be from Waterman.

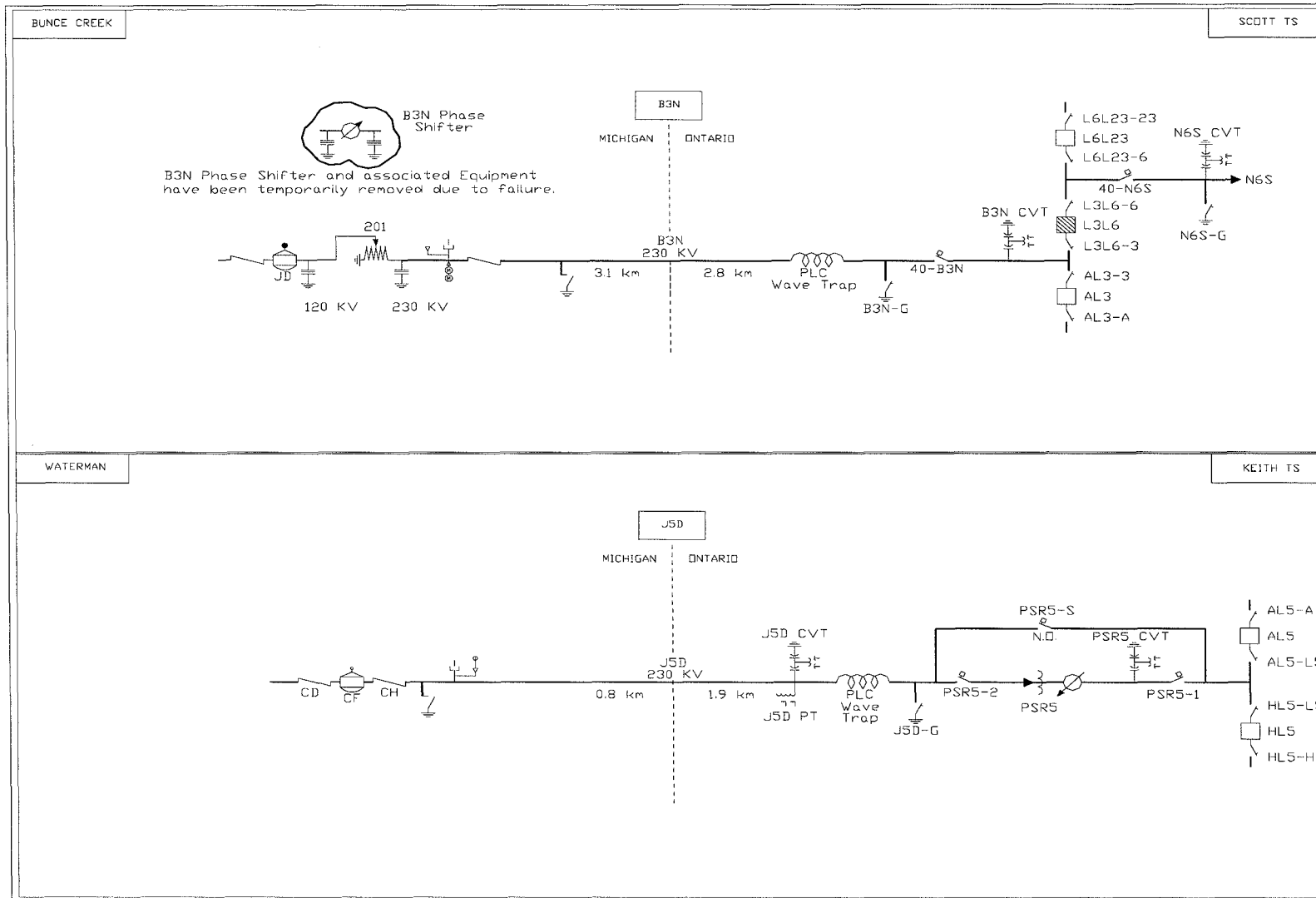
A5.2 Phase Angle Regulator (PSR5)

An in-line *Phase Angle Regulator* (PSR5) rated at 230/230 kV, 500 MVA is installed at Keith TS. Voltage regulation within a range of $\pm 10\%$ (207 – 253 kV) is provided by a 33 tap ULTC. Phase angle shifts of $\pm 31^\circ$ in 34 steps can be done under load around three fixed phase angle positions. The fixed phase angle positions (-10° , 0° , and $+10^\circ$) must be changed off load. PSR5 is owned and maintained by Hydro One Networks and can be by-passed.

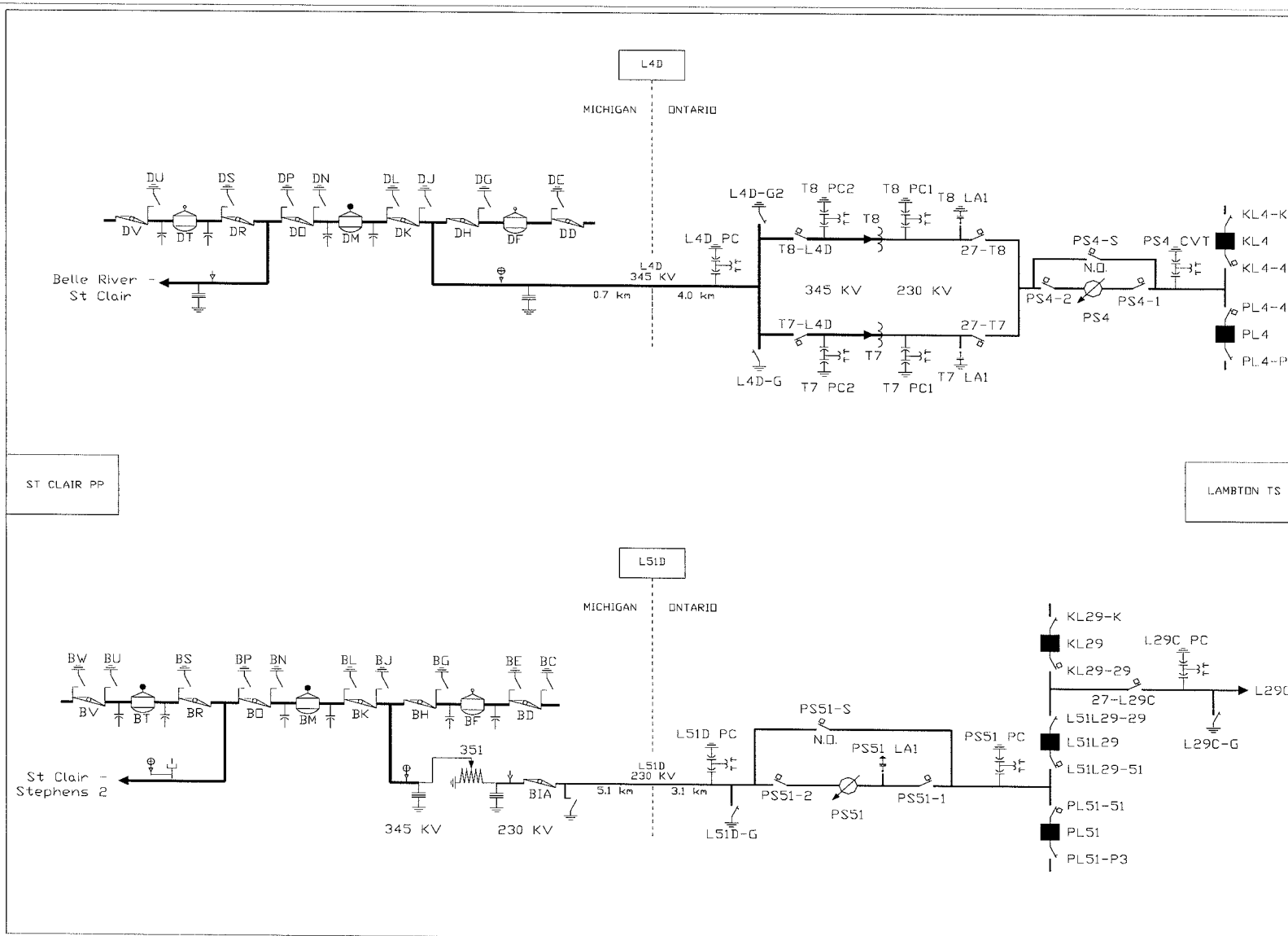
The ULTC for the transformer and the Phase Angle Regulator can be normally operated remotely (in Manual

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Figure A-1 J5D and B3N Interconnection Single Line Diagrams
(For illustrative purposes only; not to be used in operations)

Schedule "A" Release R0, dated September, 2007



(For illustrative purposes only; not to be used in operations)








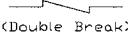







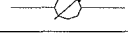

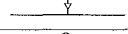










Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission

Figure A-3 ITC and Hydro One Networks Figure Symbols

(For illustrative purposes only; not to be used in operations)

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ITC	SYMBOL LEGEND	Hydro One
	Breaker - Air	
	Breaker - Oil	
	Breaker - SF6	
	Breaker - Air w/ Auto reclosing	
	Breaker - Air w/ Auto reclosing requiring voltage	
 (Double Break)	Switch - Disconnect, Motor Operated	
 (Double Break)	Switch - Disconnect, Manual, Gang Operated	
	Switch - Ground (Normally Open)	
	Capacitor Coupling Voltage Device	
	Transformer - Auto with ULTC	
	Transformer - Phase Shifting with ULTC	
	Transformer - Potential	
	Transformer - Potential with Metering	
	Transformer - Potential with Synchronizing source across one point	
	Transformer - Potential with Synchronizing source across more than one point	
	Reactor - Series (PLC Wave Trap)	
	Lightning Arrester	
	Single Unit Capacitor	

SCHEDULE "B" Cost Sharing for Extraordinary Maintenance and Repair

B1.1 List of Equipment

The following *Equipment* is subject to cost sharing in the case of *Extraordinary Maintenance* or *Repair*, or *End-of-Life replacement*.

<u>Interconnection</u>	<u>Equipment</u>	<u>Owner</u>
L4D	Autotransformers T7 and T8	Hydro One Networks
L4D	Phase angle regulator PS4	Hydro One Networks
L51D	Phase angle regulator PS51	Hydro One Networks
L51D	Autotransformer 351	ITC
B3N	Autotransformer 201	ITC
B3N	Phase angle regulator (Currently not in service as of the <i>Effective Date</i>)	ITC
J5D	Transformer / Phase Angle Regulator PSR5	Hydro One Networks

B1.2 Details of Work Subject to Cost Sharing and Exclusions

The attached Table B-1 describes the work that is subject to cost sharing and, where applicable, exclusions.

B1.3 Eligibility

To make *Equipment* in the above list eligible for cost sharing, it must have been in use under normal conditions, including regular under-load tap changing, where applicable, for at least one year.

B1.4 Regular Maintenance

The owner shall keep records of all commissioning logs, inspection checks, corrective and planned maintenance activities and agrees to provide copies to the other *Party* upon request.

Table B-1

Details of Work Subject to Cost Sharing and Exclusions as Appropriate

<u>Work</u>	<u>Shared Cost</u>	<u>Exclusions</u>
Repair of any internal transformer or phase shifter failure that requires the transformer or <i>Phase Angle Regulator</i> to be dismantled, transported to a repair facility, repaired, reassembled and re-commissioned for operation or storage.	Corrective work related to the failed components and co-lateral damage to the transformer or phase shifter arising from the failure.	Customary paint, gasket, protective device, pump, fan and tap changer maintenance work performed while at the repair facility. Premature maintenance costs for the transformer or phase shifter related to the above shall not be shared unless damaged by the failure that initiated the repair or during disassembly and transport to the repair facility.
Repair of any sub-component failure that requires the oil to be drained from the tank or tap changer compartment, including bushing failures, pump failures, internal lead failures, turret failures, major leaks	Any such action with the transformer or <i>Phase Angle Regulator</i> failure frequency exceeding four occurrences over the transformer or phase shifter life.	End-of-life disposal or oil maintenance.
Bushing replacement due to failure of the transformer or phase shifter.	Yes.	No.
Tapchanger diverter or selector switch. Replacement due to failures	Yes.	Overhauled diverter swaps for maintenance. Contact and/or spring replacements
Repair of oil leakage between main oil and under-load tapchanger compartments.	Yes.	No.
Installation of intensive-care monitoring (such as a transformer nursing unit, on-line Power Discharge monitoring) with the intent to monitor an observed defect to the main unit.	Yes	No.
Manufacturer supervision during transformer or <i>Phase Angle Regulator</i> , or sub-component thereof, disassembly/erection	If repair warranty is of one year or longer.	If owner chooses to have a warranty of less than one year.
Removals and re-assembly of enclosures/ walls/ support structures not directly attached to the transformer tank to permit transformer or <i>Phase Angle Regulator</i> handling.	No.	Excluded.
Legal action with respect to suing manufacturers or contractors for design defects or errors that cause damage to the equipment including contracting third party consultants with respect to the legal action.	Yes. Costs and claim awards shall be shared proportionally to the shared cost ratio for both <i>Parties</i> .	No.
Correction of other defects/deficiencies related to changes in the transformer or <i>Phase Angle Regulator</i> arising from de-ratings or changes in performance expectations (e.g. installation of new lightning arresters if they are required to	No.	Excluded.

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC *Transmission* Schedule "B" Release R0, dated September, 2007

<u>Work</u>	<u>Shared Cost</u>	<u>Exclusions</u>
provide increased overvoltage protection margin for a transformer that has had its lightning impulse level de-rated)		
Repair of damage or replacement of shared cost equipment and the associated control, monitoring and protective devices as a result of the breach of station security or vandalism.	No.	Excluded.
Failures resulting from unscheduled parallel flows of electric energy across the <i>Interconnection Facilities</i> .	Yes.	No.
<i>End of Life Replacement</i>	Yes.	No.

SCHEDULE "C": Contacts and Business Telephone Numbers

	Telephone	Facsimile
Hydro One		
OGCC Control Room (Controllers)	(866)384-4743 + Access Code (39623) + Prompts (Reason Code then 3-digit Station Code – Scott (626), Lambton (427), Keith (392))	(705) 792-6731
OGCC Control Room (On-shift Manager)	(705) 792-3210 NB: Manager can be reached using OGCC Control Room, Controller number	
OGCC Planning Office	(866) 3844743 + Access Code (39623) + Prompts (2# then 4#)	(705) 792-3147
Director Network Operating Division	(705) 792-3003	(705) 792-3012
Back Up Control Centre		
OGCC Control Room	Same as number above for OGCC Control Room (Controllers)	(416) 240-6563
OGCC Control Room (On-shift Manager)	Same as number above for OGCC Control Room (On-shift Manager)	(416) 240-6563
ITC		
Operations Control Room (OCR) East Transmission System Coordinator (Normal Hydro One Networks contact)	(734) 332-5109	
Operations Control Room (OCR) (Senior Transmission System Coordinator)	(734) 332-5107	(734) 332-5123
Operations-Outage Coordination	(248) 374-7181	(248) 374-7005
Director Real Time Operations	(734) 332-5141	(734) 665-3233
Back Up Control Room		
Operations Control Room (East Transmission System Coordinators)	Same as number above for OCR East Transmission System Coordinator	Same as above
Operations Control Room (Senior Transmission System Coordinator)	Same as number above for OCR Senior Transmission System Coordinator	Same as above

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SCHEDULE "D" Official Mailing Addresses for Legal and Corporate Notices

HYDRO ONE NETWORKS INC.

Secretary

483 Bay Street
North Tower, 15th Floor
Toronto, Ontario
M5G 2P5

Facsimile: (416) 345-6240

With a copy to:

General Counsel

483 Bay Street
North Tower, 15th Floor
Toronto, Ontario
M5G 2P5

Phone: (416) 345 - 6301

Facsimile: (416) 345-6240

E-mail: joe.agostino@HydroOne.com

INTERNATIONAL TRANSMISSION COMPANY

Vice President & General Counsel

39500 Orchard Hill Place, Suite 200
Novi, Michigan 48375

Phone: (248) 374-7100

Facsimile: (248) 374-7136

E-mail: general@itctransco.com

SCHEDULE "E": Communications, Operating Organizations and Evacuation Procedures

E1.0 Communications

Communications between Hydro One Networks and ITC related to the operation of the *Interconnections* must be consistent, efficient, and effective at all times.

Under normal operating conditions, communication shall be between the *Controlling Authorities / Operating Authorities* (as those terms are defined under Schedule "F").

The *Controlling Authority/Operating Authority* of the *Parties* shall confirm details of switching and work protection requirements.

Following any breaker operations of the *Interconnection Facilities*, the *Parties* shall *Promptly* establish direct communication between the *Controlling Authority* and the *Operating Authority*. When appropriate, reports shall include breaker operations and status, annunciations, voltage, frequency and out-of synchronism conditions, relay indications and interpretations of them.

The Hydro One *OGCC* Grid Operations Manager and the ITC Senior Transmission System Coordinator (TSC) will ensure that devices in their respective areas are in the position required and the final setup is described to the other utility.

E2.0 Operating Organizations and Evacuation Procedures

E2.1 Ontario

E2.1.1 The Independent Electricity System Operator (IESO)

The Shift Superintendent at the *IESO* System Control Centre is responsible for directing the reliable operation of the *IESO-Controlled Grid* in Ontario, of which the *Interconnection Facilities* located in Ontario are a part.

E2.1.2 Hydro One Networks OGCC

The OGCC is responsible for overseeing the operation and *Maintenance* of the *Transmission Facilities* of Hydro One Networks. The OGCC acts under the instructions of and the directions provided by the *IESO* for the integrated operation of the *IESO-Controlled Grid*.

The Grid Operations Manager at the OGCC may impose additional restrictions on the availability of Hydro One Networks' *Equipment* as part of their asset management

accountabilities, and act independently without prior *IESO* direction and approval in cases where there is potential for damage to Hydro One Networks' *Equipment* or harm to personnel, the public, or the environment.

The responsibilities of the OGCC controllers include monitoring *Equipment*, declaring availability of *Equipment* for service, operating control systems to perform physical operation of switchgear, directing field operators to perform switching operations, operating equipment independently or as directed under normal and disturbance conditions, all aspects of *Work Protection* work, and the issuance of *Work Permits*, *Supporting Guarantees*, and *Hold-Offs*.

E2.1.3 OGCC Evacuation

Should an evacuation of the OGCC be necessary, Hydro One Networks has provisions to transfer system operational control to its backup control centre at Richview. Hydro One Networks shall advise both the *IESO* and ITC of such a move and communications concerning schedule changes and transactions will be communicated, as per standard protocol, from the Hydro One Networks' back up control centre.

All relevant contacts and phone numbers are contained in Schedule "C". These numbers do not change in case of evacuation of the main OGCC.

E2.2 Michigan

E2.2.1 ITC Operations Control Room

ITC's Operations Control Room (OCR), is responsible for the operation of the ITC transmission system.

The Senior Transmission System Coordinator at the OCR is the designated *Operating Authority* responsible for monitoring ITC equipment loading and performance, preparation, and execution of switching procedures, operating the *Interconnections* independently or as directed under normal and disturbance conditions, issuing red tag protection and other transactions related to the operation of ITC assets.

The On-shift Senior Coordinator has ultimate operating authority to act independently in the absence of the corporate operations officer and during time-constrained emergency situations.

E2.2.2 OCR Evacuation

Should an evacuation of ITC's *OCR* be necessary, the ITC Senior Transmission System Coordinator will

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC*Transmission* Schedule "E" Release R0, dated September, 2007

transfer system operational control to its back-up system control facility. ITC shall advise the RTO and Hydro One Networks of such a move and communications concerning schedule changes and transactions will be communicated, as per standard protocol, from ITC's back up control centre.

All relevant contacts and phone numbers are contained in Schedule "C". These numbers do not change in case of evacuation of the main *OCR*.

SCHEDULE "F" Protection for Work and Terminology to be Used for Work Protection

F1.0 Terminology

ITC and Hydro One Networks use different terminology to describe the same concepts related to protection of work. The equivalent terminology for the two *Parties* is listed in Table F-1.

F1.1 When ITC requires *Isolation* from Hydro One Networks sources or *Isolation* of a device under Hydro One Networks control, ITC's *Operating Authority* shall request that Hydro One Networks provide a *Supporting Guarantee*. This request shall be made via normal operating channels.

F1.2 In the event that Hydro One Networks requires *Isolation* from ITC's sources or *Isolation* of a device under ITC's control, the Hydro One Networks *Controlling Authority* will request that ITC provide a *Red Tag Protection*. This request shall be made via normal operating channels.

F1.3 Official Applications for *Supporting Guarantees* and *Red Tag Protection* will be submitted, as soon as practical by the *Controlling Authority/ Operating Authority*, to their counterpart. These applications must identify any testing that could compromise the integrity of the *Isolation* guaranteed under the *Supporting Guarantee* or *Red Tag Protection*.

F1.4 Applications for *Supporting Guarantees* and *Red Tag Protection* shall identify requirements for *Isolation* or *Isolation* and grounding of specific *Equipment*, (i.e., *Work Protection*) and are distinct requests and approvals for *Equipment Outages*.

F1.5 The issuer of a *Supporting Guarantee* or *Red Tag Protection* must be the *Controlling Authority/Operating Authority* of at least one device of the *Equipment* being guaranteed.

F1.6 *Supporting Guarantees* and *Red Tag Protection* shall identify the nomenclature and the type of device(s) guaranteed by the *Supporting Guarantee* or *Red Tag Protection*.

F1.7 *Supporting Guarantees* and *Red Tag Protection* may be communicated orally or in writing

F1.8

F1.9 *Supporting Guarantees* and *Red Tag Protection* shall be logged or otherwise documented by the *Controlling Authority/Operating Authority* issuing the

Supporting Guarantees or *Red Tag Protection* and by the *Controlling Authority/Operating Authority* that receives the *Supporting Guarantees* or *Red Tag Protection*.

F1.10 To provide a guarantee of *Isolation*, appropriate equipment shall be made mechanically and electrically inoperative, and have appropriate tags applied.

F1.11 Where the integrity of the *Isolation* guaranteed under the *Supporting Guarantees* or *Red Tag Protection* can no longer be maintained by the issuer of the *Supporting Guarantees* or *Red Tag Protection*, immediate notification to the *Party* which received the *Supporting Guarantees* or *Red Tag Protection* must be made.

F1.12 At all times before performing the operations described in this *Agreement* the necessary safety procedures relative to this type of equipment shall be carried out by each *Party*.

F1.13 Hold-Off

F1.13.1 Hydro One Networks definition of *Hold-Off*. The purpose of the buff coloured *Hold-Off* tag is to restrict the operation of a device to previously agreed limits, except with the Holder's consent. *Hold-Offs* are most commonly used to block the auto reclosing and the manual re-energization of a line following an automatic trip. *Hold-Offs* shall never be used in place of a *Work Permit*.

F1.13.2 A *Hold-Off/Reclosing Removed* is frequently required to limit re-energization of electrical lines or apparatus after an automatic outage during the course of work. In such circumstances, the following procedure must be followed:

- (a) The *Controlling Authority/Operating Authority* must block all automatic reclosing facilities associated with the apparatus, or ensure the apparatus will not be re-energized manually while the *Hold-Off/Reclosing Removed* is in effect.
- (b) When the *Hold-Off/Reclosing Removed* is in effect, the apparatus covered by the *Hold-Off* must not be re-energized after an automatic trip until communication is established with the *Controlling Authority/ Operating Authority*. Each authority will have the responsibility of contacting the Holder to obtain the necessary consent to re-energize the circuit.

F1.13.4 With a *Hold-Off / Reclosing Removed* in effect, operation of the apparatus or control device beyond

previously agreed limits is prohibited, except with the Holder(s) of the *Hold-Off / Reclosing Removed* consent.

F1.13.5 During the course of a *Hold-Off/Reclosing Removed* each *Party* shall:

- (a) Identify (tag or symbol) the devices restricted under the *Hold-Off/Reclosing Removed*, in accordance with a documented procedure, that all reclosing facilities under their control associated with the *Interconnection Facility* have been disabled and will remain disabled during the course of the *Hold-Off/Reclosing Removed*.
- (b) Provide at the time of issuance the status of all relaying and the terminal equipment, at the request of the applicant.
- (c) Advise the Holder of the *Hold-Off/Reclosing Removed* of any change in status of the protective equipment that may degrade the reliability of the *Hold-Off/Reclosing Removed*.

Table F-1. Terminology used by ITC and Hydro One Networks

ITC	Hydro One Networks
<p>Operating Authority</p> <p>Agents responsible for the operation of the ITC <i>Transmission System</i>. To include but not limited to the following:</p> <ul style="list-style-type: none"> a. Authorizing changes in the conditions or physical position of Equipment, b. forcing Equipment out of service, c. De-rating Equipment, d. Applying Equipment limitations, e. Issuing Operating Orders, g. Providing Protective tagging; and <p>Establishing the appropriate conditions for and the coordination or switching on the Equipment under its control.</p>	<p>Controlling Authority</p> <p>Controls specific <i>Equipment</i> and devices. This includes the responsibility for performing, directing or authorizing changes in the condition or in the position of the <i>Equipment</i> or devices. Additional responsibilities include:</p> <ul style="list-style-type: none"> (i) forcing <i>Equipment</i> out of service, (ii) de-rating <i>Equipment</i>, (iii) applying <i>Equipment</i> limitations, (iv) issuing <i>Operating Orders</i>, (v) approving the establishment of conditions necessary for <i>Work Permits</i> and <i>Supporting Guarantees</i> on their Equipment; and (vi) establishing the appropriate conditions for and the coordination of switching on the <i>Equipment</i> under its control.
<p>Reclosing Removed</p> <p>Removing the automatic reclosing capability of electrical apparatus to limit re-energization of electrical lines or apparatus. Under no circumstances shall this term be understood to provide protection against electrical hazards</p>	<p>Hold-Off</p> <p>The buff coloured <i>Hold-Off</i> tag is used to restrict the operation of a device to previously agreed to limits, except with the <i>Holder's</i> consent. <i>Hold-Offs</i> are most commonly used to block the auto reclosing and the manual re-energization of a line following an automatic trip.</p> <p>Never use the <i>Hold-Off</i> procedure in place of a <i>Work Permit</i>.</p>
<p>Protection Leader</p> <p>The Protection Leader, in conjunction with the Transmission System Coordinator (TSC), must make application for protection, accepting the protection, supervise the work, maintain a record of all crew members, being present at all times work is in progress, request permission for extension of time if the work is running late, make notifications of change of emergency clearance time, and clearing of protection.</p>	<p>Holder</p> <p>The <i>Holder</i> is the person who has accepted the <i>Work Permit</i> or <i>Supporting Guarantee</i> and therefore has attained working and/or testing rights for the work group.</p> <p>The <i>Holder</i> is assigned responsibilities for ensuring that everyone in the work group is protected from the viewpoint of the Utility Work Protection Code.</p>
<p>Isolated</p> <p>ITC would assume that all normal sources of potential are disconnected. Disconnect switches open-isolated are not protected.</p>	<p>Isolated</p> <p>Equipment is <i>Isolated</i> when it is separated from all sources of dynamic energy. Typically, equipment is isolated by using devices such as valves or electrical switches.</p>
<p>Ground (Ground switches closed)</p> <p>Removes a residual or induced charge from Equipment after it is de-energized through a connection to an effective ground potential.</p>	<p>De-Energized</p> <p><i>Equipment</i> has been <i>De-energized</i> when the electrical or mechanical hazards associated with it have been removed.</p> <ul style="list-style-type: none"> • Electrical equipment has been <i>De-energized</i> when its electrical energy has been discharged through connection to an effective ground potential. • Mechanical equipment has been <i>De-energized</i> when hazards due to temperature, pressure, chemical substances,

Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission Schedule "F" Release R0, dated September 2007

ITC	Hydro One Networks
	gases and motion have been minimized or, where practical, eliminated by such measures as: <ul style="list-style-type: none"> • operation of valves, gates and dampers, • opening pipes or equipment to the atmosphere, • purging, ventilating, or cooling, and • applying brakes and blocking.
Ready for current	Available for service
Equipment is in a ready state prior to being energized	
Line Normal	In service
All breakers open	Out of service or Off potential
Breaker(s) open, one terminal	Off load or On potential
Red Tag Protection	Supporting Guarantee
A Protective Transaction between the Operating Authority and qualified <i>Protection Leaders</i> and their crews to work safely on electrical system Equipment.	A <i>Supporting Guarantee</i> is a guarantee issued in support of a Work Permit(s) and/or another <i>Supporting Guarantee(s)</i> . It certifies that an <i>Isolated</i> or <i>Isolated and De-energized</i> condition exists at points under the control of the Issuer of the <i>Supporting Guarantee</i> .
Give Protection	
The <i>Protection</i> is provided to the <i>Protection Leader</i> to begin work	
Protection Release	Surrender
The clearing of Red Tag Protection.	Surrender is the relinquishing of guaranteed conditions by a <i>Holder</i> of a <i>Work Permit</i> or a <i>Supporting Guarantee</i> .
	Work Permit
	A <i>Work Permit</i> is a written guarantee that an <i>Isolated</i> , or <i>Isolated and De-energized</i> condition has been established for work, and will continue to exist, except for authorized tests.
Protection	Work Protection
Protective measures will be instituted that insure the work may be done safely. These protective measures consist of providing adequate breaks in sources of potential to the equipment, or providing adequate breaks in control circuits where the operation of the equipment would constitute a hazard. Protection against adjacent hazards is provided by opening and tagging all sources of potential to the equipment that constitute a hazard or by installing safety barriers. In certain cases, the protective measure might be to ensure that an air, gas, or hydraulic valve will not be operated.	Defined as the short form term for the Utility Work Protection Code which governs the establishment, issuance and surrender of working rights on electrical equipment under the control of a <i>Controlling Authority</i> .
Relays	Protections
Equipment designed to detect and isolate failed or faulted elements.	Equipment designed to detect and isolate failed or faulted elements.

SCHEDULE "G" Technical Characteristics of Interconnection Facilities (Line, Transformer, and Phase Angle Regulator Ratings and Description of Protection Systems)

G1.0 Ratings for Interconnection Facilities

The ratings for the *Interconnection Facilities* that are described in Schedule "A" are contained in Tables G-1 through G-4.

G2.0 Protective Relaying for the Lambton Switchyard to St Clair 345 kV, L4D Interconnection

G2.1 LAMBTON TERMINAL – L4D LINE

Following is the list of protections associated with this *Interconnection*.

- Group "A" line protection using a Schweitzer SEL-321 relay with phase and ground Zone 1 DUR/TT, DOR/TT/DB and Group "B" line protection using GE SLY relays with phase and ground Zone 1 DUR/TT, DOR/TT/DB Communication is via PLC between Lambton TS and St. Clair CTS.
- Lambton 230 kV bus protection
- T7 and T8 transformer protection
- *Phase Angle Regulator* differential protection
- Breaker Failure protection
- Lambton generation rejection Scheme
- Automatic reclosing.
- High Resistance Ground fault and Open Phase (HIROP)
- Line Test Protection

Detailed information regarding the above protection functions have been provided in a separate Hydro One document called "ITC-HONI Interconnection Protection System Description".

G2.2 ST. CLAIR TERMINAL – L4D LINE

Following is a list of protection and associated control for this *Interconnection*.

- Group "A" line protection
- Group "B" line protection
- Breaker Failure protection
- Automatic reclosing.

Detailed information regarding these items can be obtained by contacting the Relay Engineering group of ITC.

G3.0 Protective Relaying for the Lambton Switchyard to St. Clair 230 kV, L51D Interconnection

G3.1 LAMBTON TERMINAL – L51D LINE

Following is the list of protections associated with this *Interconnection*.

- Group "A" line protection using a Schweitzer SEL-321 relay with phase and ground Zone 1 DUR/TT, Zone 2 DOR/TT/P, and Zone 3 DOR/T Group "B" line protection using a ABB REL521 relay with phase and ground Zone 1 DUR/TT, Zone 2 DOR/TT/P, and Zone 3 DOR/T. Communication is via PLC between Lambton TS and St. Clair CTS.
- Lambton 230 kV bus protection
- Phase Angle Regulator differential protection
- Breaker Failure protection
- Lambton generation rejection Scheme
- Automatic reclosing.
- High Resistance Ground fault and Open Phase (HIROP)
- Line Test Protection

Detailed information regarding the above protection functions have been provided in a separate Hydro One document called "ITC-HONI Interconnection Protection System Description".

G3.2 ST CLAIR TERMINAL – L51D

Following is a list of protection and associated control for this *Interconnection*.

- Group "A" line protection
- Group "B" line protection
- Transformer 351 protection
- Breaker Failure protection
- Automatic reclosing.

Detailed information regarding these items can be obtained by contacting the Relay Engineering group of ITC.

G4.0 Protective Relaying for the Bunce Creek to Sarnia Scott TS 230 kV, B3N Interconnection

G4.1 SARNIA SCOTT TERMINAL - B3N LINE

Following is a list of protections associated with this *Interconnection*.

- Group "A" line protection using a GE D60 relay with phase and ground Zone 1 DUR/TT, DOR/TT/DB and Group "B" line protection using a Schweitzer SEL-321 relay with phase and ground Zone 1 DUR/TT, DOR/TT/DB Communication is via PLC between Sarnia Scott TS and Bunce Creek CTS
- Breaker Failure protection

- Automatic reclosing.
- High Resistance Ground fault and Open Phase (HIROP)
- Line Test Protection

Detailed information regarding the above protection functions have been provided in a separate Hydro One document called "ITC-HONI Interconnection Protection System Description".

G4.2 BUNCE CREEK TERMINAL – B3N LINE

Following is a list of protection and associated control for this *Interconnection*.

- Group "A" line protection
- Group "B" line protection
- Transformer 201 protection
- Breaker Failure protection
- Automatic reclosing.

Detailed information regarding these items can be obtained by contacting the Relay Engineering group of ITC.

G5.0 Protective Relaying for the Keith – Waterman 230 kv, J5D Interconnection

G5.1 WATERMAN TERMINAL - J5D LINE

Following is a list of protection and associated control for this *Interconnection*.

- Group "A" line protection

- Group "B" line protection
- Breaker Failure protection
- Automatic reclosing.

Detailed information regarding these items can be obtained by contacting the Relay Engineering group of ITC.

G5.2 KEITH TERMINAL - J5D LINE

Following is the list of protections associated with this *Interconnection*.

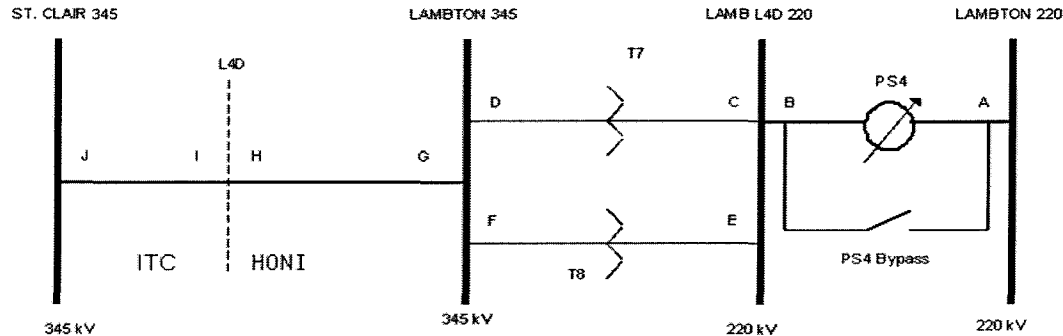
- Group "A" line protection using a Schweitzer SEL-321 relay with phase and ground Zone 1 DUR/TT, DOR/TT/DB and Group "B" line protection using a GE D60 relay with phase and ground Zone 1 DUR/TT, DOR/TT/DB Communication is via PLC between Keith TS and Waterman CTS
- Breaker Failure protection
- Automatic reclosing.
- High Resistance Ground fault and Open Phase (HIROP)
- Line Test Protection
- L5 Bus protection: Differential voltage and current protection. Timed ground over-current protection.
- Phase Angle Regulator differential protection

Detailed information regarding the above protection functions have been provided in a separate Hydro One document called "ITC-HONI Interconnection Protection System Description."

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Table G-1
Ratings for L4D (MVA/Amps)

L4D Representation



Tie Ratings for L4D components owned by ITC (Section I to J)

Section I to J				Summer Rating in effect April 1 through October 31 Winter Ratings in effect November 1 through March 31 * Parentheses () indicate the open breaker rating
Normal Ratings		Emergency Ratings		
Summer	Winter	Summer	Winter	
1950 Amps	2400 Amps (2200Amps)*	2953 Amps (2840 Amps)*	3000 Amps	
1165 MVA	1434 MVA (1315 MVA)*	1765 MVA (1697 MVA)*	1793 MVA	

* Parentheses () indicate the open breaker rating

Tie Ratings for L4D components owned by HONI (Based on 0-4km/h wind speed)

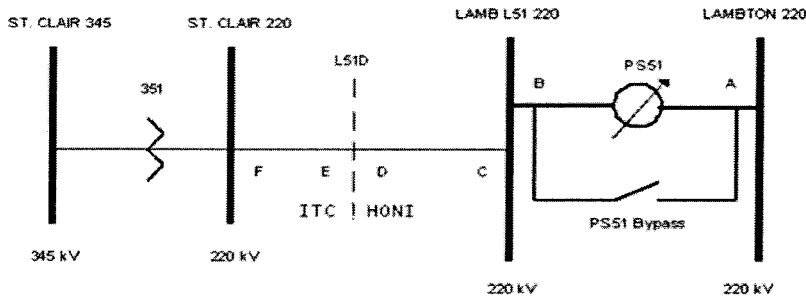
Temp (°C)	Continuous Ratings (Notes 1 and 8)					24 Hour LIE Ratings (Notes 1 and 8)					15 Minute STE Ratings (Notes 1 and 8)				
	PS4 (2)	PS4 Bypass (3)	L4D cct (4)	T7 (5)	T8 (6)	PS4 (2)	PS4 Bypass (3)	L4D cct (4)	T7 (5)	T8 (6)	PS4 (2)	PS4 Bypass (3)	L4D cct (4)	T7 (5)	T8 (6)
	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA
-10	2016	3834	2462	2046	1957	2016	3834	2462	2046	1957	2791	5983	3047	2987	2987
(14)	845	1607	1471	858	820	845	1607	1471	858	820	1170	2508	1821	1252	1252
-5	2016	3740	2427	1990	1903	2016	3740	2427	1990	1903	2791	5793	2992	2987	2983
(23)	845	1568	1450	834	798	845	1568	1450	834	798	1170	2428	1788	1252	1250
0	2016	3645	2391	1932	1847	2016	3645	2391	1932	1847	2791	5598	2941	2987	2934
(32)	845	1528	1429	810	774	845	1528	1429	810	774	1170	2346	1757	1252	1230
5	2016	3547	2353	1877	1795	2016	3547	2353	1877	1795	2791	5398	2903	2987	2882
(41)	845	1487	1406	787	752	845	1487	1406	787	752	1170	2263	1735	1252	1208
10	2016	3448	2305	1821	1741	2016	3448	2305	1821	1741	2791	5191	2858	2987	2831
(50)	845	1445	1377	763	730	845	1445	1377	763	730	1170	2176	1708	1252	1187
15	2016	3347	2255	1765	1688	2016	3347	2255	1765	1688	2791	4977	2788	2987	2779
(59)	845	1403	1347	740	708	845	1403	1347	740	708	1170	2086	1666	1252	1165
20	2016	3242	2204	1707	1634	2016	3242	2204	1707	1634	2791	4756	2728	2935	2725
(68)	845	1359	1317	715	685	845	1359	1317	715	685	1170	1994	1630	1230	1142
25	2016	3134	2152	1649	1580	2016	3134	2152	1649	1580	2791	4526	2665	2880	2671
(77)	845	1314	1286	691	662	845	1314	1286	691	662	1170	1897	1592	1207	1120
30	2016	3023	2098	1590	1540	2016	3023	2098	1590	1540	2791	4286	2577	2826	2617
(86)	845	1267	1254	666	646	845	1267	1254	666	646	1170	1797	1540	1185	1097
35	2016	2910	1988	1540	1540	2016	2910	1988	1540	1540	2791	4036	2381	2770	2561
(95)	845	1220	1188	646	646	845	1220	1188	646	646	1170	1692	1423	1161	1073

- (1): MVA ratings based on operating voltage of 242 kV for 220 kV system and 345 kV for the 345 kV system.
- (2): Limit represents most limiting series component of section A to B thru the phase shifter PS4.
- (3): Limit represents most limiting series component of section A to B thru the phase shifter bypass circuit.
- (4): Limit represents most limiting series component of L4D circuit owned by HONI (section G to H).
- (5): Limit represents most limiting series component of section C to D thru the transformer T7 on neutral tap.
- (6): Limit represents most limiting series component of section E to F thru the transformer T8 on neutral tap.
- (7): In real time, the ratings for Ontario facilities are derived on the basis of actual weather information.
- (8): 15 Minute STE ratings are based on 80% pre-load.

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Table G-2
Ratings for, L51D (MVA/Amps)

L51D Representation



Tie Ratings for L51D components owned by ITC (Section E to F and Transformer 351)

Transformer 351				Summer Rating in effect April 1 through October 31 Winter Ratings in effect November 1 through March 31 * The high side winding for Transformer 351 is rated at 346 kV, which is the basis for the Amp calculations
Normal Ratings		Emergency Ratings		
Summer	Winter	Summer	Winter	
1669 Amps*	1669 Amps*	2169 Amps*	2169 Amps*	
1000 MVA	1000 MVA	1300 MVA	1300 MVA	
Section E to F				Breaker status does not affect the rating of the line
Normal Ratings		Emergency Ratings		
Summer	Winter	Summer	Winter	
2900 Amps	3300 Amps	3350 Amps	3680 Amps	
1105 MVA	1257 MVA	1276 MVA	1402 MVA	

Tie Ratings for L51D components owned by HONI (Based on 0-4km/h wind speed)

Temp (°C)	Continuous Ratings (Notes 1 and 6)			24 Hour LIE Ratings (Notes 1 and 6)			15 Minute STE Ratings (Notes 1 and 6)		
	PSS1 (2)	PSS1 Bypass (3)	L51D cct (4)	PSS1 (2)	PSS1 Bypass (3)	L51D cct (4)	PSS1 (2)	PSS1 Bypass (3)	L51D cct (4)
	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA	MVA
-10	2016	3834	3795	2016	3834	3795	2791	5983	4647
(14)	845	1607	1591	845	1607	1591	1170	2508	1948
-5	2016	3740	3698	2016	3740	3698	2791	5793	4524
(23)	845	1568	1550	845	1568	1550	1170	2428	1896
0	2016	3645	3595	2016	3645	3595	2791	5598	4357
(32)	845	1528	1507	845	1528	1507	1170	2346	1826
5	2016	3547	3490	2016	3547	3490	2791	5398	4222
(41)	845	1487	1463	845	1487	1463	1170	2263	1770
10	2016	3448	3379	2016	3448	3379	2791	5191	4079
(50)	845	1445	1416	845	1445	1416	1170	2176	1710
15	2016	3347	3261	2016	3347	3261	2791	4977	3927
(59)	845	1403	1367	845	1403	1367	1170	2086	1646
20	2016	3242	3139	2016	3242	3139	2791	4756	3765
(68)	845	1359	1316	845	1359	1316	1170	1994	1578
25	2016	3134	3007	2016	3134	3007	2791	4526	3592
(77)	845	1314	1260	845	1314	1260	1170	1897	1506
30	2016	3023	2869	2016	3023	2869	2791	4286	3423
(86)	845	1267	1203	845	1267	1203	1170	1797	1435
35	2016	2910	2722	2016	2910	2722	2791	4036	3240
(95)	845	1220	1141	845	1220	1141	1170	1692	1358

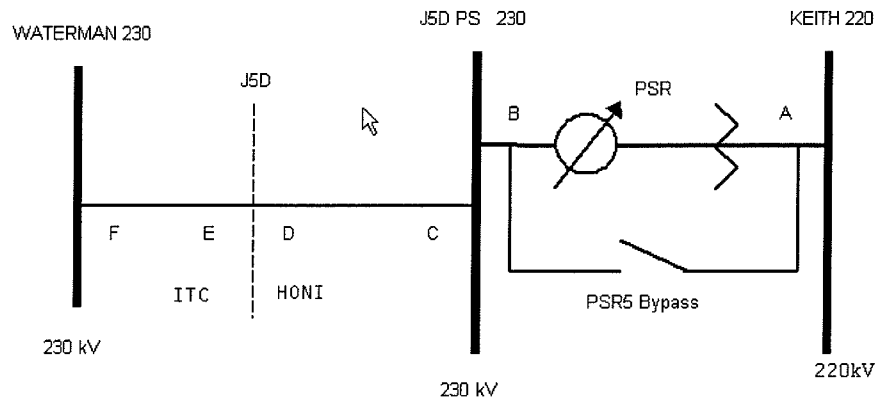
- (1): MVA ratings based on operating voltage of 242 kV for 220 kV system and 345 kV for the 345 kV system.
- (2): Limit represents most limiting series component of section A to B thru the phase shifter PSS1.
- (3): Limit represents most limiting series component of section A to B thru the phase shifter bypass circuit.
- (4): Limit represents most limiting series component of L51D circuit owned by HONI. (section C to D).
- (5): In real time, the ratings for Ontario facilities are derived on the basis of actual weather information.
- (6): 15 minutes STE ratings are based on 80% pre-load.

**Table G-3 –
Ratings
(MVA/Amps)**

for

J5D

J5D Representation



Tie Ratings for J5D components owned by ITC (Section E to F)

Section E to F				Summer Rating in effect April 1 through October 31 Winter Ratings in effect November 1 through March 31
Normal Ratings		Emergency Ratings		
Summer	Winter	Summer	Winter	
1305 Amps	1437 Amps	1305 Amps	1437 Amps	
520 MVA	572 MVA	520 MVA	572 MVA	

Tie Ratings for J5D components owned by HONI (Based on 0-4km/h wind speed)

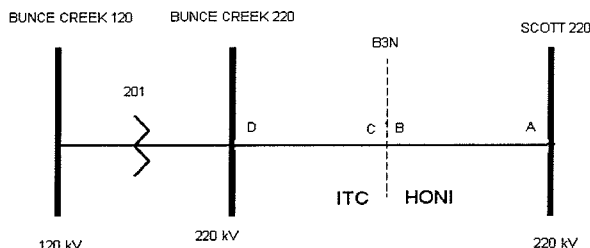
Temperature (°C)	Continuous Ratings (Notes 1 and 5)		24 Hour LIE Ratings (Notes 1 and 5)		15 Minute STE Ratings (Notes 1 and 5)	
	PSR5 (2)	J5D (3)	PSR5 (2)	J5D (3)	PSR5 (2)	J5D (3)
	Amps ----	Amps ----	Amps ----	Amps ----	Amps ----	Amps ----
	MVA	MVA	MVA	MVA	MVA	MVA
-10 (14)	1884 751	1208 481	1884 751	1208 481	2432 969	1366 544
-5 (23)	1835 731	1191 474	1835 731	1191 474	2432 969	1343 535
0 (32)	1785 711	1176 468	1785 711	1176 468	2432 969	1320 526
5 (41)	1738 692	1157 461	1738 692	1157 461	2432 969	1301 518
10 (50)	1689 673	1139 454	1689 673	1139 454	2432 969	1277 509
15 (59)	1640 653	1121 447	1640 653	1121 447	2335 930	1257 501
20 (68)	1591 634	1103 439	1591 634	1103 439	2199 876	1232 491
25 (77)	1542 614	1084 432	1542 614	1084 432	2056 819	1210 482
30 (86)	1490 594	1064 424	1490 594	1064 424	1900 757	1188 473
35 (95)	1442 574	1043 416	1442 574	1043 416	1730 689	1161 463

- (1): MVA ratings based on operating voltage of 230 kV for 220 kV system.
- (2): Limit represents most limiting series component of section A to B thru the phase shifter PSR5.
- (3): Limit represents most limiting series component of J5D circuit owned by HONI. (section C to D).
- (4): In real time, the ratings for Ontario facilities are derived on the basis of actual weather information.
- (5): 15 Minute STE ratings are based on 80% pre-load.

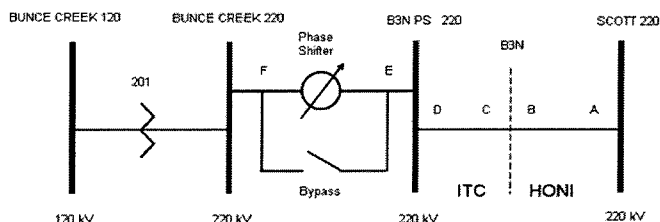
Interconnection Facilities Agreement between Hydro One Networks Inc. and ITC Transmission Schedule "G" Release R0, dated September, 2007

Table G-4
Ratings for B3N (MVA/Amps) - Based on 0 – 4 km / hour Wind Speed

B3N Representation
Present Configuration



B3N Representation
Future Configuration



Tie Ratings for B3N components owned by ITC (Section C to D, Phase Shifter B3N and Transformer 201)

Transformer 201 (120kV)				Summer Rating in effect April 1 through October 31 Winter Ratings in effect November 1 through March 31 * Amps are calculated on a 120 kV base. Ratings listed are for the equipment associated with the transformer as they are lower than the actual transformer rating.
Normal Ratings		Emergency Ratings		
Summer	Winter	Summer	Winter	
3080 Amps*	3428 Amps*	3300 Amps*	3480 Amps*	
640 MVA	712 MVA	686 MVA	723 MVA	
Phase Shifter B3N				
Phase Shifter B3N and associated equipment are out of service. A PAR has been ordered. The target in-service is 2008				
Section C to D (220kV)				
Normal Ratings		Emergency Ratings (used as both the LTE & STE)		
Summer	Winter	Summer	Winter	
1320 Amps	1500 Amps	1505 Amps	1660 Amps	
503 MVA	572 MVA	573 MVA	633 MVA	

Tie Ratings for B3N components owned by Hydro One Networks Inc., HONI (Based on 0-4km/h wind speed)

Temp (°C)	Continuous Ratings (Notes 1 and 2)	24 Hour LTE Ratings (Notes 1 and 2)	15 Minute STE Ratings (Notes 1, 2 and 3)
	B3N (A-B) (4)	B3N (A-B) (4)	B3N (A-B) (4)
	Amps	Amps	Amps
	MVA	MVA	MVA
-10 (14)	1386 576	1386 576	1575 655
-5 (23)	1367 568	1367 568	1548 643
0 (32)	1348 560	1348 560	1526 634
5 (41)	1328 552	1328 552	1500 624
10 (50)	1308 544	1308 544	1479 615
15 (59)	1287 535	1287 535	1449 602
20 (68)	1266 526	1266 526	1424 592
25 (77)	1244 517	1244 517	1398 581
30 (86)	1221 508	1221 508	1368 569
35 (95)	1198 498	1198 498	1338 556

- (1): MVA ratings are based on an operating voltage of 240 kV for the 220 kV system.
(2): In real time, the ratings for Ontario facilities are derived on the basis of actual weather information.
For advance planning, 10°C values are used as Winter ratings and 35°C values are used as Summer ratings to align with ITC.
(3): 15 Minute STE ratings are based on 80% pre-load.
(4): Limit represents most limiting series component of B3N circuit owned by HONI, (section A to B).

SCHEDULE "H" Outage Coordination Process

ITC and Hydro One Networks have established the following reporting and scheduling obligations for outage coordination.

Applications to ITC:

1. Hydro One Networks will e-mail the spreadsheet of 6-month outage summary to ITC Outage Coordination every Thursday. This is only for information purposes.
2. Hydro One Networks – Operating Planning processes outage and contacts ITC Outage Coordination by phone to confirm and discuss outage availability (minimum 15 - business days notice).
2. Hydro One Networks – Operating Planning completes outage slip.
3. ITC Outage Coordination provides notification to Hydro One Networks – Operating Planning if the outage is denied.

Applications to Hydro One:

1. ITC Outage Coordination contacts Hydro One Networks – Operating Planning by phone to confirm the outage request and discuss outage availability (minimum 15-business days notice).
2. Hydro One Networks – Operating Planning receives ITC outage application via phone and completes outage slip
3. Hydro One Networks – Operating Planning provides notification to ITC Outage Coordination if the outage is denied.

SCHEDULE "I": Operating Principles for the Phase Angle Regulators

For the purposes of this Schedule "I" and the PAR SOP, the following terms shall have the following meanings:

"Flow" means the sum of all metered readings on the *Interconnections* including a net predominant direction (either towards Michigan or towards Ontario);

"Schedule" means the sum total of all approved NERC e-tags that are scheduled across the IESO-ITC interface, plus any untagged emergency transactions that are agreed upon by MISO and IESO, including a net predominant direction (either towards Michigan or towards Ontario). The periodicity used in performing the flow calculation (e.g., real time, 5 minute integration, anticipated, etc.) will be identified in the PAR SOP; and

"Target Setting" shall mean the Ontario - Michigan Net Schedule +/- the requested offset that achieves the desired corrective action.

1. Phase Angle Regulators shall be operated primarily to control power flow circulating through the electrical systems of the *Parties* while protecting the *Parties'* respective transmission facilities. 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 relief of reliability constraints in Michigan or Ontario affecting the use of transmission facilities of the *Parties*;
 - c. the facilitation of scheduled transfers of electric power and energy between Ontario and Michigan; and
 - d. the facilitation of scheduled transfers of electric power and energy between Ontario, Michigan and third party systems.
2. In the absence of the need for corrective action to achieve the objectives set forth in Section 1, the Base Control Strategy shall be employed. When there is a need for corrective action, deviations from the Base Control Strategy shall be limited to the amount of phase angle adjustment required to achieve the objectives set forth in Section 1 above. The Base Control Strategy is the requirement that the Phase Angle Regulator taps shall be set to control power flow on the Ontario-Michigan Interface so that *Flow* equals *Schedule*.

- (a) An operating "Dead Band" shall be established in order to preserve the life expectancy of the Phase

Angle Regulators by avoiding an excessive number of tap changes and to gain an operating familiarity with the effect of the size of the Dead Band. The initial Dead Band for the total interface shall be +/-300 MW around the *Schedule*. The *Parties* shall coordinate in good faith to narrow the Dead Band in 50 MW increments.

- (b) Deviations from the Base Control Strategy may be requested at any time by:

- (i) Hydro One Networks in response to a request from the IESO to support the objectives established in Section 1 a. and b.;
or
- (ii) ITC to support the objectives established in Section 1;

so long as the deviations from the Base Control Strategy are limited to the amount of phase angle adjustment required to achieve the objectives set forth in Section 1 above. Such requests shall be honored unless the requested change:

- (A) creates reliability problems on the transmission systems in Ontario or Michigan; or
- (B) interferes with scheduled transmission services in Ontario or firm transmission service in Michigan.

3. Upon mutual agreement of the *Parties*, in writing, the Base Control Strategy established in Section 2 shall be revised, as necessary, to accommodate changes in transmission or transaction scheduling arrangements.
4. If emergency conditions are declared in both Ontario and Michigan, tap positions for the Phase Angle Regulators shall be set in accordance with the following criteria in descending order of priority:
 - a. first, to minimize the interruption of customer load in Ontario or customer load in Michigan; and
 - b. second, to minimize the interruption or curtailment of scheduled transmission services in Ontario or in Michigan, on a scheduled MW basis.
5. The voltage-regulating autotransformers installed in the J5D, L4D, L51D and B3N interconnections shall normally be controlled and operated to minimize the exchange of VARS over these interconnections.

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-50



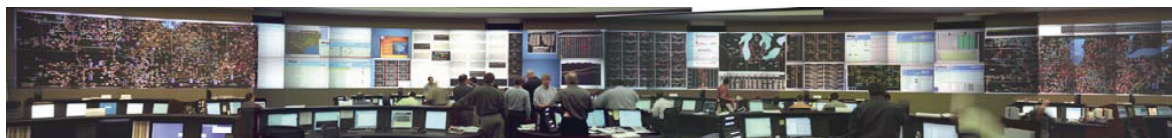
december 2006

MTEP06

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Midwest ISO Transmission Expansion Plan

(Revised February 2007)



The Midwest Independent Transmission System Operator, Inc.

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Appendix E: Constraint History (posted on the Expansion Planning Site) [web](#)

Critical Energy Infrastructure (CEI) Appendices

[Access to the following appendices requires executing a Non-Disclosure Agreement for System Planning Information with Midwest ISO:](#)

- Appendix C1: Contingency Analysis Results by Planning Region
- Appendix C2: Dynamic stability analysis
- Appendix C3: Load Deliverability Analysis
- Appendix C4: Small-Signal Stability Analysis
- Appendix D1: Opportunities for More Efficient Dispatch resultsables and Figures

6.2.7 Planned Projects for the East Region

There are a total of 91 Planned Projects in the East Region in MTEP 06 in Appendix A. Of the 91 Planned Projects listed in Appendix A for the East Region, 83 of these were identified for the first time in this MTEP 06. 30 of these new Planned Projects have estimated costs of \$1 million or more. Table 6.2-14 below lists the newly identified Planned Projects with estimated costs of \$1 million or more for the East Region, and Figure 6.2-15 below shows the location of these new Planned Projects on the East Region system map.

Table 6.2-14 New East Planning Region Planned Projects over \$1 million

Project ID	TO	Project Description	Need Summary	Expected ISD	Estimated Cost
890	FE	North Medina Sub: Add a new 345/138 kV transformer at North Medina substation at the junction of the Star-Carlisle 345 kV and Star-West Akron #2 138 kV lines	Star 345 / 138 kV transformer-#3 overloads to 112% for the loss of Star 345 / 138 kV transformer-#2. Star 345 / 138 kV transformer overload to 118% for category C contingency. Problem was seen in MTEP05 but no solution was developed.	6/1/2008	\$8,540,000
1326	FE	Addition of a 300 MVar capacitor bank at the Harding 345 kV bus in 2008 and Addition of a 300 MVar capacitor bank at the Juniper 345 kV bus in 2009	Loss of two generating units plus the outage of a 345 kV line result in very low voltage in the First Energy transmission system	6/1/2009	\$5,454,346
1333	FE	Brookside caps: Add 2 - 50 MVAR Cap Bank with 1 - 138 kV Switcher	Low voltages below 95% appear at the Brookside Substation 138 kV bus. These caps also help mitigate voltages in surrounding areas.	6/1/2010	\$1,000,200
1336	FE	Gallion Transformers #3 and #4 345 kV Circuit Breaker Addition: Add 345 kV breaker to complete 345 kV ring-bus as well as extend 138 kV bus to include another breaker string to the existing breaker-and-a-half scheme.	Loss of both 345/138 kV transformers at Galion results in voltage of 87% at the Gallion and other 138 kV buses. The breaker prevents loss of both transformers at the same time.	12/1/2007	\$1,815,566
586	ITC	Stephens - Erin 120 kV line #3: Constructs new 120 kV Cable from Stephens to Erin. Erin-Stephens is underground as ITC is utilizing existing ROW. Obtaining a new ROW to build an overhead line through a heavily populated area would be infeasible.	Relieves severe overloads of circuits in the Erin loop for the common tower failure of Erin-Stephens 1 and 2. 154% overload on Beck to Medina 120 kV line for category C contingency.	12/31/2007	\$34,000,000
686	ITC	Install a new 345/120 kV transformer and 120 kV bus at Majestic, and associated 120 kV breakers. Install a new 120 kV Majestic-Madrid circuit (by un-six-wiring the existing Majestic-Madrid 345 kV circuit) and associated terminal breakers	0.8 p.u voltage at Madrid 120 kV bus for the loss of Madrid 345/120 kV transformer	12/31/2007	\$13,000,000
692	ITC	Creates a Bismarck-Troy 345 kV underground line & a Troy 345/120 kV transformer.	Relieves 111% loading on Lincoln-Lincoln NE/NW 120 kV line for loss of Lincoln to Northeast 120 kV, and lesser overloads for other category B contingencies. Relieves 104% overload on Northeast-Pluto 120 kV line for category B contingency of Redrun Transformer	12/2009	\$150,000,000
905	ITC	Decommission Marysville Station, expand Bunce Creek Station creating new Bunce Creek - Cypress, Bunce Creek - Menlo, Bunce Creek - Wabash 2 120 kV lines.	Allows for the removal of Marysville Station and its associated equipment from the ITC system as the station and power plant are planned to be shutdown. Also allows for the interconnection of 2 distribution transformers at Bunce Creek to replace capacity	12/31/2006	\$3,500,000

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Table 6.2-14 (cont.) New East Planning Region Planned Projects over \$1 million

Project ID	TO	Project Description	Need Summary	Expected ISD	Estimated Cost
907	ITC	Build Goodinson Station, with a Belle River-Goodinson 345 kV, Pontiac-Goodinson 345 kV, new 345/120 kV transformer, new Pontiac-Goodinson 120 kV line, Goodinson-Tienken 120 kV, Sunbird-Goodinson 120 kV, and Tienken-Spokane 120 kV	The project relieves 102% and 111% overload on Bloomfield - Hamlin 120 kV under Category C and C3 conditions respectively. Project also provides 120 kV source for a new distribution substation interconnection request by DTE	12/2009	\$50,000,000
910	ITC	Coventry Station Upgrade: Install a new 345/230 kV transformer at Coventry, two 230 kV lines from Coventry to Wixom and Cody, and a 230/120 kV transformer at Cody to increase import capability	ITC's Emergency Import requirement for 2011 year is 2917. This project increases the import capability to above the projected emergency assistance need of 2917 to 3221 MW	12/31/2007	\$25,600,000
911	ITC	Install a second 345/120 kV transformer at the Placid station, and complete ring to accommodate.	Project solves the voltage problems in the Placid area for category B contingency. Placid, Proud, Prizm 120 buses voltage below 85%.	5/30/2007	\$5,550,000
1011	ITC	Durant to Genoa 120 kV: Builds a new 120 kV Durant sub-station with a new circuit from Genoa to Durant, and also breaks up 3-ended Prizm-Proud-Placid 120 kV line	This line is being built to address customer (DTE) requests to improve reliability to the Prizm sub-station and provide for future load growth in the area	12/31/2007	\$19,000,000
1302	ITC	Hines and Walton Station Equipment Replacement	Upgrades are resulted from a bus/breaker study done which identified station equipment that can be normally overloaded. The Hines 230 / 120 kV transformer is overloaded to 106% under normal conditions, currently limited by substation equipment	5/31/2007	\$1,500,000
1305	ITC	Replaces the Gas insulated Switchgear and all breakers at Caniff, and also creates a ring bus configuration.	Recurring system problems has been recorded at breakers among other equipment at Caniff. GIS was nearing end of life and would require high maintenance costs	5/31/2007	\$14,400,000
1306	ITC	Replaces the Gas insulated Switchgear and all breakers on the 120 kV at Midtown, and also creates a ring bus configuration.	Recurring system problems has been recorded at breakers among other equipment at Midtown. GIS was nearing end of life and would require high maintenance costs	12/31/2007	\$6,000,000
1307	ITC	Replace the 120 kV Breaker, buses, and station equipment at Catalina Sub	Replace the 120 kV Breaker, buses, and station equipment at Catalina Sub as part of a customer interconnection request	5/1/2007	\$1,000,000
1308	ITC	B3N Interconnection: Returns the Bunce Creek to Scott 220 kV circuit to service, and replaces the failed Phase Angle Regulator with 2 new PAR's in series	The area in the eastern part of the ITC system, and the Bloomfield area were impacted most by the unavailability of the B3N circuit.	12/31/2007	\$25,500,000
1309	ITC	Targets the replacement of breakers nearing their end of life where maintenance costs will be just as high as new breakers	Various Breakers at Monroe are nearing their end of life	12/31/2007	\$3,000,000
1310	ITC	Targets the replacement of breakers nearing their end of life where maintenance costs will be just as high as new breakers	Various Breakers at Waterman, Warren, Trenton, St. Clair, Wabash, Polaris, Atlanta and Brock are nearing their end of life	12/31/2007	\$2,000,000
481	METC	Tallmadge 345/138 kV TB3 transformer #3 addition	Emergency overload over 106% of either Tallmadge transformer for the outage of the other Tallmadge transformer.	12/1/2008	\$9,913,090

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Table 6.2-14 (cont.) New East Planning Region Planned Projects over \$1 million

Project ID	TO	Project Description	Need Summary	Expected ISD	Estimated Cost
645	METC	American Bumper - David 138 ckt # 1: Rebuild line to 795 ACSS	117% overload on American Bumper to David for category C contingency.	6/1/2007	\$2,500,000
660	METC	Rebuild 23.2 miles to 795 ACSS, Keystone to Clearwater	105% Overload of 266 ACSR for category B contingency. Considered load shed or redispatch in MTEP 05.	5/1/2009	\$10,200,000
988	METC	Build 30 miles new 138 kV line, 795 ACSS from Simpson to Batavia	138 kV Battle Creek-Verona Ckt #2 loads to 104% of Emergency for outage of Project 1 gen + 138 kV Battle Creek-Verona Ckt #1.	12/1/2009	\$13,000,000
1390	METC	Rebuild Goss 345 kV bus from GIS to air insulated and replace 345 kV breakers	Existing gas-insulated bus has recurring leakage problem. Not economical to continue patchwork repairs.	6/1/2008	\$5,800,000
1407	METC	Ludington 345 kV Reactor: Repair or replace faulty (gassing) 100MVAR reactor and replace the existing circuit switcher with a breaker	Ludington voltage difficult to control with faulty reactor. Impacts generation. Preventive approach is justified considering the consequences of not replacing the existing reactor with high probability of failing after gassing.	12/1/2007	\$1,500,000
1409	METC	System Spare Transformer: Install a spare 345/138 kV transformer at Tittabawassee	This would be METC's only spare transformer in their inventory ready to be connected anywhere in the system in the event of a failure	6/1/2007	\$2,600,000
1416	METC	Install a new 14.7 mile Tittabawassee -HSC 138 kV line, and associated breakers at terminals Swap existing line positions on structures to provide circuit diversity on structures for new and existing lines from Tittabawassee	117 % on the Lawndale-HSC 138 kV line for loss of existing Tittabawassee-HSC 138 kV line. Same contingency also overloads Lawndale to Bay Road line to 110%. HSC substation experiences 0.82 pu voltage at peak load for Tittabawassee-HSC 138 kV line outage.	10/1/2007	\$7,227,000
1465	METC	New 140 MW wind generation (G418) interconnecting at Donaldson Creek Substation	Required for G418 Generation Interconnection Request	10/1/2007	\$2,090,288
1206	WPSC	Bass Lake - Lake County Line Rebuild to 795ACSR for future 138 kV operation	The Bass Lake to Lake 138 kV line is overloaded at above 118% of its normal rating in the base case.	8/1/2006	\$1,800,000
1226	WPSC	Kalkaska Gen - Kalkaska JCT - Westwood Line Rebuild. Summer Rating 102.4 MVA	The project is needed to address the impending and potential overloads expected in 2006 shoulder peak time periods. Kalkaska Gen to Kalkaska Jct is loaded to 115.6% and Kalkaska Jct to Westwood is loaded to 105.4%. Out of cycle documentation was deemed adequate	2/1/2008	\$2,905,000
1227	WPSC	Gaylord Gen - Bagley Junction Rebuild. Summer Rating 102.4 MVA	The project is needed to address the impending and potential overloads expected in 2006 shoulder peak time periods. Gaylord Gen to Bagley Jct is loaded to 103.6% under the Atlanta 138 to Gaylord 138 line outage contingency.	2/1/2008	\$1,000,000
1228	WPSC	ANR El Paso New Load: Add 14MW load off of Wolverine's Westwood Junction	A natural gas compressor station is installing electric motors to replace their existing gas motors to drive their compressors.	8/1/2008	\$1,800,000
1272	WPSC	Add 75MVA Transformer at Redwood Substation a separate line from Redwood Junction will be ran to energize the transformer.	The existing 138/69 kV transformer at Redwood overloads over 161% of rating for category B contingencies.	8/1/2010	\$1,900,000

First Energy

Following Phase 2 analysis, FE had 441 outstanding violations. Planned projects in FE address many of the issues on FirstEnergy system. The following projects costs exceed \$1 million:

North Medina Substation

(Project ID: 890, 6/2008, \$8.54 million)

This project adds a new 345 / 138 kV transformer at North Medina substation at the junction of Star to Carlisle 345 kV and Star to West Akron #2 138 kV lines with a 167 MVA 345 / 138 transformer.

This helps relieve 112% overload on Star 345 138 kV transformer #3 for the loss of Star 345 138 transformer #2 [Category B contingency]. This also helps mitigate overload on one Star 345 / 138 kV transformer of 118% for category C contingency involving loss of the other two Star transformers and one Star 345 / 138 kV transformer overload of 104% for category C contingency involving loss of the other Star transformer and Star to Carlisle 345 kV line. For the loss of either end of the Star-W Akron #2 138 kV line, voltage at that end of the line drops below 90% voltage criteria. This project also helps improve the voltage profile. In addition, the project helps relieve 105% overload on Medina to Star 69 kV for the loss of Medina to West Akron 69 kV line.

Harding and Juniper 345 kV capacitors

(Project ID: 1326, 6/2009, \$5.45 million)

The project involves addition of two 300 MVAR (6 X 50 banks) capacitors, one at Harding 345 kV and the other at Juniper 345 kV bus.

Loss of two generating units plus the outage of a 345 kV line result in very low voltage in the First Energy transmission system. Loss of a generating unit plus outage of two 345 kV lines result in very low voltage in the First Energy transmission system. There are unacceptable load consequences for these conditions. Furthermore, with incremental load increase of less than 1% of 2011 load forecast, very low voltages are observed over a vast area for loss of 2 units (Category C). This project significantly improves the voltage profile in these areas.

Brookside – add 2 x 50 MVAR capacitor banks (Project ID: 1333) In Service June 2010

This capacitor is among the reactive power projects on the 138 kV system. Low voltages below 95% appear at the Brookside Substation 138 kV bus. These caps also help mitigate voltages in surrounding areas.

Gallion Transformer breaker addition

(Project ID: 1336) In Service December 2007

This project adds 345 kV breaker to complete 345 kV ring-bus as well as extend 138 kV bus to include another breaker string to the existing breaker-and-a-half scheme. This prevents loss of both 345/138 kV Galion transformers which thereby prevents occurrence of low voltages due to NERC category B contingencies.

These system drivers were identified in MTEP06 Phase 2. Subsequent analysis in MTEP06 Phase 3 including all planned and proposed projects demonstrated their effectiveness in addressing the system needs.

All lines overloaded for category C contingencies beyond 125% of their emergency rating were tested for cascading potential. In most cases, these lines caused subsequent line trips in the local region and system stabilized. Load shedding or generation redispatch schemes were effective in mitigating all category C contingencies.

There are no open reliability issues on the FE system based on the AC contingency analysis.

NiSource

Following Phase 2 analysis, NIPSCO had 9 outstanding violations. Reconductoring projects addressed 2 constraints.

Redispatch and Load Shed schemes were employed to mitigate the remaining category C violations.

There are no open reliability issues on the NIPSCO system.

Michigan Electric Transmission Company

Following Phase 2 analysis, METC had 24 outstanding violations, 3 of which were category-A voltage violations based on METC criteria.

Tallmadge 345/138 kV TB3 transformer #3 (Project ID: 481, 12/2008, \$10 million)

This was a proposed project in MTEP05 and was changed to planned status in MTEP06. The project adds a third transformer at Tallmadge thereby mitigating the overload on the existing transformers. The project also involves removal of existing reactors on TB1 and TB2, addition of six new 345 kV Breakers and two 138 kV Breakers and all associated structures, switches, relaying at Tallmadge. The reactors on the two existing transformers would no longer be required after installation of the new transformer. Of the 6 345 kV breakers, four breakers installed in the breaker and a half substation prevent loss of any two transformers at one time (Currently, the two transformers are on adjacent bus sections)

Tallmadge transformer overloads over 106% of its emergency rating for the outage of the other transformer in 2011. In addition, Category C contingency involving Campbell 2 generator and Tallmadge 345/138 kV transformer causes a 13% overload of the other Tallmadge 345/138 kV Transformer.

American Bumper - David 138 kV line ckt # 1 (Project ID: 645, 6/2007)

This was a proposed project in MTEP05 and was changed to planned status in MTEP06. The project involves rebuilding the line to 795 ACSS. American Bumper to David overloads over 117% of its emergency rating for loss of Goss 345 / 138 kV transformer along with Goss to Nelson and Goss to Thetford 345 kV lines (Category C contingency).

Keystone to Clearwater 138 kV line rebuild (Project ID: 660, 5/2009, \$10.2 million)

This project rebuilds the 23 mile line from 266 ACSR to 795 ACSS with a new emergency rating of 330 MVA

It helps mitigate constraints on the line due to a number of NERC category C contingencies involving outage of Keystone to Livingston 345 kV line. It also helps mitigate 105% overload of 266 ACSR for Keystone to Livingston 345 kV line out (Category B contingency). This was also analyzed with five peaking units (Gaylord and Livingston) turned off and re-dispatching Plymouth among other units. Historically, METC has used these peaking plants to alleviate overload on the underlying Keystone to Clearwater 138 kV line for the loss of Keystone to Livingston 345 kV line.

Simpson to Batavia 138 kV line (Project ID: 988, 6/2011, \$13 million)

This project builds a new 30 mile 138 kV 795 ACSS line from Simpson to Batavia.

It helps mitigate 104% overload on Battle Creek to Verona circuit 2 138 kV line for outage of Project 1 unit and Battle Creek to Verona circuit 1. In addition, 138 kV Battle Creek-Verona Ckt 1 loads to 96% of Emergency for outage of Project 1 generator and loss of 138 kV Battle Creek-Verona Ckt 2. 138 kV Battle Creek-Morrow overloads to 96% of Emergency for outage of 345 kV Argenta-Battle Creek and Argenta-Tompkins tower. 138 kV Verona-Barnum Creek Junction overloads to 93% Normal for outage of Project 1 generator.

Rebuild Goss 345 kV bus (Project ID: 1390, 6/2008, \$5.8 million)

The project involves rebuilding the Goss 345 kV bus from GIS to air insulated and replacing circuit switcher with a breaker.

Bus "R" was retired due to oil contamination and flashovers. Bus "F" has about 14 leaks releasing 100 pounds of greenhouse (SF6) gas per month. The flashover issue in conjunction with the retired "R" bus causes simultaneous outages for three circuit elements: Transformer 1 that provides 138 kV source to Goss, Thetford to Goss 345 kV line and Nelson Road to Goss 345 kV line.

Ludington 345 kV Reactor
(Project ID: 1407, 12/2007)

This project is tied to Project 481 - Tallmadge 345/138 kV transformer #3. The existing reactors on Banks #1 and #2 will be removed as a result of adding the 3rd bank.

System Spare Transformer
(Project ID: 1409, 6/2007)

This would be METC's only spare 345 / 138 kV transformer in their inventory ready to be connected anywhere in the system in the event of a failure.

Tittabawassee-Hemlock Semiconductor line
(Project ID: 1416, 10/2007, \$7.2 million)

The project involves installing three 138 kV breakers at Tittabawassee and constructs a second 138 kV Tittabawassee-HSC line (14.7 miles) along with required 138 kV breakers at each end (5 total breakers). The project also involves installing a 2 mile 138 kV double circuit to swap the existing Tittabawassee and Lawndale line connections into HSC to prevent both circuits from Tittabawassee to HSC being on the same tower (Thus preventing loss of both circuits for a single fault).

117 % on the Lawndale-HSC 138 kV line for loss of existing Tittabawassee-HSC 138 kV line. Same contingency also overloads Lawndale to Bay Road line to 110%. HSC substation experiences 0.82 p.u voltage at peak load for Tittabawassee-HSC 138 kV line outage.

METC Distribution Projects

(Project ID: 1417, 1433, 1441, 1441, 1445 and 1447)

These METC projects address either Consumer Energy's interconnection needs or are an outcome of METC's 5 year out study that results in these projects being included in METC's capital plan. A brief description of the projects is noted below:

- Race Street (1417): Install a 138 kV tie-breaker to loop the Spaulding-Four Mile 138 kV Line into Race Street
- Buskirk (1433): Install bulk substation served from the Beals-Hazelwood 138 kV line
- Ellis (Hile Road - 1441): Install bulk substation served from a new Ellis spur from Sternberg
- Emmet (1445): Install a second distribution transformer at Emmet
- Horseshoe Creek (Deja-1447): Install bulk substation served from the Eureka-Deja-Vestaburg 138 kV Line

The rest of the violations were category C type. These violations can be mitigated by published generation runback schemes, generation re-dispatch or load shedding schemes. METC has indicated that they will review the sag limits on lines overloaded due to category C contingencies in the MTEP06 analysis. METC criteria allows for load shedding for category C violations up to 5% of peak load. Redispatch and Load Shed schemes were employed to mitigate the remaining category C violations.

A few contingencies may result in severe overloads on two lines. The two lines are 138 kV lines from Beals Road to Wealthy Street and 138 kV line from Clair to Warren. Although, load Shed has been demonstrated to be effective to relieve constraints on the above lines, the overloads are severe and require load shed in excess of 200 MW.

There are no other open reliability issues on the METC system based on the AC contingency analysis.

Wolverine Power Cooperative

Wolverine Power Cooperative has recently joined the Midwest ISO and started participating in the MTEP06 study mid-process. Hence, several model updates were submitted after Phase 2 analysis. AC contingency analysis was re-done using Wolverine and METC contingencies to monitor the 69 kV and above Wolverine system. The AC contingency analysis resulted in a total of 286 thermal and voltage violations, of which 55 were NERC category A and B violations.

A second 75 MVA Redwood transformer (Project ID: 1272, 8/2010) helped mitigate majority of the violations including NERC category A and B constraints. The existing 138/69 kV transformer at Redwood overloads over 161% of rating for the loss of the Redwood or Lake County transformer (Category B contingencies).

Redispatch and Load Shed schemes were employed to mitigate the remaining category C violations.

There are no open reliability issues on the Wolverine system.

ITC Transmission

Stephens - Erin 120 kV line #3 (Project ID: 586, 12/2007, \$34 million)

This was a proposed project in MTEP05. The project constructs a new 120 kV underground cable from Stephens to Erin (circuit 3).

It relieves severe overloads of circuits in the Erin loop for the common tower failure of Erin-Stephens 1 and 2. It thereby reduces the risk of dumping 300+ MW of load for a single outage. It helps relieve 154% overload on Beck to Medina and 148% overload on Beck to Stephens 120 kV lines for category C contingencies.

Majestic 345/120 kV switching station (Project ID: 686, 12/2007, \$13 million)

This was a proposed project in MTEP05. The project involves installing a new 345/120 kV transformer and 120 kV bus at Majestic, and associated 120 kV breakers. It also installs a new 120 kV Majestic-Madrid circuit (by un-six-wiring the existing Majestic-Madrid 345 kV circuit) and associated terminal breakers

Low voltage of 0.8 p.u voltage is observed at Madrid 120 kV bus for the loss of Madrid 345/120 kV transformer (Category B). Madrid 345-120 #1 transformer overloads to 98% of its emergency rating for loss of Cody to Nolan 120 kV line (Category B contingency). The project also helps relieve 13% overload on existing 34/120 Madrid Transformer for the loss of Cody to Nolan 120 kV and Placid to Durant 120 kV lines (Category C contingency).

Bismarck-Troy 345 (Project ID: 692, 12/2009, \$150 million)

This was a proposed project in MTEP05. The project involves building a new 13.94 mile 345 kV line (2.3 overhead and 11.64 underground) from Troy from to Bismarck connected to the Troy 120 kV by a 300/400/500 MVA 345 / 120 kV transformer.

The project relieves 111% loading on Lincoln-Lincoln NE/NW 120 kV line for loss of Lincoln to Northeast 120 kV, and lesser overloads for other category B contingencies. It also relieves 104% overload on Northeast-Pluto 120 kV line for category B contingency of Redrun Transformer. The project also helps relieve 128% overload on Lincoln -Lincoln NE/NW 120 kV line for category C3 contingency of Bloomfield to Troy and Bloomfield to Wheeler and 107% overload on Lincoln -Troy 120 kV line for category C3 contingency of Bloomfield to Troy 120 kV and Bloomfield to Wheeler 120 kV. Project verification was conducted using the revised reduced Michigan load forecast. Other violations are also projected, including loading above emergency ratings during planned outages at load levels below 85% of peak.

Detroit metro area is ringed by 345 kV and is supplied by several 345 kV substations surrounding the area. Supply points are at Brownstown, Wayne, Wixom/Quaker, Pontiac, Jewell, Bismarck, and Stephens/Caniff substations. This project provides an additional 345 kV source into the Northern Detroit Metro area by extending a 345 kV circuit from Bismarck to Troy 120 kV substation to off-load existing supplies and 120 kV circuits in the Troy area. The project Supports 335 MW of load at Troy substation and relieves supplies to adjacent areas. At 335 MW, Troy is the most heavily loaded substation on the ITC system. The new line will carry approximately 360 MW of new capacity into Troy area initially, unloading multiple existing supply lines to Troy. It also substantially unloads several 50 year old vintage 120 kV circuit that include cable sections 40-55 yrs old. It also relieves first contingency overloads of OH and UG circuits at off-peak periods permitting maintenance of existing (UG) circuits, in accordance with NERC Standards.

Overhead routes for new 345 kV supply are not feasible in large, congested urban environments. Alternatives of upgrading 230 kV and 120 kV circuits in the area have been reviewed and are not feasible due to inability to upgrade facilities without lengthy outages disrupting critical industrial loads, and permitting restrictions and space restrictions at some sites that would house 230 kV.

Marysville Decommissioning
(Project ID: 905, 12/2006)

The project decommissions Marysville Station, expands Bunce Creek Station creating new Bunce Creek - Cypress, Bunce Creek - Menlo, Bunce Creek - Wabash 2 120 kV lines. It allows for the removal of Marysville Station and its associated equipment from the ITC system as the station and power plant are planned to be shutdown. It also allows for the interconnection of 2 distribution transformers at Bunce Creek to replace capacity

Coventry Station Upgrade
(Project ID: 910, 12/2007)

The project involves building two new 230 kV lines from Coventry to Cody and Wixom, new 345/230 kV transformer at Coventry along with a 230/120 kV transformer at Cody and expansion of the Coventry 345 kV station. ITC's Emergency Import capability requirement for 2011 year to meet LOLE of 0.1 is 2917 MW. ITC's import capability without this project is 2381, deficient in 2011 by 536 MW. With the addition of the Coventry project, ITC's import capability goes up to 3221 MW, meeting its emergency import requirement for 2011. Project verification was conducted using the revised reduced Michigan load forecast.

Goodison Station
(Project ID: 907, 12/2009, \$50 million)

This was a proposed project in MTEP05. The project involves building Goodison 345 kV Station by splitting the existing 345 kV line from Belle River to Goodison to create Belle River-Goodison 345 kV and Pontiac-Goodison 345 kV, a new 345/120 kV Goodison transformer and a new Pontiac-Goodison 120 kV line. The project also creates new Goodison-Tienken-Spokane and Goodison-Sunbird lines using existing circuit taps to shift support to these areas from Pontiac to New Goodison Substation. It installs a new sectionalizing breaker at Tienken to provide through circuit to Spokane, new 120 kV line position at Spokane to remove adjacent Tienken tap providing dedicated Tienken-Spokane circuit and 5% reactor at Spokane to control flow into Spokane from new Goodison source through Tienken.

The project relieves the following overloads:

102% loading on Bloomfield-Hamlin 120 kV for Cat C3 (Line + Gen) outage of Jewel-Spokane 230 kV and St. Clair Unit 4, 135% loading on Bloomfield-Hamlin and 119% loading on Auburn Heights-Hamlin for loss of Jewell-Spokane 230 kV and Apache-Troy 120 kV (Category C), 119% loading on Apache-Troy for loss of Jewell-Spokane 230 kV and Bloomfield-Hamlin 120 kV (Category C), 111% loading on Bloomfield-Hamlin 120 kV for DCT outage of Jewel-Spokane 230 kV and Jewel-St. Clair -Spokane 120 kV (Category C) and Unloads Pontiac 345/120 kV transformers that are at 94% of emergency rating for loss of the other to 79% post project.

In absence of Goodison 120 kV station, DTE's needs in the area could be met only by building 120 kV lines from long distances as ITC has only 345 kV in the area that DTE needs an interconnection point). Project verification was conducted using the revised reduced Michigan load forecast.

Placid 345 /120 kV transformer
(Project ID: 911, 5/2007, \$5.55 million)

Install a second 345/120 kV transformer at the Placid station, and complete ring to accommodate.

Project eliminates voltage criteria violations where Placid, Proud, and Prizm 120 buses voltage fall below 85% for the following category B contingencies: Loss of Placid 345/120 transformer 1 and Loss of Placid-Pontiac 345.

Durant to Genoa 120 kV
(Project ID: 1011, 12/2007, \$19 million)

The project involves construction of a new 120 kV Durant sub-station with a new circuit from Genoa to Durant, and also breaks up 3-ended Prizm-Proud-Placid 120 kV line.

This project is driven by DTE's Interconnection request with ITC for GM Milford Darlington Hills facility and Hurst Substation. The existing 40 kV serves as a hot standby to the 120 kV Placid to Proud line outage. Existing capacity on the 40 kV is 43 MVA and increased loading in the area is creating N-1 overloads on the 40 kV system. Low voltages at site are also observed under these conditions and problems would be worse with anticipated load growth at Milford site. Continuing load growth in area requires another transmission to sub transmission interconnection at Hurst to resolve. Breaking the three ended Prizm-Proud-Placid 120 kV line to two lines: Placid to Durant and Placid to Proud also helps create two independent feeds into Durant substation thereby increasing reliability

Caniff Station Upgrade
(Project ID: 1305, 5/2007, \$14.4 million)

The project involves replacing gas insulated switchgear and all breakers at Caniff and also creates a ring bus configuration.

The current gas insulated switchgear installed at Caniff was nearing end of life and is leaking causing recurring alarms/failures (34 alarms since 1/2004). The leaking gas is an environmental issue as well. GIS is 35 years old and is nearing end of life. Going forward with the existing equipment would require high maintenance costs. Caniff feeds downtown Detroit, and under current configuration, 1 section breaker failure can result in the loss of the entire station. This would cause the cables feeding the city from the south to overload at peak. Therefore a ring bus configuration is optimal.

Midtown Station Upgrade
(Project ID: 1306, 12/2007, \$6 million)

The project involves replacing gas insulated switchgear and all breakers at Midtown and also creates a ring bus configuration.

The current gas insulated switchgear installed at Midtown was nearing end of life and is leaking causing recurring alarms/failures (13 alarms since 1/2004). The leaking gas is an environmental issue as well. GIS is 35 years old and is nearing end of life. Going forward with the existing equipment would require high maintenance costs. With the current configuration at Midtown, one section breaker failure can result in the loss of the entire station, as well as bus 103 at Frisbee station. Therefore a ring bus configuration is optimal at Midtown, and does not add any additional cost to the project.

B3N Interconnection

(Project ID: 1308, 12/2007, \$25.5 million)

The project returns the Bunce Creek to Scott 220 kV circuit to service, and replaces the failed Phase Angle Regulator with 2 new PAR's in series. This failed transformer is part of the northern most interconnection with Canada.

The new phase shifting transformers will increase both MVA capability and phase angle control. Midwest ISO reviewed the impact on system performance of system operation with and without the B3N tie between ITC and IMO in service. The review was based both on review of the recent 2010 study reported to ECAR by ITC, and on independent review of contingent conditions. There a substantial number of contingencies involving multiple elements that can result in significant system overloads without the B3N circuit, which would not occur with the B3N circuit available. Contingencies that have the most significant impact are shown in the table below:

- 116% for St Clair - Cypress 120 kV & St Clair - Bunce Creek 120 kV DCT
- 112% for Jewell-Spokane 345-230-120 kV & Apache-Troy 120 kV
- 102% for Jewell-Spokane 345-230-120 kV & Dean (all)
- 101% for Caniff-Northeast 120 kV & Conners Creek (all)
- 130% for Greenwood 120-345 kV & Atlanta-Tuscola 120 kV
- 104% for Pontiac 345-120 kV #303 & Pontiac-Sunbird 120 kV
- 115% for Both St.Clair-Lambton lines

Following Phase 2 analysis, there were 129 outstanding violations, 7 of which were category B violations. Proposed projects were modeled to relieve the thermal overloads on ITC system. Subsequent analysis in MTEP06 demonstrated the project's effectiveness in addressing the system needs. Midwest ISO recommends the proposed projects become planned projects. Details on the proposed projects are discussed in the following section.

ITC will coordinate with DTE on category B voltage violations. Remaining category C violations were mitigated by means of load shedding. The exact amount and load locations may differ.

There are no open reliability issues on the ITC system.

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-51

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Project Information from Facility table

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A	90	West	ALTW	Emery-Lime Crk 161kV, Ckt 2	Emery - Lime Creek 161 ckt 2, Sum rate 326	IA	Other	Excluded	Y	\$8,000,000.00	6/1/2007	161		1
A	1204	West	ALTW	Adams-Rochester 161 kV line termination upgrade	Replace disconnect jumpers at Adams on Adams-Rochester 161 kV line	MN	Other	Not Shared		\$5,000.00	10/1/2006	161		1
A	1287	West	ALTW	Replace Salem 345/161 kV transformer with 448 MVA unit	Replace Salem 345/161 kV transformer with 448 MVA unit	IA	BaseRel	Shared		\$5,000,000.00	6/1/2008	345	161	1
A	1288	West	ALTW	Replace Hazleton 345/161 kV transformer #1 with 335 MVA unit	Replace Hazleton 345/161 kV transformer #1 with 335 MVA unit	IA	BaseRel	Shared		\$5,000,000.00	6/1/2009	345	161	1
A	1289	West	ALTW	Marshalltown - Toledo - Belle Plaine - Stoney Point 115 kV line rebuild	Marshalltown - Toledo - Belle Plaine - Stoney Point 115 kV line will be rebuilt/upgraded between 2008 and 2011	IA	Other	Not Shared		\$19,000,000.00	6/1/2010	115		3
A	1342	West	ALTW	Lewis Fields 161 kV substation which taps the SwampFX - Coggon 115 kV line	Build a new 161 kV substation Lewis Fields to be tapped to the 115 kV line Swamp Fox - Coggon at 5% distance via a new 161/115 kV transformer. Also build a new 161 kV line from Hiawatha to Lewis Fields	IA	Other	Not Shared		\$4,550,000.00	6/1/2009	161	115	2
A	1344	West	ALTW	Build a new 345 kV Beverly substation which taps the Arnold - Tiffin 345 kV line	Build a new 345 kV Beverly Tap substation and tapped to 345 kV line Arnold - Tiffin at 40% distance away from Arnold. Add a new 335 MVA 345/161 kV transformer and build a new 161 kV line connecting the new substation to Beverly 161 kV bus	IA	Other	Not Shared		\$4,300,000.00	6/1/2008	345	161	2
A	1471	West	ALTW	G518	G518	MN	GIP	Shared		\$125,000.00	5/1/2007	69		1
A	1472	West	ALTW	G536	G536	MN	GIP	Shared		\$125,000.00	5/1/2007	69		1
A	1473	West	ALTW	Mason City Armor - Emery North 69 kV line	Mason City Armor - Emery North 69 kV line	IA	TDSP	Direct Assigned				69		1
A	1348	West	ALTW/CIPCO	Upgrade terminal equipment for Prairie Creek - Marion 115 kV line. Rebuild 115 kV line Marion - Swampfx - Coggon	Upgrade terminal equipment for 115 kV line Prairie Creek - Marion so that new ratings become 198/198 MVA limited by conductor rating. Rebuild 115 kV line Marion - Swampfx7 - Coggon to the new rating as 198/198 MVA	IA	Other	Not Shared		\$200,000.00	6/1/2011	115		3
A	1349	West	ALTW/CIPCO	Replace Dundee 161/115 kV transformer with new ratings as 112/112 MVA	Replace Dundee 161/115 kV transformer with new ratings as 112/112 MVA	IA	Other	Not Shared		\$100,000.00	6/1/2011	161	115	1
A	144	Central	Ameren	Crab Orchard - Marion South 138 kV	Crab Orchard - Marion South 138 kV - Reconductor line	IL	Other	Excluded	Y	\$2,712,300.00	6/1/2008	138		1
A	149	Central	Ameren	Mason-Sioux-7 345 kV	Mason-Sioux-7 345 kV - Breaker addition at Mason	MO	Other	Excluded	Y	\$605,900.00	6/1/2007	345		1
A	153	Central	Ameren	Central-Watson-1 138 kV	CEE Tap - Watson section of Central-Watson-1 138 kV - Reconductor line	MO	Other	Not Shared		\$311,400.00	6/1/2008	138		1
A	155	Central	Ameren	Joachim 345/138 kV	Joachim 345/138 kV - New Substation	MO	Other	Excluded	Y	\$12,963,300.00	6/1/2008	345	138	1
A	708	Central	Ameren	Casey-Breed 345 kV	Casey-Breed 345 kV Line - Reconductor river crossing	IL	Other	Excluded	Y	\$303,900.00	6/1/2007	345		1
A	711	Central	Ameren	Wood River-Gillespie 138 kV	Wood River-Gillespie 138 kV - Reconductor	IL	Other	Excluded	Y	\$939,500.00	6/1/2007	138		1
A	712	Central	Ameren	Mason 345/138 kV Substation	Labadie-Mason-3 345 kV Terminal equipment replacement	MO	Other	Excluded	Y	\$184,100.00	12/1/2007	345		1
A	719	Central	Ameren	Labadie Plant	Labadie Plant - Replace 2-345 kV Breakers	MO	Other	Not Shared		\$1,897,100.00	6/1/2009	345		1
A	856	Central	Ameren	Osage 138 kV Substation	Osage 138 kV Substation - Replace bus conductor in bus #1 and line to Eldon	MO	Other	Not Shared		\$65,000.00	12/1/2006	138		1
A	857	Central	Ameren	Rush Island-Joachim 345 kV Line	Rush Island-Joachim 345 kV - Replace terminal equipment at Rush Island	MO	Other	Not Shared		\$283,200.00	6/1/2007	345		1
A	858	Central	Ameren	Sioux-Huster-1 138 kV	Sioux-Huster-1 138 kV - Increase ground clearance on 6 miles of 795 kcmil ACSR	MO	Other	Not Shared		\$1,024,500.00	6/1/2007	138		1
A	859	Central	Ameren	Central-Watson-1 138 kV	Central-Watson-1 138 kV - Reconductor 5.1 miles 954 kcmil ACSR between Central and Twr. 55	MO	Other	Not Shared		\$1,500,300.00	6/1/2008	138		1
A	1241	Central	Ameren	Mattoon, West Wind Farm Connection	Install 138 kV Breaker at Mattoon, West Substation to connect Wind Farm	IL	Other	Not Shared		\$555,400.00	3/1/2007	138		1
A	875	Central	AmerenCILCO	Kickapoo 138/69 kV Substation	Kickapoo 138/69 kV Substation - Replace terminal equipment	IL	Other	Not Shared		\$156,700.00	11/15/2006	138		1
A	876	Central	AmerenCILCO	Tazewell 345/138 kV Substation	Tazewell 345/138 kV Substation - Replace 2000 A terminal equipment with 3000 A on line to Powerton	IL	Other	Not Shared		\$1,042,900.00	6/1/2007	345		1

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Project Information from Facility table

App AB	PrjID	Region	Reporting Source	Project Name	Project Description	State	Allocation FF	Share Status	Exclude FF1	Estimated Project Cost	Expected ISD	Max kV	Min kV	Facility Count
A	150	Central	AmerenIP	Prairie State Power Plant transmission outlet	Establish a new Prairie State 345 kV switchyard including a 6-position breaker and ½ bus arrangement to accommodate 2 generating units and 4-345 kV outlet lines with 9-345 kV circuit breakers. Tap the existing Baldwin-Stallings 345 kV line 4531 "in and out" and build 7.5 miles of double-circuit 3000 A summer emergency capability line to the switchyard. Tap the existing Baldwin-Mt. Vernon 345 kV line 4541 "in and out" and build 1.5 miles of double-circuit 3000 A summer emergency capability line to the switchyard. At the Baldwin 345 kV switchyard, replace 9-345 kV circuit breakers that would be overstressed as a result of the Prairie State development. Also install 3-345 kV circuit breakers for a new Baldwin-Rush Island 345 kV line and a new connection for the Baldwin 345/138 kV transformer. Build a new 26 mile 345 kV 3000 A summer emergency capability line from Baldwin to Rush Island.	IL	Other	Not Shared (Pre-RECB 1)		\$63,039,600.00	6/1/2008	345		5
A	725	Central	AmerenIP	LaSalle Area Development	N. LaSalle-Wedron Fox River 138 kV - 20 miles new line, 2-138 kV breakers at N. LaSalle, 1 138 kV Breaker at Wedron Fox River	IL	Other	Excluded	Y	\$20,489,370.00	12/1/2008	138		1
A	726	Central	AmerenIP	LaSalle Area Development	Ottawa-Wedron Fox River 138 kV - Construct 14 miles new 138 kV line, 1 new 138 kV breaker at Ottawa	IL	Other	Excluded	Y	\$8,045,400.00	12/1/2008	138		1
A	728	Central	AmerenIP	Wood River-Roxford 1502 138 kV line	Wood River-Roxford 1502 138 kV line - Reconductor	IL	BaseRel	Shared		\$5,264,900.00	6/1/2008	138		1
A	732	Central	AmerenIP	S. Bloomington-State Farm 138 kV	S. Bloomington-State Farm 138 kV - Reconductor	IL	Other	Not Shared		\$1,172,900.00	6/1/2007	138		1
A	736	Central	AmerenIP	W. Tilton 138 kV Substation	W. Tilton 138 kV Substation - Install 138 kV breaker	IL	Other	Not Shared		\$1,709,400.00	6/1/2007	138		1
A	738	Central	AmerenIP	Latham-Lanesville 138 kV Line	138 kV Line 1342C tap - Line 1342A - Reconductor structure 423 to 467A	IL	Other	Excluded	Y	\$1,994,400.00	6/1/2007	138		1
A	739	Central	AmerenIP	Franklin County Power Plant Connection	Franklin County Power Plant Connection - Tap 345 kV Line 4561 Tap, and Install new 345 kV ring bus	IL	Other	Not Shared (Pre-RECB 1)		\$7,108,700.00	1/1/2009	345		1
A	865	Central	AmerenIP	Havana-Monmouth 138 kV River Crossing	Havana-Monmouth 138 kV Line 1362 - Rebuild river crossing	IL	Other	Not Shared		\$223,700.00	6/1/2007	138		1
A	869	Central	AmerenIP	Sidney-Mira Tap 138 kV	Sidney-Mira Tap 138 kV - Reconductor 2 miles 795 kcmil ACSR	IL	Other	Not Shared		\$693,800.00	6/1/2007	138		1
A	873	Central	AmerenIP	Baldwin Plant 345 kV Switchyard	Replace 6-345 kV breakers with breakers having 3000 A continuous capability	IL	Other	Not Shared (Pre-RECB 1)		\$12,726,300.00	1/31/2009	345		3
A	1470	West	ATC	G483	50 MW wind farm	WI	GIP	Shared		\$7,538,732.00	11/5/2006	69		5
A	1	West	ATC LLC	Arrowhead-Gardner Park 345 kV	Arrowhead - Gardner Park 345 kV line	WI	Other	Excluded	Y	\$391,667,218.88	6/30/2008	345	230	7
A	2	West	ATC LLC	Weston - Northpoint 115 kV reconductor	Reconductor Weston-Dewey Tap-Northpoint 115 kV line with 795 ACSR conductor.	WI	Other	Excluded	Y	\$11,071,370.00	4/1/2007	115		2
A	21	West	ATC LLC	Metonga T-D interconnection	Venus-Metonga (was Crandon) 138 kV line	WI	Other	Not Shared		\$8,745,840.00	6/1/2007	115		1
A	62	West	ATC LLC	Wien-McMillan 115 kV	Wien - Stratford - McMillan 115 ckt , Sum rate 202	WI	Other	Excluded	Y	\$1,750,000.00	3/1/2007	115		1
A	64	West	ATC LLC	Kegonsa-McFarland-Femrite conversion to 138 kV	Kegonsa - McFarland -Femrite conversion to 138 kV	WI	Other	Excluded	Y	\$3,410,000.00	6/1/2007	138		2
A	101	West	ATC LLC	Kelly-Whitcomb 115 kV uprate	Kelly - Whitcomb 115 ckt , Sum rate 241	WI	Other	Excluded	Y	\$1,900,000.00	6/1/2008	115		1
A	177	West	ATC LLC	Gardner Park-Central Wisconsin 345 kV line projects	Construct Gardner Park-Central Wisconsin 345 kV line and Construct new Central Wisconsin 345 kV substation	WI	Other	Not Shared (pre RECB 1)		\$128,900,000.00	12/1/2009	345		6
A	339	West	ATC LLC	Lake Mills Transmission-Distribution interconnection	Construct a Jefferson-Lake Mills-Stony Brook 138 kV line Uprate Rockdale to Jefferson 138 kV line Uprate Rockdale to Boxelder 138 kV line Uprate Boxelder to Stonybrook 138 kV line	WI	Other	Excluded	Y	\$20,450,000.00	6/1/2008	138		6
A	345	West	ATC LLC	Morgan - Werner West 345 kV line (includes Clintonville-Werner West 138)	Morgan - Werner West 345 kV line, Clintonville - Werner West 138 kV line primarily on 345 kV line structures, and terminate the existing Werner - White Lake 138 kV line at the Werner West switching station	WI	BaseRel	Shared		\$141,290,700.00	12/1/2009	345		4

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A	350	West	ATC LLC	Weston-Sherman-Hilltop 115 kV	Weston - Sherman Street - Hilltop 115 kV line rebuild as double circuit	WI	Other	Excluded	Y	\$7,750,000.00	6/1/2007	115		3
A	352	West	ATC LLC	Cranberry-Conover 115 kV and Conover-Plains conversion to 138 kV	Construct Cranberry-Conover 115 kV line, Rebuild/convert Conover-Plains 69 kV line to 138 kV, Construct 138 kV bus and install 138/115 kV 150 MVA and 138/69 kV 60 MVA transformers at Conover, Construct 138 kV bus and install 60 MVA transformer at Bobcta, Relocate Iron River substation (Iron Grove), Construct 138 kV bus and install a 138/69 kV, 60 MVA transformer at Iron Grove	WI	BaseRel	Shared		\$117,085,000.00	12/31/2009	138	115	7
A	433	West	ATC LLC	Wautoma 32.6 MVAR capacitor bank	Install 2-24.5 MVAR capacitor banks at Wautoma 138 kV and one-16.33 MVAR capacitor bank at 69 Kv	WI	Other	Excluded	Y	\$1,200,000.00	6/1/2007	138		1
A	446	West	ATC LLC	Hartford 36 MVAR capacitor bank	Hartford 138 kV, 36 MVAR Capacitor bank	WI	Other	Excluded	Y	\$750,000.00	4/30/2007	138		1
A	566	West	ATC LLC	Plymouth T-D interconnection	Forest Junction / Charter Steel to Plymouth 138 kV line and T-D substation. Construct 1.3 mile double circuit from Plymouth municipal utility to existing line.	WI	Other	Excluded	Y	\$2,500,000.00	5/1/2007	138		1
A	570	West	ATC LLC	Rock River-Bristol-Elkhorn conversion to 138 kV	Rock River - Bristol - Elkhorn conversion to 138 kV	WI	Other	Excluded	Y	\$15,063,960.00	6/1/2009	138		6
A	571	West	ATC LLC	North Madison-Waunakee 138 kV line	New North Madison - Huiskamp 138 kV line and a new 138/69 kV substation near Huiskamp including a 100 MVA 138/69-kV transformer	WI	Other	Excluded	Y	\$8,700,000.00	6/1/2008	138		1
A	572	West	ATC LLC	Menominee 138/69 kV transformer	Loop West Marinette - Bay de Noc 138 kV line into Menominee. Total project cost \$2,000,000.	WI	Other	Excluded	Y	\$2,000,000.00	6/1/2008	138		2
A	877	West	ATC LLC	Elm Road (Oak Creek) Generation Related Additions	Reconductor Oak Creek-Ramsey 138 kV line (2009), Reconductor Oak Creek-Allerton 138 kV line (2009), Replace relaying on 230 kV circuits at Oak Creek (2009), Replace two 345 kV circuit breakers at Pleasant Prairie on the Racine and Zion lines with IPO breakers and upgrade relaying (2009), Expand Oak Creek 345 kV switchyard to interconnect one new generator (2009), Loop Ramsey5-Harbor 138 kV line into Norwich and Kansas to form a new line from Ramsey-Norwich and Harbor-Kansas 138 kV lines (2009), Uprate Kansas-Ramsey6 138 kV line (2009), Install second 500 MVA 345/138 kV transformer at Oak Creek (2010), Expand 345 kV switchyard at Oak Creek to interconnect one new generator (2010), Uprate Oak Creek-Root River 138 kV line (2010), Uprate Oak Creek-Nicholson 138 kV line (2010).	WI	Other	Not Shared (Pre-RECB 1)		\$44,706,194.00	6/1/2010	345	138	12
A	1451	West	ATC LLC	Femrite-Sprecher new 138 kV; Sprecher-Reiner-Sycamore conversion to 138 kV	Femrite - Sprecher 138 (new), Sprecher - Reiner 138 (conversion), Reiner - Sycamore 138 (conversion),	WI	Other	Excluded	Y	\$10,600,000.00	6/1/2007	138		3
A	1453	West	ATC LLC	St Lawrence - Pleasant Valley - Saukville 138 kV line reconductor	St Lawrence - Pleasant Valley - Saukville 138 kV line reconductor	WI	BaseRel	Shared		\$9,600,000.00	6/1/2008	138		2
A	1461	West	ATC LLC	G376, 37395-03, Green Lake Energy	Net: loop into existing substation, install 138 kV equipment at Green Lake Sub, replace 69 kV circuit breaker at Wautoma sub.	WI	TAP	Not Shared (Pre-RECB 1)		\$2,314,698.00	10/20/2006	138	34.5	3
A	1463	West	ATC LLC	G384	Net: new two breaker 138 kV substation, loop line Y-51 into the substation, perform a relay replacement for Kewaunee sub 138 kV line Y-51 to Shoto sub.	WI	Other	Not Shared (Pre-RECB 1)		\$3,268,000.00	10/20/2006	138		5
A	1475	West	ATC LLC	Atlantic 138-69 kV Transformer 60 MVA	Atlantic 138-69 kV Transformer 60 MVA	WI	TDSP	Direct Assigned				138	69	1
A	1476	West	ATC LLC	Mullet River 138-69 kV - Transformer	Mullet River 138-69 kV - Transformer	WI	TDSP	Direct Assigned				138	69	1
A	1477	West	ATC LLC	N. Madison - ABS -Yahara 138 kV line	N. Madison - ABS -Yahara 138 kV line	WI	TDSP	Direct Assigned			6/1/2008	138		1
A	1478	West	ATC LLC	Waunakee - Westport - Pheasant Branch 69 kV line 95 MVA	Waunakee - Westport - Pheasant Branch 69 kV line 95 MVA	WI	TDSP	Direct Assigned			1/1/2008	69		1
A	42	Central	DEM	Bedford to Seymour 13829 Reconductor	Reconductor 13829 line from Bedford - Shawswick - Pleasant Grove - Airport Road Jct - Seymour.	IN	Other	Excluded	Y	\$10,970,605.00	6/1/2009	138		4

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A	91	Central	DEM	Hillcrest 345/138 substation	Construct new 345/138 kV Hillcrest substation. Tap Stuart to Foster 345kV line. Construct new 138kV line from Eastwood to Hillcrest. Replace 345kV relays at Stuart and Foster. Replace 138kV relays at Brown and Ford Batavia.	OH	BaseRel	Shared		\$17,687,496.00	6/1/2008	345	138	8
A	115	Central	DEM	New London to Webster 230 Reconductor	Reconductor New London to Webster St 230	IN	Other	Excluded	Y	\$9,455,194.00	6/1/2007	230		1
A	116	Central	DEM	Westwood Bk2 345/138	Add 2nd 345kV line from AEP Dequine to Westwood and 2nd Westwood 345/138 kV transformer.	IN	Other	Excluded	Y	\$6,836,707.00	6/1/2007	345	138	3
A	199	Central	DEM	Kokomo HP 230/138	Add 4th 230/138 kV transformer at Kokomo Highland Park.	IN	Other	Excluded	Y	\$3,278,756.00	6/1/2007	230	138	1
A	200	Central	DEM	W Laf Purdue 138 Switches	Upgrade 138kV switches at West Lafayette Purdue.	IN	Other	Excluded	Y	\$9,877.00	6/1/2007	138		1
A	201	Central	DEM	W Laf 138 Switches	Changing out switches to achieve conductor rating. NW Tap - West Lafayette 138	IN	Other	Excluded	Y	\$100,000.00	6/1/2008	138		1
A	619	Central	DEM	IPL Petersburg 345 Breaker	Complete breaker and half scheme at Petersburg Plant. IPL total estimate 1,100,000. 200,000 is Cinergy share of project.	IN	Other	Excluded	Y	\$200,000.00	6/1/2008	345		1
A	624	Central	DEM	Cloverdale to Plainfield 138 Lightning Protection	Upgrade static and grounding on the Cloverdale to Plainfield South 138kV circuit.	IN	Other	Excluded	Y	\$2,387,209.00	12/31/2007	138		1
A	627	Central	DEM	Kenton to West End New 138 Circuit	Construct new 138kV line from Kenton to West End.	KY	Other	Excluded	Y	\$1,980,041.00	6/1/2009	138		3
A	628	Central	DEM	Kok HP to Kok Delco 138 100C Uprate	Uprate 138kV line from Kokomo Highland Park to Kokomo Delco to 100C operating temperature.	IN	Other	Excluded	Y	\$100,000.00	6/1/2007	138		1
A	629	Central	DEM	Kok HP to Kok Chrysler 138 100C Uprate	Uprate 138kV line from Kokomo Highland Park to Kokomo Chrysler to 100C operating temperature.	IN	Other	Not Shared		\$100,000.00	6/1/2007	138		1
A	632	Central	DEM	Gallagher to HE Georgetown 138kV Reconductor	Reconductor section of the 13885 circuit from Gallagher to HE Georgetown.	IN	Other	Excluded	Y	\$1,065,110.00	6/1/2009	138		1
A	766	Central	DEM	Clarksville 138kV Cap	Add 57.6 MVAR 138kV capacitor at Clarksville.	IN	Other	Excluded	Y	\$738,662.00	6/1/2007	138		1
A	767	Central	DEM	Hastings Park 138kV Cap	Add 57.6 MVAR 138kV capacitor at Greenfield Hastings Park.	IN	Other	Excluded	Y	\$598,722.00	6/1/2007	138		1
A	807	Central	DEM	Dresser Bk 1&2 Limiting Equipment	Replace 138kV breakers and switches to achieve full transformer rating.	IN	Other	Not Shared		\$858,000.00	6/1/2009	345	138	2
A	838	Central	DEM	Speed 69kV Cap	Add 57.6 MVAR 69kV capacitor at Speed.	IN	Other	Not Shared		\$500,000.00	12/31/2006	138		1
A	839	Central	DEM	Crawfordsville 69kV Cap	Add 28.8 MVAR 69kV capacitor at Crawfordsville.	IN	Other	Not Shared		\$500,000.00	6/1/2007	138		1
A	842	Central	DEM	Blackwell 138/69	Construct new Blackwell 138/69kV substation. Tap LGEE 138kV line into substation.	KY	Other	Not Shared		\$589,000.00	4/30/2007	138		1
A	849	Central	DEM	Peabody Jct 600A Switches	Replace Peabody Jct 600A switches with 1200A switches.	IN	Other	Not Shared		\$318,341.00	6/1/2007	138		2
A	851	Central	DEM	Laf Cumberland to Laf AE Staley 138 Reconductor	Reconductor section of 13806 circuit with 954ACSR 100C.	IN	Other	Not Shared		\$325,000.00	6/1/2011	138		1
A	1193	Central	DEM	Nickel	Extend 5680 through new Nickel 138/12 sub to be built on development property.	OH	Other	Not Shared		\$150,376.81	6/1/2010	138		1
A	1195	Central	DEM	Cloverdale Ethanol 138	Construct new 138kV line from Cloverdale to new Putnam Energy ethanol plant.	IN	Other	Not Shared		\$229,811.00	5/1/2007	138		1
A	1196	Central	DEM	New London to Kok Highland Park 23009 Wave Traps	Replace 23009 800A wave traps at New London and Kokomo Highland Park with 1200A wave traps.	IN	Other	Not Shared		\$29,671.83	12/31/2006	230		2
A	1198	Central	DEM	Bedford Switch Automation	Add motors and automation to the 34506 and 34521 line switches.	IN	Other	Not Shared		\$152,390.14	6/1/2007	345		1
A	1199	Central	DEM	Dresser to Water St 100C Urate	Uprate 13868 conductor to 100C operating temperature from Dresser to S 1st St to Water St. New limit 1200A terminal equipment.	IN	Other	Not Shared		\$20,000.00	6/1/2010	138		2
A	1200	Central	DEM	Speed Bk3 Limiting Equipment	Upgrade 2000A 138kV breaker & switch and any other Bk3 limiting equipment. Replace any equipment that would limit the 345/138 xfr to less than the hot spot rating of 520 MVA.	IN	Other	Not Shared		\$173,193.11	6/1/2010	345	138	1
A	1201	Central	DEM	Oakland City to Princeton 100C Uprate	Uprate 13863 to 100C operating temperature from Oackland City to Princeton by adding 3 structures. New limit 1200A terminal equipment.	IN	Other	Not Shared		\$111,331.00	12/31/2006	138		1
A	1244	Central	DEM	Cayuga to Frankfort 23013 Wave Trap Upgrade	Upgrade wave traps at Cayuga and Frankfort to increase line rating to 797 MVA.	IN	Other	Not Shared		\$167,560.00	6/1/2011	230		2

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A	1246	Central	DEM	Five Points 23030 Wave Trap	Replace 800A wave trap with a 2000A wave trap. Increase line rating for Five Points to Geist 230kV line.	IN	Other	Not Shared		\$24,038.00	6/1/2011	230		1
A	1247	Central	DEM	Greentown to Peru SE 23021 uprate to 100C	Upgrade Greentown to Peru SE 230kV line to 100C operating temperature.	IN	Other	Not Shared		\$28,403.00	6/1/2011	230		1
A	1251	Central	DEM	Kokomo Highland Park to Noblesville 23008 Wave Trap Upgrade	Replace 800A wave traps with 2000A wave traps at Kok HP and Noblesville. Increase 230kV line rating from Kok HP to Carmel 146th St Jct to Noblesville.	IN	Other	Not Shared		\$54,038.00	6/1/2011	230		2
A	1252	Central	DEM	Kokomo Highland Park 23028 Wave Trap	Replace 800A wave trap with a 2000A wave trap. Increase 230kV line rating to Thorntown.	IN	Other	Not Shared		\$30,000.00	12/31/2006	230		1
A	1253	Central	DEM	Noblesville 23007 Wave Trap	Replace 800A wave trap with a 2000A wave trap. Increase line rating for Noblesville to Geist 230kV line.	IN	Other	Not Shared		\$24,038.00	6/1/2011	230		1
A	1254	Central	DEM	Charletown to CMC new 138kV line	Construct 8.5 mi. of 138kV line from Charlestown to CMC.	IN	Other	Not Shared			12/31/2009	138		1
A	1262	Central	DEM	HE Durgee Rd	HE 138/12 kV substation.	IN	Other	Not Shared		\$227,341.00	12/31/2007	138		1
A	584	West	DPC/XEL	Genoa-Coulee 161 kV line upgrade	Genoa-Coulee 161 kV line upgrade	WI	Other	Not Shared		\$4,057,132.00	6/1/2007	161		1
A	615	East	FE	Gallion 345/138 kV transformer prep	Gallion 345/138 kV transformer prep	OH	Other	Excluded	Y	\$1,815,566.00	12/1/2007	345	138	1
A	616	East	FE	Crissinger - Tangy 138 kV line	Crissinger - Tangy 138 kV line	OH	Other	Excluded	Y	\$2,713,000.00	6/1/2007	138		1
A	890	East	FE	North Medina 345/138 kV Substation	Add a new 345/138kV substation at the junction of the Star-Carlisle 345kV and Star-West Akron #2 138kV lines	OH	BaseRel	Shared		\$8,540,000.00	6/1/2008	345	138	2
A	1316	East	FE	Dale Sub - Install Reactor	Reactor to be installed on the Dale-West Canton 138 kV line at the Dale Substation	OH	Other	Not Shared		\$401,800.00	6/1/2007	138		1
A	1326	East	FE	Add Capacitor Banks at Harding and Juniper 345 kV substations	Addition of a 300 Mvar capacitor bank at the Harding 345 kV bus in 2008 and Addition of a 300 Mvar capacitor bank at the Juniper 345 kV bus	OH	BaseRel	Shared		\$5,454,346.00	6/1/2009	345		2
A	1327	East	FE	Babb - Install 138 kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$488,600.00	6/1/2009	138		1
A	1328	East	FE	Barberton - Install 138 kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$677,600.00	6/1/2010	138		1
A	1329	East	FE	West Akron - Install 138 kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$257,000.00	6/1/2009	138		1
A	1330	East	FE	South Akron - Install 138 kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$426,000.00	6/1/2007	138		1
A	1331	East	FE	East Akron - Install 138 kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$305,000.00	6/1/2011	138		1
A	1332	East	FE	Cloverdale - Install 138 kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$378,000.00	6/1/2009	138		1
A	1333	East	FE	Brookside -Add 138kV Cap Banks	Add 2 - 50 MVAR Cap Bank with 1 - 138 kV Switcher	OH	Other	Not Shared		\$1,000,200.00	6/1/2010	138		1
A	1334	East	FE	Longiew -Add 138kV Cap Banks	Add 2 - 50 MVAR Cap Bank with 1 - 138 kV Switcher	OH	Other	Not Shared		\$523,800.00	6/1/2010	138		1
A	1335	East	FE	Roberts -Add 138kV Cap Bank	Add 1 - 50 MVAR Cap Bank with 1 - 138 kV Breaker	OH	Other	Not Shared		\$379,285.00	6/1/2007	138		1
A	1336	East	FE	Gallion Transformers #3 and #4 345 kV Circuit Breaker Addition	Add 345kV breaker to complete 345kV ring-bus as well as extend 138kV bus to include another breaker string to the existing breaker-and-a-half scheme.	OH	Other	Not Shared		\$1,815,566.00	12/1/2007	138		1
A	1350	East	FE	Cloverdale Sub - Split 138 kV Bus	Rearrange the 138 kV bus at Cloverdale to electrically separate the North and the South bus and provide a separate 138 kV breaker for xfmr #4	OH	Other	Not Shared		\$630,900.00	6/1/2007	138		1
A	596	West	GRE	Vermillion River - Empire 115 kV line	Vermillion River - Empire 115 kV line	MN	Other	Excluded	Y	\$2,750,000.00	5/1/2007	115		1
A	601	West	GRE	Mud Lake - Wilson Lake 115 kV line	Mud Lake - Wilson Lake 115 kV line	MN	Other	Excluded	Y	\$6,000,000.00	6/1/2008	115		1
A	1026	West	GRE	Linwood 230-69 kV transformer	Required for TSR A125 and A130	MN	TDSP	Direct Assigned		\$5,000,000.00	12/1/2007	230	69	1
A	1290	West	GRE	Willmar - Granite Fall 230 kV line limit will be 382 MVA by 2007 (CT and wavetrap replacement to higher amperage this fall)	Willmar - Granite Fall 230 kV line limit will be 382 MVA by 2007 (CT and wavetrap replacement to higher amperage this fall)	MN	Other	Not Shared		\$250,000.00	2/28/2007	230		1
A	1459	West	GRE	G351, 37804-01, G352, 37804-02	Net: new Dakota County substation will be located between NSP Blue Lake and Prairie Island Substations on the 345 kV line 0976	MN	GIP	Shared		\$8,935,288.00	1/1/2009	345	16	4
A	1318	Central	HE	Decatur County Switch Station (DCSS)	161/138kV Switching Station w/138kV Ring Bus	IN	Other	Not Shared		\$7,000,000.00	9/1/2007	161	138	3
A	1319	Central	HE	Decatur County Switch Station Tap	138kV Taplines from Cinergy 138kV Transmission	IN	Other	Not Shared		\$500,000.00	9/1/2007	138		1
A	1320	Central	HE	Greensburg Honda Subs & Tap Lines	Two 138/12.47kV substations and tap lines from DCSS	IN	Other	Not Shared		\$3,750,000.00	9/1/2007	138		2
A	1321	Central	HE	Napoleon to DCSS Transmission Project	161kV Transmission from Napoleon to DCSS, 30 MVAR Cap	IN	Other	Not Shared		\$8,000,000.00	9/1/2008	161		2

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A	1322	Central	HE	Owensville Primary Substation	138/69kV Primary Station at Owensville	IN	Other	Not Shared		\$2,500,000.00	4/1/2008	138		1
A	40	Central	IPL	Cumberland-Julietta-Indian Crk 138kV Line	Add new 138kV Line from Cumberland to Julietta to Indian Creek	IN	Other	Excluded	Y	\$1,818,011.02	6/1/2008	138		2
A	893	Central	IPL	North 138 kV 150 MVAR Capacitor	Capacitor Bank SizeUpgrade: North 138 kV 100 MVAR To 150 MVAR	IN	Other	Not Shared		\$300,000.00	6/1/2008	138		1
A	895	Central	IPL	Georgetown To Northeast 138kV Loop-In	Loop Georgetown to Northeast 138kV Line Into North Substation	IN	Other	Not Shared		\$3,000,000.00	7/1/2007	138		2
A	503	East	ITC	Wixom-Quaker 230	Project to add 345/230 kV transformer at Wixom, un-six-wire Wixom to Hancock 120 kV ckt, decommission Hancock to Quaker 120 kV ckt, add 230/120 kV transformer at Quaker (on new bus), create new 230 kV ckt from Wixom to Quaker, and reconductor 4 miles of the existing Hancock to Southfield 120 kV circuit.	MI	Other	Excluded	Y	\$10,000,000.00	5/30/2007	345	120	4
A	509	East	ITC	Lenox Station	Belle River-Lenox and Lenox-Jewel 345 kV lines, Lenox 345/120 kV transformer, and 120 kV station that ties together several 120 kV lines in the area. (St Clair, Victor, Augusta tap, Grayling 1 & 2). Was New Haven, named changed to Lenox.	MI	Other	Excluded	Y	\$15,000,000.00	12/31/2006	345	120	8
A	518	East	ITC	Bismark-Golf	Bismark-Golf 120 kV line: create a 120 kV station at Golf and build a new 120 kV line from Bismark to Golf.	MI	Other	Excluded	Y	\$4,000,000.00	5/30/2007	120		3
A	578	East	ITC	DVARs at Wyatt and Lee	Installs DVARs at Wyatt Station and Lee Station	MI	Other	Excluded	Y	\$3,500,000.00	12/31/2006	120		1
A	586	East	ITC	Stephens - Erin 120 kV line #3	Constructs new 120 kV Cable from Stephens to Erin	MI	BaseRel	Shared		\$34,000,000.00	12/31/2007	120		1
A	686	East	ITC	Majestic 345/120 kV switching station	Create a Majestic-Madrid 120 kV circuit by un-six wiring the existing Majestic-Madrid 345 kV circuit and connecting the available conductor to a new 120 kV bus and position off the Madrid 120 kV bus and the new 120 kV substation via a 345/120 kV transformer at the Majestic station. Porject also requiresbus expansions at both Madrid 120 kV and 345 kV stations	MI	BaseRel	Shared		\$15,000,000.00	12/31/2007	345	120	5
A	692	East	ITC	Bismark-Troy 345 kV line	Creates a Bismarck-Troy 345 kV line with a Troy 345/120 kV transformer.	MI	BaseRel	Shared		\$150,000,000.00	5/31/2008	345	120	2
A	905	East	ITC	Marysville Decommissioning	Decommission Marysville Station, expand Bunce Creek Station creating new Bunce Creek - Cypress, Bunce Creek - Menlo, Bunce Creek - Wabash 2 120 kV lines.	MI	Other	Not Shared		\$3,500,000.00	12/31/2006	120		3
A	907	East	ITC	Goodison Station	Build Goodison Station, with a Belle River-Goodison 345 kV, Pontiac-Goodison 345 kV, new 345/120 kV Xfmr, new Pontiac-Goodison 120 kV line, Goodison-Tienken 120 kV, Sunbird-Goodison 120 kV, and Tienken-Spokane 120 kV.	MI	BaseRel	Shared		\$50,000,000.00	5/31/2008	345	120	7
A	910	East	ITC	Coventry Station upgrade	Constructs new Coventry-Cody 230 kV line using the same right-of-way currently occupied by the Coventry-Cody 120 kV circuit. Project involves constructing a new 345/230 kV tranformer at Coventry along with a 230/120 kV transformer at Cody. Project also invloves expansion of the Coventry 345 kV station.	MI	BaseRel	Shared		\$25,600,000.00	12/31/2007	345	120	5
A	911	East	ITC	Placid 345/120 transformer #2	Construct second 345/120 kV transformer at the Placid station. Project involves expansions at both Placid 120 kV and 345 kV stations	MI	BaseRel	Shared		\$5,550,000.00	5/30/2007	345	120	2
A	1011	East	ITC	Durant-Genoa 120 kV	Builds a new 120 kV Durant sub-station with a new circuit from Genoa to Durant	MI	Other	Not Shared		\$15,000,000.00	12/31/2006	120		1
A	1300	East	ITC	Pontiac-Joslyn and Joslyn-Walton Equipment upgrade	Replace line terminal equipment in order to raise the thermal rating of the Pontiac-Joslyn and Joslyn-Walton 120 kV circuits.	MI	Other	Not Shared		\$500,000.00	5/30/2007	120		2
A	1301	East	ITC	Yost Line Breaker	Adds a line breaker on the Yost end of the Yost-Polaris 120 kV Circuit to reduce the trasnmission system exposure to faults on distribution circuits	MI	Other	Not Shared		\$300,000.00	12/31/2007	120		1
A	1302	East	ITC	Hines and Walton Station Equipment Replacement	Replaces equipment and buses at Hines and Walton Stations to increase thermal ratings to relieve overloads	MI	Other	Not Shared		\$1,500,000.00	5/31/2007	120		2
A	1304	East	ITC	Monroe Breaker	Adds a new breaker on the 120 kV side of Monroe Xfmr 303	MI	Other	Not Shared		\$300,000.00	12/31/2007	345	120	1

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A	1305	East	ITC	Caniff Station Upgrade	Replaces the Gas Insulated Switchgear and all breakers at Caniff, and also creates a ring bus configuration. GIS was nearing end of life and would require high maintenance costs	MI	Other	Not Shared		\$14,400,000.00	5/31/2007	345	120	1
A	1306	East	ITC	Midtown Station Upgrade	Replaces the Gas insulated Switchgear and all breakers on the 120 kV at Midtown, and also creates a ring bus configuration. GIS was nearing end of life and would require high maintenance costs	MI	Other	Not Shared		\$6,000,000.00	12/31/2007	120		1
A	1307	East	ITC	Catilina Substation	Replace the 120 kV Breaker, buses, and station equipment at Catalina Sub as part of a customer interconnection request	MI	Other	Not Shared		\$1,000,000.00	5/1/2007	120		1
A	1308	East	ITC	B3N Interconnection	Returns the Bunce Creek to Scott 220 kV circuit to service, and replaces the Phase Angle Regulator with 2 new phase angle regulating transformers in series	MI	Other	Not Shared		\$25,500,000.00	12/31/2007	220		2
A	1309	East	ITC	Breaker Replacement Program	Targets the replacement of breakers nearing their end of life where maintenance costs will be just as high as new breakers	MI	Other	Not Shared		\$3,000,000.00	12/31/2007	345		12
A	1310	East	ITC	Breaker Replacement Program	Targets the replacement of breakers nearing their end of life where maintenance costs will be just as high as new breakers	MI	Other	Not Shared		\$2,000,000.00	12/31/2007	230		12
A	1488	East	ITC	Break up 3-ended Prizm-Proud-Placid 120 kV line	Results in Placid to Durant and Placid to Proud (Durant substation replaces Prizm sub).	MI	Other	Not Shared		\$4,000,000.00	12/31/2006	120		2
A	246	West	LES	North Tier 115 kV, Phase II	NW68th & Holdrege - NW 12th & Arbor 115 ckt 1, Sum rate 373	NE	Other	Excluded	Y	\$1,712,000.00	12/31/2008	115		1
A	804	West	LES	Rebuild North Tier 115 kV	Rebuild part of 19th & Alvo - 70th & Bluff 115 ckt 1, Sum rate 363	NE	Other	Not Shared		\$300,000.00	12/31/2008	115		1
A	548	West	MDU	Bismarck Downtown-East Bismarck 115 kV upgrade to at least 160 MVA	Bismarck Downtown-East Bismarck 115 kV upgrade to at least 160 MVA	ND	Other	Not Shared		\$363,000.00	11/1/2007	115		1
A	1008	West	MDU	Bismarck/Mandan 115 kV Circuits transferred from old to new Memorial Bridge	Bismarck/Mandan 115 kV Circuits transferred from old to new Memorial Bridge	ND	Other	Not Shared		\$6,560,000.00	11/1/2009	115		2
A	481	East	METC	Tallmadge 345/138 kV TB3 transformer #3	Tallmadge 345/138 kV TB3 transformer #3 addition	MI	BaseRel	Shared		\$9,913,090.00	12/1/2008	345	138	3
A	497	East	METC	Tallmadge - Wealthy Street 138 kV line #2	Tallmadge - Wealthy Street 138 kV line #2	MI	Other	Excluded	Y	\$40,000.00	6/1/2007	138		1
A	644	East	METC	Rogue River 138 ckt # 1	Rogue River 138 ckt # 1	MI	Other	Excluded	Y	\$160,000.00	6/15/2007	138		1
A	645	East	METC	American Bumper - David 138 ckt # 1	Rebuild line to 795 ACSS	MI	Other	Not Shared		\$2,500,000.00	6/1/2007	138		1
A	658	East	METC	Gaylord - Livingston 138 ckt # 1	Reconductor 1.5 miles to 795 ACSS	MI	TDSP	Not Shared		\$500,000.00	5/1/2008	138		1
A	660	East	METC	Keystone - Clearwater - Stover 138 kV line Phase 1	Keystone to Clearwater 138 kV line - rebuild 23.2 miles to 795 ACSS	MI	BaseRel	Shared		\$10,200,000.00	5/1/2009	138		1
A	740	East	METC	345 kV line relaying and communications upgrade project - Phase 1	Phase 1 Upgrade 345 kV line relaying and communications on Gallagher - Tittabawassee, Keystone - Livingston, and Livingston - Gallagher lines.	MI	Other	Excluded	Y	\$2,794,000.00	3/1/2007	345		3
A	775	East	METC	Iosco 138 kV 18 MVAR Capacitors	Iosco 138 kV 18 MVAR Capacitors	MI	Other	Excluded	Y	\$800,000.00	3/31/2007	138		1
A	976	East	METC	Alpine - Add one line switch	Install a tap pole and one switch on Four Mile-N Belding 138kV line	MI	Other	Not Shared		\$80,000.00	5/15/2008	138		1
A	977	East	METC	Marquette 138 kV station	Replace breaker failure scheme	MI	Other	Not Shared		\$200,000.00	5/1/2006	138		1
A	981	East	METC	Wabasis	Install a tap pole and two switches on N. Belding - Vergennes 138kV Line	MI	Other	Not Shared		\$160,000.00	6/1/2009	138		1
A	982	East	METC	Crahen	Install a tap pole and one switch on Spaulding-Race St.-Four Mile 138kV line	MI	Other	Not Shared		\$80,000.00	7/1/2008	138		1
A	988	East	METC	Simpson - Batavia 138 kV line	Simpson - Batavia 138 kV line - Build 30 miles new 138 kV line, 795 ACSS	MI	BaseRel	Shared		\$13,000,000.00	12/31/2009	138		1
A	1015	East	METC	Oden	Oden - New Capacitor	MI	Other	Not Shared		\$510,000.00	6/1/2008	138		1
A	1016	East	METC	Bard Road	Bard Road - New Capacitor	MI	Other	Not Shared		\$596,000.00	6/1/2007	138		1
A	1017	East	METC	Croton	Croton - New Capacitor	MI	Other	Not Shared		\$596,000.00	6/1/2007	138		1
A	1390	East	METC	Goss Station 345kV Bus	Rebuild Goss 345kV bus from GIS to air insulated and replace 345kV breakers	MI	Other	Not Shared		\$5,800,000.00	12/1/2007	345		1

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A	1391	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 148 at Campbell	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1392	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 188 at Campbell	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1393	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 288 at Campbell	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1394	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 388 at Campbell	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1395	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 500 at Campbell	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1396	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 588 at Campbell	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1397	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 36M9 at Spaulding	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1398	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 36B7 at Spaulding	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1399	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 377 at Morrow	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1400	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 288 at Claremont	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1401	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 388 at Claremont	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1402	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 13B7 at Goss	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1403	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 13M9 at Goss	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1404	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 6W8 at Argenta	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1405	East	METC	Overdutied Breaker Replacement Plan	Replace 138kV breaker 499 at Hemphill	MI	Other	Not Shared		\$160,000.00	12/31/2007	138		1
A	1406	East	METC	Breaker Repair or Replace Program	Replace 138kV Alpena 188 breaker	MI	Other	Not Shared		\$160,000.00	12/31/2008	138		1
A	1407	East	METC	Ludington 345kV Reactor	Repair or replace faulty (gasing) 100MVAR reactor and replace the existing circuit switcher with a breaker	MI	Other	Not Shared		\$1,500,000.00	12/1/2007	345		1
A	1408	East	METC	RTU / SCADA upgrade	Install and/or upgrade RTU's and SCADA points throughout system	MI	Other	Not Shared		\$801,000.00	5/1/2007	345	138	1
A	1410	East	METC	Mobile 138kV Bulk Capacitor	Purchase a mobile 14.4 - 36MVAR capacitor for flexible use where needed throughout the system		Other	Not Shared		\$700,000.00	12/1/2008	138		1
A	1411	East	METC	Campbell Unit 3 Automatic Relay Runback SPS	Install auto relay runback scheme on Campbell Unit 3 per MISO G479 project	MI	Other	Not Shared		\$75,000.00	3/1/2007	345		1
A	1412	East	METC	Covert - Negative Sequence Mitigation	Re-arrange phases on 345kV Palisades-Argenta Ckt #1 or #2 and on 345kV Palisades-Cook Ckt #2	MI	Other	Not Shared		\$905,000.00	6/1/2007	345		2
A	1413	East	METC	Bagley-Gaylord 138kV line	Rebuild line to 795 ACSS	MI	Other	Not Shared		\$350,000.00	5/1/2009	138		1
A	1414	East	METC	Thetford 345kV Line Relaying	Upgrade line relaying on 345kV lines	MI	Other	Not Shared		\$300,000.00	12/31/2007	345		1
A	1415	East	METC	Solar	Install a tap pole and one switch on each of the Tittabawassee-HSC and Lawndale-HSC 138kV lines.	MI	Other	Not Shared		\$160,000.00	10/1/2007	138		1
A	1416	East	METC	Tittabawassee-Hemlock Semiconductor 138 kV line	Install a second 138kV Tittabawassee-HSC line (14.7 miles) along with required 138kV breakers at each end (5 total breakers) and install a 2 mile 138kV double circuit to swap the existing Tittabawassee and Lawndale line connections into HSC.	MI	BaseRel	Shared		\$7,227,000.00	10/1/2007	138		2
A	1417	East	METC	Race Street	Install a 138kV tie-breaker to loop the Spaulding-Four Mile 138kV Line into Race Street	MI	Other	Not Shared		\$2,200,000.00	6/1/2007	138		1
A	1418	East	METC	Kinderhook	Install a tap pole and two switches on Batavia-Barton Lake 138kV Line	MI	Other	Not Shared		\$160,000.00	5/1/2007	138		1
A	1419	East	METC	Laundra	Install a tap pole and one switch on Bullock-Saginaw River 138kV Line	MI	Other	Not Shared		\$80,000.00	6/1/2007	138		1
A	1420	East	METC	Sanderson	Install a tap pole and one switch on North Belding-Sanderson 138kV Line	MI	Other	Not Shared		\$80,000.00	6/1/2007	138		1
A	1421	East	METC	Baraga (formerly Sinclair or Spectrum)	Install a 138kV tie-breaker to loop the Spaulding-Four Mile 138 kV Line into Baraga.	MI	Other	Not Shared		\$240,000.00	12/15/2007	138		1
A	1422	East	METC	Marshall	Install a tap pole and one switch on the Verona-Marshall 138kV line.	MI	Other	Not Shared		\$80,000.00	6/1/2007	138		1
A	1423	East	METC	Eppler	Install a tap pole and two switches on the Emmet-McNally 138kV line. Purchase the high side of Emmet Substation and a section of the 138kV line from the substation to the Eppler tap point.	MI	Other	Not Shared		\$500,000.00	6/1/2007	138		1
A	1424	East	METC	Trillium	Install a tap pole and two switches on Delhi-Tompkins #2 138kV Line	MI	Other	Not Shared		\$160,000.00	5/1/2007	138		1
A	1425	East	METC	Gray Road	Install a tap pole and two switches on Keystone-Elmwood 138kV Line plus some relay upgrades	MI	Other	Not Shared		\$300,000.00	6/1/2008	138		1
A	1433	East	METC	Buskirk	Install bulk substation served from the Beals-Hazelwood 138kV Line	MI	Other	Not Shared		\$2,200,000.00	6/1/2008	138		1

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App AB	PrjID	Region	Reporting Source	Project Name	Project Description	State	Allocation FF	Share Status	Exclude FF1	Estimated Project Cost	Expected ISD	Max kV	Min kV	Facility Count
A	1434	East	METC	Five Mile	Install bulk substation served from the Spaulding 138kV ring bus	MI	Other	Not Shared		\$750,000.00	6/1/2008	138		1
A	1437	East	METC	N Ave	Install a tap pole and two switches on Argenta-Milham 138kV Line	MI	Other	Not Shared		\$160,000.00	6/1/2008	138		1
A	1438	East	METC	Potvin	Install a tap pole and one switch on Wexford-Tippy 138kV Line	MI	Other	Not Shared		\$80,000.00	6/1/2008	138		1
A	1439	East	METC	Busch	Install a tap pole and two switches on Hemphill-Weadock 138kV Line	MI	Other	Not Shared		\$160,000.00	10/1/2007	138		1
A	1440	East	METC	Huckleberry	Install a tap pole and two switches on Beals Rd-Wayland-Hazelwood 138kV Line	MI	Other	Not Shared		\$80,000.00	6/1/2008	138		1
A	1441	East	METC	Ellis (Hile Road)	Install bulk substation served from a new Ellis spur from Sternberg	MI	Other	Not Shared		\$3,250,000.00	6/1/2009	138		1
A	1442	East	METC	Eastmanville (Pingree)	Install bulk substation served from the Fillmore-Four Mile 138kV Line	MI	Other	Not Shared		\$200,000.00	10/1/2007	138		1
A	1444	East	METC	Dublin	Install a tap pole and two switches on Bullock-Edenville 138kV Line	MI	Other	Not Shared		\$160,000.00	6/1/2011	138		1
A	1445	East	METC	Emmet	Install a second distribution transformer at Emmet	MI	Other	Not Shared		\$2,750,000.00	6/1/2010	138		1
A	1446	East	METC	Gaines	Install bulk substation at Gaines	MI	Other	Not Shared		\$50,000.00	6/1/2010	138		1
A	1447	East	METC	Horseshoe Creek (Deja)	Install bulk substation served from the Eureka-Deja-Vestaburg 138kV Line	MI	Other	Not Shared		\$2,200,000.00	6/1/2010	138		1
A	1449	East	METC	Juniper	Install bulk substation served from the Cobb-Tallmadge #2 138kV Line	MI	Other	Not Shared		\$160,000.00	6/1/2010	138		1
A	1465	East	METC	G418, 38068-02	Construction Suspended on 5/15/2006, can be suspended for 3 years. Net:	MI	GIP	Shared		\$5,192,616.00	10/1/2007	138	1	6
A	1358	West	MP	Grand Rapids - Capacitor 115 add new	Grand Rapids - Capacitor 115 add new	MN	Other	Not Shared		\$320,000.00	12/30/2006	115		1
A	279	West	MPC/XEL/OT	Boswell - Wilton 230 kV Line	Boswell - Wilton 230 ckt 1, Sum rate 390	MN	BaseRel	Shared		\$35,963,000.00	7/1/2010	230		1
A	757	East	NIPS	Dune Acres - Add 138 kV Capacitors - 100 MVAR	Add one step of capacitors, for a total 100 MVAR, on the Dune Acres 138 kV bus.	IN	Other	Excluded	Y	\$1,083,600.00	2/1/2007	138		1
A	925	East	NIPS	ISG2 to Marktown - Upgrade Capacity	Upgrade circuit capacity on existing .6 miles of 300 KCM Cu line by bundling both sets of 300 KCM CU line on shared tower line between Marktown and ISG #2 to increase capacity to 316 MVA.	IN	Other	Not Shared		\$240,500.00	12/1/2006	138		1
A	1298	East	NIPS	Inland #5 to Marktown - Upgrade Capacity	Upgrade Cir. 13830 capacity on existing 2.2 miles of 400 KCM Cu line by upgrading conductor to 954 KCM ACSR between Marktown and Inland #5 Substation.	IN	Other	Not Shared		\$750,000.00	5/1/2008	138		1
A	1454	West	NSP	G176, 37319-01	Net: Yankee Substation 115/34.5 kV transformer Int: two 34.5 feeder bays at Yankee Sub terminating at the dead-end switch structures outside Yankee Sub.	MN	TAP	Not Shared (Pre-RECB 1)		\$2,306,000.00	10/1/2007	115	34.5	1
A	1455	West	NSP	G238, 37642-02, Increase of generating capacity at Riverside Generating Plant	Net: 3 new 115 kV, 63 kA interrupting rating circuit breakers, disconnect switches, and relocate the existing Apache 115 kV line to a new termination in the same substation	MN	Other	Not Shared (Pre-RECB 1)		\$2,770,000.00	5/1/2009	115		2
A	274	West	OTP	Appleton - Dawson 115 kV Line	Appleton - Dawson 115 ckt 1, Sum rate 96	MN	Other	Not Shared		\$474,000.00	8/1/2008	115		1
A	275	West	OTP	Canby - Dawson 115 kV Line	Dawson - Canby 115 ckt 1, Sum rate 96	MN	Other	Not Shared		\$538,000.00	8/1/2008	115		1
A	1362	West	OTP	Louisurg - Dawson 115 Convert an existing 41.6 kV line to 115 kV	Louisurg - Dawson 1 115 Convert an existing 41.6 kV line to 115 kV	MN	Other	Not Shared		\$988,000.00	8/1/2008	115		1
A	1462	West	OTP / GRE	G380, 37946-02	Net: Transmission Owner will upgrade the Rugby Substation to accomdate the interconnection of the IC's 230 kV radial transmission line into Rugby, will need to add additional 230 kV bus, new 230 kV breaker and associated equipment.	ND	GIP	Shared		\$898,740.00	9/1/2007	230		3
A	755	West	OTP/MRES/G	Alexandria Capacitor Addition	Alexandria Switching Station 115 kV 25 MVAR Capacitors	MN	Other	Not Shared		\$530,000.00	6/1/2007	115		1
A	81	Central	SIPC	Marion Power Plant - Carrier Mills 161 kV line	Construct a 161 kV line connecting the Marion 161 kV Plant to a new Carrier Mills 161/69 kV Substation. The project includes the construction of nearly 27 miles of 161 kV transmission line and converting a 69 kV switching station into a 161/69 kV substation.	IL	Other	Excluded	Y	\$7,083,000.00	6/1/2007	161		1
A	1205	East	WPSC	Cheboygan II Breaker Station	Add a 69KV breaker in the line from Tower to Pelston	MI	Other	Not Shared		\$550,000.00	8/1/2006	69		1
A	1206	East	WPSC	Bass Lake - Lake County Line Rebuild	Line Rebuild to 795ACSR for future 138KV operation	MI	Other	Not Shared		\$1,800,000.00	8/1/2006	69		1
A	1207	East	WPSC	Hersey - Osceola Line Re-rate	Rerate line to 75C	MI	Other	Not Shared		\$200,000.00	8/1/2006	69		1
A	1208	East	WPSC	Oden 12MVAR Capacitor Bank	Add 12MVAR Capacitor Bank at Oden Substation	MI	Other	Not Shared		\$300,000.00	8/1/2006	69		1

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A	1226	East	WPSC	Kalkaska Gen - Westwood Line Rebuild	Kalkaska Gen - Kalkaska JCT - Westwood Line Rebuild. Summer Rating 102.4 MVA	MI	Other	Not Shared		\$2,905,000.00	2/1/2008	69		1
A	1227	East	WPSC	Gaylord Gen - Bagley Junction	Gaylord Gen - Bagley Junction Rebuild. Summer Rating 102.4 MVA	MI	Other	Not Shared		\$1,000,000.00	2/1/2008	69		1
A	1228	East	WPSC	ANR El Paso New Load	Add 14MW load off of Wolverine's Westwood Junction	MI	Other	Not Shared		\$1,800,000.00	8/1/2008	69		1
A	1229	East	WPSC	Plains Junction Breaker Station	Replace Relaying and Breakers at Plains Junction Substation	MI	Other	Not Shared		\$625,000.00	11/1/2006	69		1
A	1230	East	WPSC	White Cloud Breaker Station	Replace Relaying and Breakers at White Cloud Substation	MI	Other	Not Shared		\$625,000.00	9/1/2006	69		1
A	1231	East	WPSC	Superior Corn Substation	Add new load point near Wolverine's Odessa Substation	MI	Other	Not Shared		\$550,000.00	6/1/2006	69		1
A	1272	East	WPSC	Redwood 75MVA Transformer	Add 75MVA Transformer at Redwood Substation a separate line from Redwood Junction will be ran to energize the transformer.	MI	Other	Not Shared		\$1,900,000.00	8/1/2010	138	69	1
A	56	West	XEL	Chisago - Apple River	Chisago - Lindstrom - Shafer- Lawrence Creek 69 kV rebuild to 115 kV, Lawrence Creek - St Croix Falls - Apple River 69 kV rebuild to 161 kV. New Lawrence Creek 161/115/69 kV substation	MN	Other	Excluded	Y	\$34,480,000.00	12/31/2010	161	115	5
A	267	West	XEL	Lawrence - Minnehaha 115	Lawrence - Minnehaha 115 ckt 1, Sum rate 310	SD	Other	Excluded	Y	\$829,667.00	5/1/2007	115		1
A	268	West	XEL	Minnehaha - Lincoln County 115	Minnehaha - Lincoln County 115 ckt 1, Sum rate 310	SD	Other	Excluded	Y	\$925,398.00	5/1/2007	115		1
A	269	West	XEL	Prairie Island - Red Rock 345	Prairie Island - Red Rock 345 ckt 2, Sum rate 1198	MN	Other	Excluded	Y	\$807,000.00	6/1/2007	345		1
A	270	West	XEL	Champlin - Champlin Tap 115	Champlin - Champlin Tap 115 ckt 1, Sum rate 310	MN	Other	Excluded	Y	\$382,923.00	6/1/2007	115		1
A	272	West	XEL	Air Lake - Vermillion River 115	Air Lake - Vermillion River 115 ckt 1, Sum rate 200	MN	Other	Not Shared		\$3,359,095.21	6/1/2007	115		1
A	366	West	XEL	Sherburne Co Area 115 kV project	Upgrade Sherco - Monticello 115 and Sherco - St Cloud 115 kV lines, new Sherco 345/115 transformer	MN	Other	Excluded	Y	\$7,763,734.00	6/1/2007	345	115	5
A	377	West	XEL	Xcel Energy Wind 425 MW project	Buffalo Ridge (SW MN) 425 MW of Generation Outlet:Remaining projectcomponent.	MN	TDSP	Not Shared		\$9,380,127.53	1/1/2007	115		1
A	385	West	XEL	Xcel Energy Wind 425-825 MW project	Buffalo Ridge (SW MN) 825 MW of Generation Outlet: Split Rock to Lakefield Junction new 345 kVline and other upgrades	MN	TDSP	Not Shared		\$124,947,480.66	6/1/2010	345	115	13
A	417	West	XEL	Westgate 115, 80 MVAR Capacitor	Westgate 115, 80 MVAR Capacitor	MN	Other	Excluded	Y	\$1,500,000.00	6/1/2007	115		1
A	609	West	XEL	Long Lake - Oakdale 115 kV line	Long Lake - Oakdale 115 kV line	MN	Other	Excluded	Y	\$760,000.00	6/1/2007	115		1
A	671	West	XEL	Oakdale - Tanners Lake 115	Oakdale - Tanners Lake 115 ckt # 1	MN	Other	Excluded	Y	\$800,000.00	6/1/2007	115		1
A	673	West	XEL	Champlin Tap - Crooked Lake 115	Champlin Tap - Crooked Lake 115 ckt # 1	MN	Other	Not Shared		\$310,000.00	6/1/2008	115		1
A	674	West	XEL	High Bridge - Rogers Lake 115	High Bridge - Rogers Lake 115 ckt # 1	MN	TDSP	Not Shared		\$2,400,000.00	5/1/2008	115		1
A	780	West	XEL	Lakefield Gen - Wilmarth Series Compensation	Fieldon Township 345 kV Series Capacitor 20 ohms	MN	TDSP	Not Shared		\$10,100,000.00	11/1/2007	345		1
A	1031	West	XEL	Garwind McNeilus generator TSR upgrades	TSR conditional upgrades for delivery of G171, G239, G242	MN	TDSP	Not Shared		\$780,000.00	3/1/2005	69		1
A	1034	West	XEL	Loon Lake 115/69 kV transformer upgrade	Replace Loon Lake 115/69 kV transformer with 112 MVA	MN	Other	Not Shared		\$1,774,000.00	6/1/2006	115	69	1
A	1364	West	XEL	Lakefield Jct - Lakefield Generation 345 kV line - Raise the structures to increase the thermal rating	Lakefield Jct - Lakefield Generation 345 kV line - Raise the structures to increase the thermal rating	MN	TDSP	Not Shared			5/1/2007	345		1
A	1365	West	XEL	Edina - Eden Prairie 115 Reconnector	Edina - Eden Prairie 1 115 Reconnector	MN	Other	Not Shared		\$3,730,000.00	6/1/2007	115		1
A	1366	West	XEL	G405: Colvill Generating station - Interconnection upgrades	Colvill Generating station - Transformer relocated from Cannon Falls substation, Build in and out to Cannon Falls - Empire 115 kV line, Build in and out to Cannon Falls - Spring Creek 161 kV line	MN	GIP	Shared		\$13,943,380.00	5/1/2008	161	115	5
A	1456	West	XEL	G255, 37517-01	Net: a new 120 MVA, 118-36.2 kV transformer, 2 115 kV breakers, 115 kV switches and 34.5 kV breakers and switches. Int: install two new 50 MW feeders and all associated equipment.	MN	GIP	Shared		\$3,357,600.00	11/1/2007	118	36.2	2
A	1457	West	XEL	G287, 37642-03. Upgrades for G287	G287 Upgrades: Nobles County sub upgrades, Hazel Run substation, Nobles County - Fenton 115 kV line	MN	GIP	Shared		\$38,735,000.00	12/31/2010	345		6

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A	1458	West	XEL	G349, 37774-01: Upgrades for G349	G349 Upgrades: Yankee substation, Brookings Co 345/115 substation, Hazel Run 53 Mvar capacitor, Brookings-Yankee 115 kV line	MN	GIP	Shared		\$31,982,000.00	11/30/2011	345	115	6
A	1464	West	XEL	G408, 38048-01, Velva Windfarm	Net: tap McHenry - Souris 115 kV line, install switches, metering equipment, and other appropriate equipment	MN	Other	Not Shared (Pre-RECB 1)		\$336,650.00	11/15/2005	115		3
A	1489	West	XEL	Woodbury - Tanners Lake upgrade	Reconductor the line from Woodbury - Tanners Lake to 310 MVA	MN	Other	Not Shared		\$525,000.00	6/1/2011	115		1
A	853	Central	DEM	West Lafayette to Cumberland 138 Reconductor	Reconductor section of 13806 circuit with 954ACSR 100C.	IN	Other	Not Shared		\$646,000.00	6/1/2015	138		1

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App AB	Facil ID	Reporting Source	PriID	Expected ISD	From Sub or Location	To Sub or Device Description	Ckt	Voltage (kV)	LS kV	Rating (Normal / Emergency)	Upgrade Description	Map Grid	State	Miles Upg	Miles New	Estimated Facility Cost	Cost Shared	Post Stamp
A	189	ALTW	90	6/1/2007	Emery	Lime Creek	2	161		326	New Facility	H7	IA		25	\$8,000,000.00		
A	2104	ALTW	1204	10/1/2006	Adams	Rochester	1	161		201/221 MVA	replace termination jumpers at Adams	I7	MN			\$5,000.00		
A	2116	ALTW	1287	6/1/2008	Salem 345/161 kV	transformer	1	345	161	448/448	Larger Xfmr	J8	IA	0	0	\$5,000,000.00	Y	
A	2117	ALTW	1288	6/1/2009	Hazleton 345/161	transformer	1	345	161	335/335	Larger Xfmr	J7	IA	0	0	\$5,000,000.00	Y	
A	2118	ALTW	1289	6/1/2008	Marshalltown	Toledo	1	115		233/233	Rebuild	I8	IA	16	0	\$4,712,000.00		
A	2119	ALTW	1289	6/1/2009	Belle Plaine	Toledo	1	115		233/233	Rebuild	I8	IA	18	0	\$6,080,000.00		
A	2120	ALTW	1289	6/1/2010	Belle Plaine	Stoney Point	1	115		233/233	Rebuild	I8	IA	27	0	\$8,208,000.00		
A	2209	ALTW	1342	6/1/2009	Lewis Fields	transformer	1	161	115		new transformer	J8	IA			\$2,000,000.00		
A	2208	ALTW	1342	6/1/2009	Lewis Fields	Hiawatha	1	161		250	new line	J8	IA		8.5	\$2,550,000.00		
A	2212	ALTW	1344	6/1/2008	Beverly	transformer	1	345	161	335	new substation	J8	IA			\$4,000,000.00		
A	2211	ALTW	1344	6/1/2008	Beverly Tap	Beverly	1	161		335	new line	J8	IA		7.9	\$300,000.00		
A	2216	ALTW	1348	6/1/2011	Marion	Prairie Creek	1	115		198	upgrade limiting equipment	J8	IA			\$200,000.00		
A	2544	ALTW	1348	6/1/2011	Marion	Swamp Fox	1	115		208		J8	IA	4				
A	2545	ALTW	1348	6/1/2011	Swamp Fox	Lewis Field	1	115		208	upgrade limiting equipment	J8	IA	1				
A	2218	ALTW	1349	6/1/2011	Dundee	transformer	1	161	115	112	replace transformer	J7	IA			\$100,000.00		
A	2473	ALTW	1471	5/1/2007	Generating Facility Sub		1	69			transmission structure with a 3-way, load break, manual, 1200 amp or higher, 69 kV switch		MN			\$125,000.00	Y	
A	2475	ALTW	1472	5/1/2007	Generating Facility Sub		1	69			transmission structure with a 3-way, load break, manual, 1200 amp or higher, 69 kV switch		MN			\$125,000.00	Y	
A	1856	ALTW	1473		Mason City Armor	Emery North		69			Rebuild existing line		IA					
A	392	Ameren	144	6/1/2008	Crab Orchard	Marion South	1	138		269	reconductor	K11	IL	9.1		\$2,712,300.00		
A	397	Ameren	149	6/1/2007	Mason	Sioux	1	345			breaker addition at Mason	J11	MO			\$605,900.00		
A	398	Ameren	150	6/1/2008	Rush Island	Baldwin	1	345		1793	terminal at Rush Island & river crossing only	J11-K1	IL		2	\$1,615,100.00		
A	400	Ameren	153	6/1/2008	CEE Tap	Watson	1	138		370	reconductor	J11	MO	0.8		\$311,400.00		
A	401	Ameren	155	6/1/2008	Joachim 345/138 kV	transformer	1	345	138	560	new 345/138 kV transformer	J11	MO			\$12,963,300.00		
A	1399	Ameren	708	6/1/2007	Casey	Breed	1	345		1332	reconductor river crossing	L10	IL	0.23		\$303,900.00		
A	1403	Ameren	712	12/1/2007	Mason	Labadie-Mason-4 Term.	1	345			terminal equipment upgrade at Mason	J11	MO			\$184,100.00		
A	1410	Ameren	719	6/1/2009	Labadie Plant	Replace 4-345 kV Breakers		345			replace existing 345 kV breakers	J11	MO			\$1,897,100.00		
A	831	Ameren	856	12/1/2006	Osage 138 kV Substation	Eldon	1	138		200	Replace bus conductor at Osage Substation	I11	MO			\$65,000.00		
A	832	Ameren	857	6/1/2007	Rush Island	Joachim	1	345		1200	Replace terminal equipment at Rush Island	J11	MO			\$283,200.00		
A	833	Ameren	858	6/1/2007	Sioux	Huster	1	138		214	Increase ground clearance	J10	MO	6		\$1,024,500.00		
A	834	Ameren	859	6/1/2008	Central	Watson (Tower 55)	1	138		370	Reconductor 5.1 miles 954 kcmil ACSR from Central to Twr. 55	J11	MO	5.1		\$1,500,300.00		
A	1942	Ameren	1241	3/1/2007	Mattoon, West	Install 138 kV Breaker at Mattoon, West	1	138			Install 138 kV Breaker to connect Wind Farm	K10	IL			\$555,400.00		
A	853	AmerenCILCO	875	11/15/2006	Kickapoo	Mason City-Decatur		138		155	Replace 600 A terminal equipment with 1200 A at Kickapoo	K9	IL			\$156,700.00		
A	854	AmerenCILCO	876	6/1/2007	Tazewell	Powerton	1	345		1339	Replace 2000 A terminal equipment at Tazewell with 3000 A	K9	IL			\$1,042,900.00		
A	1423	AmerenIP	150	6/1/2008	Line 4531 tap	Prairie State Power Plant	2	345		1470	345 kV connection to new generation	K11	IL		7.5	\$2,283,900.00		
A	1422	AmerenIP	150	6/1/2008	Baldwin	Rush Island	1	345		1793	26 miles of new 345 kV line	J11-K1	IL		26	\$46,149,200.00		
A	1424	AmerenIP	150	6/1/2008	Line 4541 tap	Prairie State Power Plant	2	345		1470	345 kV connection to new generation	K11	IL		1.5	\$12,991,400.00		
A	1667	AmerenIP	150	6/1/2008	Prairie State	substation	1	345		1793	new switchyard (6 position, 4 lines, 2 units)	J11-K1	IL					
A	1402	AmerenIP	711	6/1/2007	Wood River	Gillespie	1	138		240	reconductor	K10	IL	7.5		\$939,500.00		
A	1418	AmerenIP	725	12/1/2008	N. LaSalle	Wedron Fox River	1	138		266	2 CB at N LaSalle, 1 CB at Wedron Fox River Substation	K8	IL		25	\$20,489,370.00		
A	1419	AmerenIP	726	12/1/2008	Ottawa	Wedron Fox River	1	138		266	1 CB at Ottawa, new 138 kV line to Wedron Fox River Substation	K8	IL		8	\$8,045,400.00		
A	1421	AmerenIP	728	6/1/2008	Wood River	Roxford L1502	1	138		382	reconductor	K10	IL	4.36		\$5,264,900.00	Y	
A	1425	AmerenIP	732	6/1/2007	S. Bloomington	State Farm	1	138		337	Reconductor 1.3 miles 1272 kcmil ACSR	K9	IL	1.3		\$1,172,900.00		
A	1429	AmerenIP	736	6/1/2007	W. Tilton	Tilton Energy Center		138			new 138 kV breaker addition at W. Tilton	L9	IL			\$1,709,400.00		
A	1431	AmerenIP	738	6/1/2007	Line 1342C tap	Line 1342A	1	138		280	Line 1342A (structure 423 to 467A reconductor)	K9	IL	5.23		\$1,994,400.00		
A	1432	AmerenIP	739	1/1/2009	Line 4561 Tap	Franklin County Power Plant	1	345			345 kV connection (new ring bus) to new generation	K11	IL			\$7,108,700.00		

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A	841	AmerenIP	865	6/1/2007	Havana	Monmouth	1	138		280	Build new river crossing	J9	IL		0.44	\$223,700.00		
A	845	AmerenIP	869	6/1/2007	Sidney	Mira Tap	1	138		280	Reconductor 2 miles of 795 kcmil ACSR	L9	IL	2		\$693,800.00		
A	851	AmerenIP	873	1/31/2009	Baldwin	Turkey Hill	1	345		1195	Replace 345 kV breakers at Baldwin terminal	K11	IL			\$4,242,100.00		
A	849	AmerenIP	873	1/31/2009	Baldwin	W. Mt. Vernon	1	345		1195	Replace 345 kV breakers at Baldwin terminal	K11	IL			\$4,242,100.00		
A	850	AmerenIP	873	1/31/2009	Baldwin	Stallings	1	345		1195	Replace 345 kV breakers at Baldwin terminal	K11	IL			\$4,242,100.00		
A	855	ATC LLC	1	6/1/2008	Stone Lake	Inductor		345		75 Mvar		J6	WI			\$0.00		
A	2064	ATC LLC	1	6/1/2008	Arpin	Capacitor bank		138		50 Mvar		J6	WI			\$1,021,496.00		
A	3099	ATC LLC	1	6/1/2008	Stone Lake	Capacitor		345		75 Mvar		J6	WI			\$0.00		
A	135	ATC LLC	1	6/30/2008	Arrowhead	Stone Lake	1	345		1092/1092 MVA	new line	I4	WI		78.85	\$130,497,676.83		
A	2555	ATC LLC	1	12/4/2006	Stone Lake	Gardner Park	1	345		1200/1200 MVA	new line	I4	WI		141.5	\$234,148,046.05		
A	121	ATC LLC	2	4/1/2007	Dewey Tap	Weston		115		244/277 MVA	Phase I increase clearance/ Phase II reconductor 12/31/07	K6	WI	15.4		\$5,535,685.00		
A	127	ATC LLC	2	4/1/2007	Northpoint	Dewey Tap		115		244/277 MVA	Phase I increase clearance/ Phase II reconductor 12/31/07	K6	WI	8.2		\$5,535,685.00		
A	119	ATC LLC	21	6/1/2007	Venus	Metonga (was Crandon)		115		175	new radial line	K5	WI		14	\$8,745,840.00		
A	108	ATC LLC	62	3/1/2007	Stratford	McMillan		115		135		J6	WI	10		\$1,750,000.00		
A	87	ATC LLC	64	6/1/2007	McFarland	Femrite (conversion to 138 kV)		138		438	conversion to 138	K7	WI	2.1		\$1,000,000.00		
A	86	ATC LLC	64	6/1/2007	Kegonsa	McFarland (conversion to 138 kV)		138		348	conversion to 138	K7	WI	3.7		\$2,410,000.00		
A	125	ATC LLC	101	6/1/2008	Kelly	Whitcomb		115		121/165 MVA	uprate clearances to 300F	K6	WI	24.3		\$1,900,000.00		
A	862	ATC LLC	177	6/1/2009	Highway 22 (formerly Central Wisconsin)	new substation		345			new substation	K6	WI			\$12,200,000.00		
A	2457	ATC LLC	177	12/1/2009	Belle Plaine	Badger	1	115		175/240 MVA			WI			\$0.00		
A	2454	ATC LLC	177	12/1/2009	Kelly	Whitcomb	1	115		174/174 MVA			WI			\$0.00		
A	2455	ATC LLC	177	12/1/2009	Whitcomb	Caroline	1	115		138/138 MVA			WI			\$0.00		
A	607	ATC LLC	177	12/1/2009	Gardner Park (new Weston)	HWY 22 (formerly Central Wisconsin)	1	345		1776 MVA SE		K6	WI		47	\$116,700,000.00		
A	2456	ATC LLC	177	12/1/2009	Caroline	Belle Plaine	1	115		290/401 MVA			WI			\$0.00		
A	892	ATC LLC	339	6/1/2008	Boxelder	Stonybrook		138		287	uprate	K7	WI			\$200,000.00		
A	434	ATC LLC	339	6/1/2008	Rockdale	Boxelder	1	138		383	uprate	K7	WI			\$200,000.00		
A	433	ATC LLC	339	6/1/2008	Rockdale	Lakehead Cambridge		138		287	uprate	K7	WI			\$200,000.00		
A	450	ATC LLC	339	6/1/2008	Lake Mills (provisional)	Stonybrook		138		290	construct new	K7	WI		6	\$9,850,000.00		
A	429	ATC LLC	339	6/1/2008	Lakehead Cambridge	Jefferson		138		348	uprate	K7	WI			\$150,000.00		
A	449	ATC LLC	339	6/1/2008	Jefferson	Lake Mills (provisional)		138		290	construct new	K7	WI		6	\$9,850,000.00		
A	608	ATC LLC	345	11/30/2008	Clintonville	Werner West		138		381/529 MVA		K6	WI	14	2	\$6,091,242.00	Y	Y
A	2458	ATC LLC	345	12/1/2009	Badger	Clintonville	1	138		211/238 MVA			WI			\$3,533,329.00	Y	Y
A	2459	ATC LLC	345	12/1/2009	Morgan	White Clay	1	138		293/332 MVA			WI			\$3,533,329.00	Y	Y
A	480	ATC LLC	345	12/1/2009	Morgan	Werner West		345		1882 MVA SE	new line	K6	WI		47	\$128,132,800.00	Y	Y
A	459	ATC LLC	350	6/1/2007	Sherman St	Hilltop		115		239	rebuild	J6	WI	6.9		\$3,750,000.00		
A	458	ATC LLC	350	6/1/2007	Weston	Sherman St		115		239	rebuild	J6	WI	0.2		\$250,000.00		
A	1247	ATC LLC	350	6/1/2007	Gardner Park (was Weston)	Hilltop		115		285	new line	K6	WI	2.4		\$3,750,000.00		
A	1963	ATC LLC	352	6/1/2006	Eagle River Muni			115			Construct new SS adjacent to the Cranberry 115-kV SS		WI			\$2,600,000.00	Y	
A	446	ATC LLC	352	1/1/2008	Eagle River	Lakota Rd (formerly Conover)	1	115		244	new line	K5	WI		14	\$10,000,000.00	Y	
A	447	ATC LLC	352	1/1/2008	Lakota Rd (formerly Conover)	transformer	1	138	115	150	138/115 transformer	K5	WI			\$17,785,000.00	Y	
A	445	ATC LLC	352	7/31/2008	Lakota Rd (formerly Conover)	Iron Grove	1	138		290	convert 69 to 138 kV	K5	MI/WI	73		\$69,100,000.00	Y	
A	2460	ATC LLC	352	12/31/2009	Iron Grove	Aspen	1	138		400 MVA SE		K5	WI			\$5,850,000.00	Y	
A	896	ATC LLC	352	12/31/2009	Iron Grove	Substation relocation		138			Iron River rename/relocation	K5	MI			\$5,900,000.00	Y	
A	1371	ATC LLC	352	12/31/2009	Aspen	Plains	1	138		400 MVA SE		K5	WI			\$5,850,000.00	Y	
A	2062	ATC LLC	433	6/1/2007	Wautoma	Capacitor bank		138		2x24.5 Mvar		K6	WI			\$1,200,000.00		

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A	2082	ATC LLC	446	4/30/2007	Rubicon	Capacitor bank		138		32 Mvar	was Hartford	K7	WI			\$750,000.00		
A	1244	ATC LLC	566	5/1/2007	Plymouth	Forest Junction/Charter Steel	1	138		277		K6	WI		1.3	\$2,500,000.00		
A	1255	ATC LLC	570	6/1/2009	La Prairie RCEC	Bradford RCEC	1	138		381		K7	WI			\$1,610,612.00		
A	1256	ATC LLC	570	6/1/2009	Bradford RCEC	West Darien	1	138		381		K7	WI			\$3,410,708.00		
A	1260	ATC LLC	570	6/1/2009	Bristol	Elkhorn	1	138		292		K7	WI			\$3,410,708.00		
A	1259	ATC LLC	570	6/1/2009	North Shore	Bristol	1	138		381		K7	WI			\$1,610,612.00		
A	1257	ATC LLC	570	6/1/2009	West Darien	Southwest Delavan	1	138		381		K7	WI			\$1,610,612.00		
A	1258	ATC LLC	570	6/1/2009	Southwest Delavan	North Shore	1	138		381		K7	WI			\$3,410,708.00		
A	1992	ATC LLC	571	6/1/2008	North Madison	Huiskamp	1	138		481 MVA SE			WI			\$8,700,000.00		
A	1262	ATC LLC	572	6/1/2008	Ingalls/Bay de Doc	Menominee	1	138		345		K5	WI		0.45	\$1,000,000.00		
A	1263	ATC LLC	572	6/1/2008	West Marinette	Menominee	1	138		345		K5	WI		0.45	\$1,000,000.00		
A	868	ATC LLC	877	6/1/2009	Ramsey	Norwich		138		288	loop Ramsey5-Harbor into Norwich and Kansas to form Ramsey-Norwich and Harbor-Kansas	L7	WI	3		\$200,000.00		
A	869	ATC LLC	877	6/1/2009	Harbor	Kansas		138		157	loop Ramsey5-Harbor into Norwich and Kansas to form Ramsey-Norwich and Harbor-Kansas	L7	WI	2.72		\$200,000.00		
A	867	ATC LLC	877	6/1/2009	Oak Creek	Expand 345 kV switchyard		345			expand switchyard to interconnect new generator	L7	WI			\$19,277,005.00		
A	866	ATC LLC	877	6/1/2009	Pleasant Prairie	replace two circuit breakers		345			replace circuit breakers	L7	WI			\$2,357,175.00		
A	865	ATC LLC	877	6/1/2009	Oak Creek	Relaying replacements		230			replace relaying	L7	WI			\$2,500,000.00		
A	864	ATC LLC	877	6/1/2009	Oak Creek	Allerton		138		242	reconductor	L7	WI	5.4		\$2,000,000.00		
A	863	ATC LLC	877	6/1/2009	Oak Creek	Ramsey		138		293	reconductor (need 382 MVA for A035)	L7	WI	8.5		\$200,000.00		
A	482	ATC LLC	877	6/1/2009	Oak Creek 345/138 #2	transformer	2	345	138	500		L7	WI			\$6,600,000.00		
A	873	ATC LLC	877	6/1/2010	Oak Creek	Nicholson		138		332	uprate	L7	WI	6.8		\$136,007.00		
A	872	ATC LLC	877	6/1/2010	Oak Creek	Root River		138		293	uprate	L7	WI			\$136,007.00		
A	871	ATC LLC	877	6/1/2010	Kansas	Ramsey6		138		290	uprate	L7	WI	5.7		\$500,000.00		
A	870	ATC LLC	877	6/1/2010	Oak Creek	Expand 345 kV switchyard		345			expand switchyard to interconnect second new generator	L7	WI			\$10,600,000.00		
A	132	ATC LLC	1451	6/1/2007	Sprecher	Reiner (conversion to 138 kV)		138		366	conversion to 138	K7	WI	10		\$1,250,000.00		
A	131	ATC LLC	1451	6/1/2007	Reiner	Sycamore (conversion to 138 kV)		138		366	conversion to 138	K7	WI	7		\$1,250,000.00		
A	123	ATC LLC	1451	6/1/2007	Femrite	Sprecher (new 138 kV)	1	138		348	new 138 kV line	K7	WI		5	\$8,100,000.00		
A	467	ATC LLC	1453	6/1/2008	Pleasant Valley	Saukville		138		290	reconductor	K7	WI	12		\$4,800,000.00	Y	
A	468	ATC LLC	1453	6/1/2008	Pleasant Valley	St. Lawrence		138		290	reconductor	K7	WI	7		\$4,800,000.00	Y	
A	2509	ATC LLC	1461	10/20/2006	Green Lake Sub						Interconnection Facilities will include a collection bus at a voltage level of 34.5kV, 34.5kV facilities, 138/34.5 kV transformer and 138 kV circuit breaker.		WI			\$170,146.00		
A	2511	ATC LLC	1461	10/20/2006	Green Lake Sub	transformer		138	34.5	178 MVA	a new two-breaker, 138 kV substation in a configuration allowing future expansion to a six position ring bus. Two line positions will allow for looping line X-4 into the substation.		WI			\$2,049,696.00		
A	2512	ATC LLC	1461	10/20/2006	Green Lake Sub			138			a loop into New Substation, including two (2) steel pole dead-ends to facilitate entry of Line X-4 into the substation. Transmission Owner will perform 138kV Line X-4 relay settings updates at the Green Lake, North Fo		WI			\$94,856.00		
A	2517	ATC LLC	1463	10/20/2006	Mishicot	new substation		138			New Substation between Kewaunee Sub and Shoto Sub, New two-breaker 138 kV substation in a configuration allowing future expansion to a seven position ring bus. Two line positions will allow for looping line Y-51 into the substation.		WI			\$2,612,000.00		
A	2521	ATC LLC	1463	10/20/2006	Shoto	Relaying replacements		138			Shoto Substation 138 kV Line Y-51, to Kewaunee, Relay Replacement. This relay upgrade will include replacing the existing line protection relays and panels with a new panel containing relays for a directional comparison unblocking (DCUB) system.		WI			\$123,000.00		

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A	2520	ATC LLC	1463	10/20/2006	Kewaunee	Relaying replacements		138			Kewaunee Substation 138 kV Line Y-51, to Shoto, Relay Replacement, This relay upgrade will include replacing the existing line protection relays and panels with a new panel containing relays for a directional comparison unblocking (DCUB) system.		WI			\$123,000.00		
A	2518	ATC LLC	1463	10/20/2006	Mishicot			138			This interconnection will include extension of the 138 kV bus to a disconnect switch, the addition of an H-frame dead-end structure, and connection to the generation substation with 2156 MCM ACSR.		WI			\$179,000.00		
A	2519	ATC LLC	1463	10/20/2006	Mishicot			138			Line Y-51 Loop into New Substation. This interconnection will include the installation of two new 45' steel poles (labeled as 163A and 163B) to facilitate entry of Line Y-51 into the substation at right angles.		WI			\$231,000.00		
A	2479	ATC LLC	1470	11/1/2006	Generating Facility Sub			69			New two-breaker 69 kV substation in a configuration allowing future expansion to a six-position ring bus		WI			\$1,765,957.00	Y	
A	2480	ATC LLC	1470	11/2/2006	Y-33 line			69	63		existing line Y-33 will be re-built completely to increase the line capacity to a minimum of 63 MVA. The new line will have T2-4/0 ACSR conductors and OPGW for fiber communication		WI			\$5,268,974.00	Y	
A	2481	ATC LLC	1470	11/3/2006	Y-33 line	S. Monroe		69			replacing the existing line protection relays and panels with a new panel containing relays for a permissive under-reaching transfer trip (POTT) system		WI			\$193,240.00	Y	
A	2482	ATC LLC	1470	11/4/2006	Y-33 line	Brodhead		69			replacing the existing line protection relays and panels with a new panel containing relays for a permissive under-reaching transfer trip (POTT) system		WI			\$184,941.00	Y	
A	2483	ATC LLC	1470	11/5/2006	Generating Facility Sub			69			extension of the 69 kV bus to a disconnect switch, the addition of an H-frame dead-end structure, and connection to the generation substation with 2156 MCM ACSR		WI			\$125,620.00		
A	1861	ATC LLC	1475		Atlantic 138-69 kV	Transformer		138	69	60	New Transformer		WI					
A	1862	ATC LLC	1476		Mullet River 138-69 kV	Transformer		138	69		Replacement of Tranformer		WI					
A	1865	ATC LLC	1477	6/1/2008	N. Madison	ABS -Yahara		138			Uprate of N.Madison-ABS 138kV and ABS-Yahara 138kV lines		WI					
A	1868	ATC LLC	1478	1/1/2008	Waunakee	Westport - Pheasant Branch		69		95 MVA SE	Uprate of Waunakee-Westport-Pheasant Branch 69 kV line		WI					
A	182	DEM	42	6/1/2007	Bedford	Shawswick	1	138		306	Reconductor Bedford to Shawswick section of 13829 line.	M10	IN		7.1	\$2,110,106.00		
A	184	DEM	42	6/1/2009	Shawswick	Pleasant Grove	1	138		306	Reconductor	M10	IN		18.3	\$4,719,516.00		
A	183	DEM	42	6/1/2009	Pleasant Grove	Airport Road Jct	1	138		306	Reconductor	M10	IN		9.3	\$3,388,077.00		
A	181	DEM	42	6/1/2009	Airport Road Jct	Seymour	1	138		306 MVA	Reconductor	M10	IN		2.2	\$752,906.00		
A	2536	DEM	91	6/1/2008	Eastwood	Breaker		138			Install 2 new circuit breakers, bus and associated equipment for the new 138kV circuit from Hillcrest.	N10	OH			\$1,602,070.00	Y	
A	2539	DEM	91	6/1/2008	Stuart	Relays		345			Replace relays at Stuart on the 345kV line to the new Hillcrest substation.	N10	OH			\$93,403.00	Y	Y
A	2540	DEM	91	6/1/2008	Foster	Relays		345			Replace relays at Foster on the 345kV line to the new Hillcrest substation.	N10	OH			\$213,385.00	Y	Y
A	358	DEM	91	6/1/2008	Hillcrest 345/138	transformer	1	345	138	450	Add new 345/138 transformer	N10	OH			\$4,120,000.00	Y	
A	2537	DEM	91	6/1/2008	Brown	Relays		138			Replace relays at Brown on the 138kV line to Eastwood associated with the new Hillcrest to Eastwood 138kV line.	N10	OH			\$210,608.00	Y	
A	2538	DEM	91	6/1/2008	Ford Batavia	Relays		138			Replace relays at Ford Batavia on the 138kV line to Eastwood associated with the new Hillcrest to Eastwood 138kV line.	N10	OH			\$270,412.00	Y	
A	362	DEM	91	6/1/2008	Hillcrest	Eastwood	1	138		304	Add new line	N10	OH		8	\$4,704,406.00	Y	
A	2556	DEM	91	6/1/2008	Hillcrest 345 kV	substation upgrades		345			345 kV upgrades for 345/138 transformer	N10	OH			\$6,473,212.00	Y	Y
A	366	DEM	115	6/1/2007	New London	Webster	1	230		800	reconductor	M9	IN		12	\$9,455,194.00		
A	1307	DEM	116	6/1/2007	West Lafayette	Cumberland	1	138		179	replace 600A switches	M9	IN		0	\$154,757.00		
A	367	DEM	116	6/1/2007	Westwood	Dequine	1	345		1200	Add 2nd 345kV line	L9	IN		2	\$588,366.00		
A	357	DEM	116	6/1/2007	Westwood 345/138	transformer	2	345	138	336	Add 2nd 345/138 transformer	L9	IN			\$6,093,584.00		

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A	356	DEM	199	6/1/2007	Kokomo 230/138	transformer	2	230	138	200	Add fourth 230/138kV transformer.	M9	IN			\$3,278,756.00		
A	618	DEM	200	6/1/2007	West Lafayette Purdue	Purdue NW Tap	1	138		179	Upgrade switches at West Lafayette Purdue.	L9	IN	7.2		\$9,877.00		
A	536	DEM	201	6/1/2008	NW Tap	West Lafayette	1	138		240	Changing out switches to achieve conductor rating.	L9	IN	0		\$100,000.00		
A	1292	DEM	619	6/1/2008	IPL Petersburg	345kV breaker		345			Complete breaker and half scheme at Petersburg Plant. IPL total estimate 1,100,000. 200k is Cinergy share of project.	M10	IN	0	0	\$200,000.00		
A	1300	DEM	624	12/31/2007	Cloverdale	Plainfield South	1	138		No change	Upgrade static and grounding	L10	IN	24.3	0	\$2,387,209.00		
A	1953	DEM	627	6/1/2007	Crescent	West End		138		239	3 wires of existing 6 wire circuit will be used for the new Kenton to West End circuit, lowering the rating of Crescent to West End.							
A	1853	DEM	627	6/1/2009	Buffington Reactor	Florence		138			Remove reactor when Kenton to West End project is completed.		KY					
A	1304	DEM	627	6/1/2009	Kenton	West End	1	138		239	Add new line	N10	KY-OH	4.5	4.3	\$1,980,041.00		
A	1305	DEM	628	6/1/2007	Kokomo Highland Park	Kokomo Chrysler	1	138		179	Kok 13879 Uprate conductor to 100C operating temp	M9	IN	3	0	\$100,000.00		
A	1306	DEM	629	6/1/2007	Kokomo Highland Park	Kokomo Delco	1	138		179	Kok 13887 Uprate conductor to 100C operating temp	M9	IN	3.78	0	\$100,000.00		
A	1309	DEM	632	6/1/2009	Gallagher	HE Georgetown	1	138		202	reconducgtor 250CU, 477ACSR already 100C (no cost)	M10	IN	2.8	0	\$1,065,110.00		
A	3060	DEM	766	6/1/2007	Clarksville	Capacitor		138		57.6 Mvar	Add capacitor	M10	IN			\$738,662.00		
A	3062	DEM	767	6/1/2007	Greenfield Hastings Park	Capacitor		138		57.6 Mvar	Add capacitor	M9	IN			\$598,722.00		
A	812	DEM	807	6/1/2009	Dresser 345/138 Bk1	transformer	1	345	138	523	Upgrade limiting equipment to achieve full transformer rating	L10	IN			\$429,000.00		
A	813	DEM	807	6/1/2009	Dresser 345/138 Bk2	transformer	2	345	138	543	Upgrade limiting equipment to achieve full transformer rating	L10	IN			\$429,000.00		
A	817	DEM	838	12/31/2006	Speed	Capacitor		138		57.6 MVAR	Add capacitor	M10	IN			\$500,000.00		
A	818	DEM	839	6/1/2007	Crawfordsville	Capacitor		138		28.8 MVAR	Add capacitor	L9	IN			\$500,000.00		
A	822	DEM	842	4/30/2007	Blackwell	LGEE Tap		138			138 line for Blackwell 138/69, LGEE circuit	N10	KY			\$589,000.00		
A	824	DEM	849	6/1/2007	Peabody Jct	Farmersburg Jct	1	138		246	Replace Peabody Jct 600A switches with 1200A towards Farmersburg Jct in the 13821 line, 804F6402	L10	IN			\$159,170.50		
A	823	DEM	849	6/1/2007	Peabody Jct	Jasonville	1	138		246	Replace Peabody Jct 600A switches with 1200A towards Jasonville in the 13821 line, 804F6402	L10	IN			\$159,170.50		
A	826	DEM	851	6/1/2011	Lafayette Cumberland Ave	Laf AE Staley	1	138		306	13806 reconductor with 954ACSR 100C 604F6347	L9	IN	1.3		\$325,000.00		
A	1843	DEM	1193	6/1/2010	Nickel			138			Extend 5680 through new Nickel 138/12 sub to be built on development property		OH			\$150,376.81		
A	1845	DEM	1195	5/1/2007	Cloverdale	Cloverdale Ethanol	1	138			Construct new 138kV line from Cloverdale to new Putnam Energy ethanol plant.		IN			\$229,811.00		
A	1846	DEM	1196	12/31/2006	New London	Kokomo Highland Park	1	230		405	Replace New London 23009 800A wave trap with a 1200A wave trap.		IN			\$29,671.83		
A	1847	DEM	1196	12/31/2006	Kokomo Highland Park	New London	1	230		405	Replace Kokomo Highland Park 23009 800A wave trap with a 1200A wave trap.		IN					
A	1849	DEM	1198	6/1/2007	Bedford			345			Add motors and automation to the 34506 and 34521 line switches.		IN			\$152,390.14		
A	1850	DEM	1199	6/1/2010	Dresser	Terre Haute South 1st St	1	138		287	Uprate 13868 conductor to 100C operating temperature from Dresser to South 1st St. New limit 1200A terminal equipment.		IN			\$10,000.00		
A	1851	DEM	1199	6/1/2010	Terre Haute South 1st St	Terre Haute Water St	1	138		287	Uprate 13868 conductor to 100C operating temperature from South 1st St to Water St. New limit 1200A terminal		IN			\$10,000.00		
A	1852	DEM	1200	6/1/2010	Speed		3	345	138	520	Upgrade 2000A 138kV breaker & switch and any other Bk3 limiting equipment. Replace any equipment that would limit the 345/138 xfr to less than the hot spot rating of 520 MVA.		IN			\$173,193.11		
A	1854	DEM	1201	12/31/2006	Oakland City	Princeton	1	138		287	Uprate line to 100C operating temperature by adding 3 structures.		IN			\$111,331.00		
A	1945	DEM	1244	6/1/2011	Cayuga 23013 Wave Trap	Frankfort		230		797	Replace 1600A wave trap with a 2000A wave trap. Increase line rating of the Cayuga to Frankfort 23013 line.		IN			\$68,733.00		
A	1946	DEM	1244	6/1/2011	Frankfort 23013 Wave Trap	Cayuga		230		797	Replace 1600A wave trap with a 2000A wave trap. Increase line rating of the Cayuga to Frankfort 23013 line.		IN			\$98,827.00		
A	1947	DEM	1246	6/1/2011	Five Points 23030 Wave Trap	Geist		230		405	Replace 800A wave trap with a 2000A wave trap. Increase line rating to Geist.		IN			\$24,038.00		
A	1948	DEM	1247	6/1/2011	Greentown	Peru SE		230		478	Uprate 23021 circuit to 100C operating temp		IN			\$28,403.00		

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A	1949	DEM	1251	12/31/2006	Kokomo Highland Park 23008 Wave Trap	Carmel 146th St Jct		230		405	Replace 800A wave trap with a 2000A wave trap. Increase 230kV line rating to Carmel 146th St Jct.		IN			\$30,000.00		
A	1950	DEM	1251	6/1/2011	Noblesville 23008 Wave Trap	Carmel 146th St Jct		230		405	Replace 800A wave trap with a 2000A wave trap. Increase 230kV line rating to Carmel 146th St Jct.		IN			\$24,038.00		
A	1951	DEM	1252	12/31/2006	Kokomo Highland Park 23028 Wave Trap	Thorntown		230		405	Replace 800A wave trap with a 2000A wave trap. Increase 230kV line rating to Thorntown.		IN			\$30,000.00		
A	1952	DEM	1253	6/1/2011	Noblesville 23007 Wave Trap	Geist		230		405	Replace 800A wave trap with a 2000A wave trap. Increase line rating to Geist.		IN			\$24,038.00		
A	1955	DEM	1254	12/31/2009	Charlestown	CMC		138		306	Construct 8.5 mi. of 138kV line from Charlestown to CMC.		IN					
A	1978	DEM	1262	12/31/2007	HE Durgee Rd			138			HE 138/12 kV substation.		IN			\$227,341.00		
A	807	DPC/XEL	584	6/1/2007	Genoa	Coulee	1	161		375		E13	WI	18.7		\$4,057,132.00		
A	1283	FE	615	12/1/2007	Galion 345-138 kV	transformer prep.		345	138		Protection upgrades to separate existing transformers, so they don't trip together	O8	OH			\$1,815,566.00		
A	1284	FE	616	6/1/2007	Crissinger	Tangy	1	138		275 MVA		O8	OH	23		\$2,713,000.00		
A	2559	FE	890	6/1/2008	North Medina 345 kV	substation upgrades		345			North Medina 345 kV substation	O8	OH			\$3,540,000.00	Y	Y
A	899	FE	890	6/1/2008	North Medina new 345-138 kV	substation	4	345	138		Add a new 345/138kV substation at the junction of the Star-Carlisle 345kV and Star-West Akron #2 138kV lines	O8	OH			\$5,000,000.00	Y	
A	2186	FE	1316	6/1/2007	Dale	West Canton	1	138		208/281 MVA	Add reactor at Dale end of the Dale to West Canton 138 kV line.		OH			\$401,800.00		
A	2191	FE	1326	6/1/2008	Harding	capacitor bank		345			Capacitor Bank Addition		OH			\$2,727,173.00	Y	Y
A	2192	FE	1326	6/1/2009	Juniper	capacitor bank		345			Capacitor Bank Addition		OH			\$2,727,173.00	Y	Y
A	2193	FE	1327	6/1/2009	Babb	capacitor bank		138			Capacitor Bank Addition		OH			\$488,600.00		
A	2194	FE	1328	6/1/2010	Barberton	capacitor bank		138			Capacitor Bank Addition		OH			\$677,600.00		
A	2195	FE	1329	6/1/2009	West Akron	capacitor bank		138			Capacitor Bank Addition		OH			\$257,000.00		
A	2196	FE	1330	6/1/2007	South Akron	capacitor bank		138			Capacitor Bank Addition		OH			\$426,000.00		
A	2197	FE	1331	6/1/2011	East Akron	capacitor bank		138			Capacitor Bank Addition		OH			\$305,000.00		
A	2198	FE	1332	6/1/2009	Cloverdale	capacitor bank		138			Capacitor Bank Addition		OH			\$378,000.00		
A	2199	FE	1333	6/1/2010	Brookside	capacitor bank		138			Capacitor Bank Addition		OH			\$1,000,200.00		
A	2200	FE	1334	6/1/2010	Longview	capacitor bank		138			Capacitor Bank Addition		OH			\$523,800.00		
A	2201	FE	1335	6/1/2007	Roberts	capacitor bank		138			Capacitor Bank Addition		OH			\$379,285.00		
A	2202	FE	1336	12/1/2007	Gallion	capacitor bank		138			Breaker Addition		OH			\$1,815,566.00		
A	2189	FE	1350	6/1/2007	Cloverdale	breaker		138			Breaker Addition		OH			\$630,900.00		
A	1076	GRE	596	5/1/2007	Vermillion River	Empire	1	115		200		TC det	MN		6	\$2,750,000.00		
A	641	GRE	601	6/1/2008	Mud Lake	Wilson Lake	1	115		142		H5	MN	12		\$6,000,000.00		
A	752	GRE	1026	12/1/2007	Linwood 230-69 kV	transformer	1	230	69	112		TC det	MN			\$5,000,000.00		
A	2121	GRE	1290	2/28/2007	WILLMAR4 (63050)	GRANITF4 (66550)	1	230		382/382	Replace CTs and Wavetrap	G5	MN	0	0	\$250,000.00		
A	2499	GRE	1459	1/1/2009	Dakota County Sub	transformer	1	345	16	224 MVA	one 224 MVA, 345/16 kV generator step-up transformer, a 16/4.1 kV station aux transformer, and two 16 kV circuit breakers and a 345 kV motor operated switch		MN			\$275,000.00		
A	2500	GRE	1459	1/1/2009	Dakota County Sub	transformer	2	345	16	224 MVA	one 224 MVA, 345/16 kV generator step-up transformer, a 16/4.1 kV station aux transformer, and two 16 kV circuit breakers and a 345 kV motor operated switch		MN			\$275,000.00		
A	2501	GRE	1459	1/1/2009	Dakota County Sub	new substation		345			new substation, along with NSP Blue Lake and Prairie Island transmission line construction		MN			\$5,959,788.00	Y	Y
A	2525	GRE	1464	11/15/2005	McHenry Tap			115					ND			\$233,800.00		
A	2524	GRE	1464	11/15/2005	McHenry Tap			115			The Transmission Owner Interconnection Facilities		ND			\$102,850.00		
A	2173	HE	1318	9/1/2007	Decatur County Switch Station (DCSS)	138kV 6-Breaker Ringbus	1	138		2000Amp	New Construction		IN			\$3,000,000.00		
A	2172	HE	1318	9/1/2007	Decatur County Switch Station (DCSS)	161/138kV Transformer	1	161	138	250MVA	New Construction		IN			\$1,000,000.00		

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A	2171	HE	1318	9/1/2007	Decatur County Switch Station (DCSS)	138kV Switching Station w/Capacitor	1	138		30MVAR	New Construction		IN			\$3,000,000.00		
A	2174	HE	1319	9/1/2007	Decatur County Switch Station (DCSS)	Cinergy 138 (Greensburg to Shelbyville)	1	138		327MVA	New Construction		IN		0.5	\$500,000.00		
A	2177	HE	1320	9/1/2007	Greensburg Honda	DCSS	1	138		215MVA	New Construction East Loop		IN		5.5	\$1,875,000.00		
A	2178	HE	1320	9/1/2007	Greensburg Honda	DCSS	1	138		215MVA	New Construction West Loop		IN		5.5	\$1,875,000.00		
A	2180	HE	1321	9/1/2008	Napoleon Primary	DCSS	1	161		338MVA	New Construction		IN		25	\$7,200,000.00		
A	2179	HE	1321	9/1/2008	Napoleon	Capacitor & CB Addition, and bus upgrades	1	161		30MVAR	New Construction		IN			\$800,000.00		
A	2182	HE	1322	4/1/2008	Owensville Primary Tapline	Cinergy 138 (Gibson to Princeton)	1	138		215MVA	New Construction		IN		0.5	\$2,500,000.00		
A	177	IPL	40	6/1/2008	Indian Creek	Julietta	1	138		286 MVA	New 138kV Line	M9	IN		5	\$951,838.23		
A	178	IPL	40	6/1/2008	Cumberland	Julietta	1	138		286 MVA	New 138kV Line	M9	IN		4.55	\$866,172.79		
A	902	IPL	893	6/1/2008	North	Capacitor		138		150 MVAR	Increase Capacitor Size To 150 MVAR	M9	IN			\$300,000.00		
A	905	IPL	895	7/1/2007	North	Breaker		138		245 MVA	New 2000 Amp Breaker	M9	IN			\$1,500,000.00		
A	904	IPL	895	7/1/2007	North	Breaker		138		245 MVA	New 2000 Amp Breaker	M9	IN			\$1,500,000.00		
A	759	ITC	503	12/31/2006	Quaker 230-120 kV	transformer	1	230	120	634		M9	MI	0	0	\$1,500,000.00		
A	757	ITC	503	12/31/2006	Wixom 230	Quaker 230	1	230		657		M9	MI	5	4.3	\$2,300,000.00		
A	758	ITC	503	12/31/2006	Wixom 345/230	transformer	1	345	230	782		M9	MI	0	0	\$5,000,000.00		
A	760	ITC	503	5/30/2007	Hancock 120	Southfield 120	1	120		244		N7	MI	3.7		\$1,200,000.00		
A	768	ITC	509	12/31/2006	Lenox 120	Grayling 1 120	1	120		313		O7	MI	10.8		\$1,300,000.00		
A	766	ITC	509	12/31/2006	Lenox 120	Augusta Tap 120	1	120		343		O7	MI	4.98		\$1,300,000.00		
A	765	ITC	509	12/31/2006	Lenox 120	Victor 120	1	120		313		O7	MI	1.08		\$1,300,000.00		
A	764	ITC	509	12/31/2006	Lenox 120	St Clair 120	1	120		312.8		O7	MI	19.5		\$1,300,000.00		
A	763	ITC	509	12/31/2006	Lenox 345-120 kV	transformer	1	345	120	500		O7	MI		0	\$5,000,000.00		
A	762	ITC	509	12/31/2006	Lenox 345	Belle River 345	1	345		2002		O7	MI	19.1		\$1,750,000.00		
A	761	ITC	509	12/31/2006	Lenox 345	Jewel 345	1	345		2007		O7	MI	8.7		\$1,750,000.00		
A	767	ITC	509	12/31/2006	Lenox 120	Grayling 2 120	1	120		313		O7	MI	10.8		\$1,300,000.00		
A	773	ITC	518	5/30/2007	Golf 120	Macomb 120 #2	2	120		291		O7	MI	3.2		\$1,600,000.00		
A	770	ITC	518	5/30/2007	Golf 120	Boyne 120	1	120		290		O7	MI	4.2	0.64	\$1,200,000.00		
A	771	ITC	518	5/30/2007	Golf 120	Houston 2 120	1	120		313		O7	MI	17.3		\$1,200,000.00		
A	2100	ITC	578	12/31/2006	Wyatt	DVAR		120		30 Mvar		N9	MI			\$3,500,000.00		
A	774	ITC	586	12/31/2007	Stephens 120	Erin 120	3	120		290		O7	MI	4.7		\$34,000,000.00	Y	
A	1377	ITC	686	12/31/2006	Majestic 120 kV	Madrid 120 kV	2	120		445		N7	MI	15.9		\$2,000,000.00	Y	
A	2558	ITC	686	12/31/2006	Majestic 345 kV	substation upgrades	1	345	120	681	345 kV substation upgrades	N7	MI			\$600,000.00	Y	Y
A	1378	ITC	686	12/31/2006	Majestic 345/120 kV	transformer	1	345	120	681		N7	MI			\$6,200,000.00	Y	
A	1382	ITC	686	12/31/2007	Majestic 120 kV	Phoenix 120 kV	1	120		313		N7	MI	7.4	9.2	\$3,500,000.00		
A	1381	ITC	686	12/31/2007	Majestic 120 kV	Lark 120 kV	1	120		313		N7	MI	2.6	9.2	\$2,700,000.00		
A	1384	ITC	692	5/31/2008	Troy 345/120 kV	transformer	1	345	120	700		N7	MI			\$5,000,000.00	Y	
A	1383	ITC	692	5/31/2008	Bismarck 345 kV	Troy 345 kV	1	345		700		N7	MI		15.4	\$145,000,000.00	Y	Y
A	931	ITC	905	12/31/2006	Bunce Creek 120 kV	Cypress 120 kV	1	120		313		N9	MI	0.1	0	\$1,166,668.00		
A	930	ITC	905	12/31/2006	Bunce Creek 120 kV	Menlo 120 kV	1	120		152		N9	MI	0.1	0	\$1,166,666.00		
A	929	ITC	905	12/31/2006	Bunce Creek 120 kV	Wabash 120 kV 2	2	120		299		N9	MI	0.1	0	\$1,166,666.00		
A	910	ITC	907	5/31/2008	Goodison 345 kV	Belle River 345	1	345		2151	Goodison 345 kV substation	N7	MI	35.2		\$6,000,000.00	Y	Y
A	911	ITC	907	5/31/2008	Goodison 345 kV	Pontiac 345	1	345		2002	Goodison 345 kV substation	N7	MI	6.3		\$6,000,000.00	Y	Y
A	912	ITC	907	5/31/2008	Goodison 345/120 kV	transformer	1	345	120	700		N7	MI			\$5,000,000.00	Y	
A	913	ITC	907	5/31/2008	Goodison 120 kV	Pontiac 120 kV	1	120		343		N7	MI		6.3	\$11,000,000.00	Y	
A	914	ITC	907	5/31/2008	Goodison 120 kV	Sunbird 120 kV	1	120		229		N7	MI	3.55	2.87	\$11,000,000.00	Y	
A	915	ITC	907	5/31/2008	Goodison 120 kV	Tienken 120 kV	1	120		343		N7	MI	2.78	2.34	\$9,000,000.00	Y	
A	916	ITC	907	5/31/2008	Spokane 120 kV	Tienken 120 kV	1	120		343		N7	MI	0.1		\$2,000,000.00	Y	
A	950	ITC	910	12/31/2007	Coventry 345/230	transformer	1	345	230	782		N7	MI			\$8,200,000.00	Y	

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A	952	ITC	910	12/31/2007	Coventry 230 kV	Cody 230kV	1	230		657		N7	MI	6.6		\$3,000,000.00	Y	
A	951	ITC	910	12/31/2007	Cody 230/120 kV	transformer	1	230	120	693		N7	MI			\$4,500,000.00	Y	
A	2560	ITC	910	12/31/2007	Coventry 345 kV	substation	1	345			345 kV substation upgrades	N7	MI			\$2,900,000.00	Y	Y
A	1581	ITC	910	12/31/2007	Coventry 230 kV	Wixom 230 kV	1	230			345 kV operated at 230 kV	N7	MI			\$7,000,000.00	Y	
A	953	ITC	911	5/30/2007	Placid 345 kV	transformer	2	345	120	700	120 kV bus work	M9	MI			\$350,000.00	Y	
A	2561	ITC	911	5/30/2007	Placid 345 kV	substation		345			345 kV substation upgradeds	M9	MI			\$5,200,000.00	Y	Y
A	1583	ITC	1011	12/31/2006	Genoa 120 kV	Durant 120 kV	1	120		343		N7	MI		8.5	\$15,000,000.00		
A	2130	ITC	1300	5/30/2007	Pontiac 120 kV	Joslyn 120 kV	1	120		445	line termination	N6	MI	2.28		\$250,000.00		
A	2131	ITC	1300	5/30/2007	Walton 120 kV	Joslyn 120 kV	1	120		445	line termination	N6	MI	1.75		\$250,000.00		
A	2132	ITC	1301	12/31/2007	Yost 120 kV	Polaris 120 kV	1	120		349	line breaker	N7	MI	0.9		\$300,000.00		
A	2133	ITC	1302	5/31/2007	Hines 120 kV	substation equipment		120		642	station equipment replacement	N7	MI			\$750,000.00		
A	2134	ITC	1302	5/31/2007	Walton 120 kV	substation equipment		120		635	station equipment replacement	N6	MI			\$750,000.00		
A	2136	ITC	1304	12/31/2007	Monroe 345 kV	Monroe 120 kV	1	345	120	321	Adds a new breaker on the 120 kV side of Monroe Xfmr 303	N7	MI			\$300,000.00		
A	2137	ITC	1305	5/31/2007	Caniff 120 and 345 kV	substation equipment		345	120		replace breakers and switchgear	N7	MI			\$14,400,000.00		
A	2138	ITC	1306	12/31/2007	Midtown 120 kV			120				N7	MI			\$6,000,000.00		
A	2139	ITC	1307	5/1/2007	Catalina 120 kV			120				N7	MI			\$1,000,000.00		
A	2140	ITC	1308	12/31/2006	Bunce Creek 220 kV	Scott 220 kV	1	220				N7	MI	4.5		\$500,000.00		
A	2141	ITC	1308	12/31/2007	Bunce Creek PAR		1	220				N7	MI			\$25,000,000.00		
A	2149	ITC	1309	12/31/2007	Monroe 345 kV pos. FM	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2153	ITC	1309	12/31/2007	Monroe 345 kV pos. BT	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2152	ITC	1309	12/31/2007	Monroe 345 kV pos. BM	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2151	ITC	1309	12/31/2007	Monroe 345 kV pos. BF	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2150	ITC	1309	12/31/2007	Monroe 345 kV pos. FT	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2143	ITC	1309	12/31/2007	Monroe 345 kV pos. CM	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2146	ITC	1309	12/31/2007	Monroe 345 kV pos. LM	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2148	ITC	1309	12/31/2007	Monroe 345 kV pos. FF	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2147	ITC	1309	12/31/2007	Monroe 345 kV pos. LT	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2144	ITC	1309	12/31/2007	Monroe 345 kV pos. CT	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2142	ITC	1309	12/31/2007	Monroe 345 kV pos. CF	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2145	ITC	1309	12/31/2007	Monroe 345 kV pos. LF	circuit breaker		345			CB replacement	N7	MI			\$250,000.00		
A	2165	ITC	1310	12/31/2007	Brock 120 kV pos. HP	circuit breaker		120			CB replacement	N7	MI			\$150,000.00		
A	2164	ITC	1310	12/31/2007	Atlanta 120 kV pos. HD	circuit breaker		120			CB replacement	N7	MI			\$150,000.00		
A	2156	ITC	1310	12/31/2007	Warren 230 kV pos. CF	circuit breaker		230			CB replacement	N7	MI			\$200,000.00		
A	2163	ITC	1310	12/31/2007	Polaris 120 kV pos. HG	circuit breaker		120			CB replacement	N7	MI			\$150,000.00		
A	2162	ITC	1310	12/31/2007	Wabash 120 kV pos. HL	circuit breaker		120			CB replacement	N6	MI			\$150,000.00		
A	2161	ITC	1310	12/31/2007	Trenton Ch. 120 kV Pos. KP	circuit breaker		120			CB replacement	O7	MI			\$150,000.00		
A	2160	ITC	1310	12/31/2007	Trenton Ch. 120 kV Pos. KG	circuit breaker		120			CB replacement	O7	MI			\$150,000.00		
A	2157	ITC	1310	12/31/2007	St. Clair 120 kV pos. JD	circuit breaker		120			CB replacement	O7	MI			\$200,000.00		
A	2155	ITC	1310	12/31/2007	Waterman 230 kV pos. CF	circuit breaker		230			CB replacement	O7	MI			\$200,000.00		
A	2154	ITC	1310	12/31/2007	Waterman 230 kV pos. BF	circuit breaker		230			CB replacement	O7	MI			\$200,000.00		
A	2159	ITC	1310	12/31/2007	St. Clair 120 kV pos. HS	circuit breaker		120			CB replacement	O7	MI			\$150,000.00		
A	2158	ITC	1310	12/31/2007	St. Clair 120 kV pos. KB	circuit breaker		120			CB replacement	O7	MI			\$150,000.00		
A	1585	ITC	1488	10/31/2006	Placid 120 kV	Proud 120 kV	1	120		343		N7	MI	14.3				
A	1584	ITC	1488	12/31/2006	Placid 120 kV	Durant 120 kV	1	120		343		N7	MI	16.7		\$4,000,000.00		
A	193	LES	246	12/31/2008	NW68th & Holdrege	NW 12th & Arbor	1	115		373	New Line	F9	NE		10	\$1,712,000.00		
A	806	LES	804	12/31/2008	19th & Alvo	70th & Bluff	1	115		363	Rebuilt Line	F9	NE	1.5		\$300,000.00		
A	1576	MDU	548	11/1/2007	Bismarck Downtown	East Bismarck		115		160	Rebuild	D4	ND			\$363,000.00		
A	1578	MDU	1008	11/1/2009	S Mandan	Bismarck Downtown		115		180	Memorial Bridge circuit replacement	D4	ND			\$2,868,000.00		
A	1577	MDU	1008	11/1/2009	Heskett	NW Bismarck		115		180	Memorial Bridge circuit replacement	D4	ND			\$3,692,000.00		
A	1332	METC	481	12/1/2008	Tallmadge 3rd 345/138 kV	transformer	3	345	138			M7	MI			\$3,649,203.00	Y	
A	1534	METC	481	12/1/2008	Tallmadge Remove Reactors	Tallmadge Remove Reactors	1&2	345			remove 138 kV reactors		MI			\$0.00	Y	
A	2557	METC	481	12/1/2008	Tallmadge 345 kV	substation upgrades		345			sub upgrades for 3rd transformer	M7	MI			\$6,263,887.00	Y	Y
A	1322	METC	497	6/1/2007	Tallmadge	Wealthy	2	138				M7	MI	0		\$40,000.00		

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A	1327	METC	644	6/15/2007	Rogue River J. - METC	Rogue River	1	138				M7	MI		0.1	\$160,000.00		
A	1328	METC	645	6/1/2007	American Bumper	David	1	138				M7	MI		8	\$2,500,000.00		
A	1345	METC	658	5/1/2008	Gaylord	Livingston	1	138				M5	MI		1.5	\$500,000.00		
A	1347	METC	660	5/1/2009	Keystone	Clearwater	1	138				M5	MI		23.2	\$10,200,000.00	Y	
A	1434	METC	740	3/1/2007	Gallagher	Tittabawassee	1	345			relaying & communications	M5	MI		0	\$1,000,000.00		
A	1435	METC	740	3/1/2007	Keystone	Livingston	1	345			relaying & communications	M5	MI		0	\$1,000,000.00		
A	1436	METC	740	3/1/2007	Livingston	Gallagher	1	345			relaying & communications	M5	MI		0	\$794,000.00		
A	3083	METC	775	3/31/2007	Iosco	Capacitors	1	138		18 Mvar		N6	MI		0	\$800,000.00		
A	1539	METC	976	5/15/2008	Alpine	Add one line switch		138			Add One switch		MI			\$80,000.00		
A	1540	METC	977	5/1/2006	Marquette Station	Replace breaker failure scheme		138			Replace breaker failure scheme		MI			\$200,000.00		
A	1544	METC	981	6/1/2009	Wabasis J. - N. Belding - Vergennes	Wabasis	1	138			Install a Tap Pole and Switches		MI			\$160,000.00		
A	1545	METC	982	7/1/2008	Crahen J. - Spaulding - Race Street	Crahen	1	138			Install a Tap Pole and one switch		MI			\$80,000.00		
A	1551	METC	988	12/31/2009	Simpson	Batavia	1	138					MI		30	\$13,000,000.00	Y	
A	1587	METC	1015	6/1/2008	Oden	Oden - New Capacitor	1	138		21.6 Mvar	Oden - New 21.6 Mvar Capacitor		MI			\$510,000.00		
A	1588	METC	1016	6/1/2007	Bard Road	Bard Road - New Capacitor	1	138		36 Mvar	Bard Road - New 36 Mvar Capacitor		MI			\$596,000.00		
A	1589	METC	1017	6/1/2007	Croton	Croton - New Capacitor	1	138		36 Mvar	Croton - New 36 Mvar Capacitor		MI			\$596,000.00		
A	2393	METC	1390	12/1/2007	Goss 345kV	345kV GIS bus and breakers		345			Replace old, leaking 345kV GIS bus & breakers with open-air type. Patchwork repairs haven't been successful.		MI			\$5,800,000.00		
A	2394	METC	1391	12/31/2007	Campbell 138kV	Breaker 148		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2395	METC	1392	12/31/2007	Campbell 138kV	Breaker 188		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2396	METC	1393	12/31/2007	Campbell 138kV	Breaker 288		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2397	METC	1394	12/31/2007	Campbell 138kV	Breaker 388		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2398	METC	1395	12/31/2007	Campbell 138kV	Breaker 500		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2399	METC	1396	12/31/2007	Campbell 138kV	Breaker 588		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2400	METC	1397	12/31/2007	Spaulding 138kV	Breaker 36M9		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2401	METC	1398	12/31/2007	Spaulding 138kV	Breaker 36B7		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2402	METC	1399	12/31/2007	Morrow 138kV	Breaker 377		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2403	METC	1400	12/31/2007	Claremont 138kV	Breaker 288		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2404	METC	1401	12/31/2007	Claremont 138kV	Breaker 388		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2405	METC	1402	12/31/2007	Goss 138kV	Breaker 13B7		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2406	METC	1403	12/31/2007	Goss 138kV	Breaker 13M9		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2407	METC	1404	12/31/2007	Argenta 138kV	Breaker 6W8		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2408	METC	1405	12/31/2007	Hemphill 138kV	Breaker 499		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2409	METC	1406	12/31/2008	Alpena 138kV	Breaker 188		138			Replace overdutied breaker with higher capacity breaker.		MI			\$160,000.00		
A	2410	METC	1407	12/1/2007	Ludington 345kV	Reactor		345			Repair or replace existing 100MVAR reactor and replace circuit switcher with a breaker		MI			\$1,500,000.00		
A	2411	METC	1408	5/1/2007	RTU/SCADA upgrades	Throughtout System		345	138		Install and/or upgrade numerous RTU/SCADA points		MI			\$801,000.00		
A	2413	METC	1410	12/1/2008	Mobile 138kV Capacitor			138		14.4 - 36MVAR	Purchase a mobile 138kV capacitor for use where needed during outages, heavy transfers, etc.		MI			\$700,000.00		
A	2414	METC	1411	3/1/2007	Campbell 345kV	Relay Runback SPS on Unit 3		345			Install auto relay runback SPS for Campell Unit 3 per MISO G479 Study		MI			\$75,000.00		
A	2415	METC	1412	6/1/2007	Palisades 345kV	Argenta 345kV	1or2	345			Modify phase connections at the Palisades and Argenta ends of the 345kV line for Covert project		MI			\$170,000.00		
A	2416	METC	1412	6/1/2007	Palisades 345kV	Cook 345kV	2	345			Modify phase connections at the Palisades and Cook ends of the 345kV line for Covert project		MI			\$735,000.00		
A	2417	METC	1413	5/1/2009	Bagley 138kV	Gaylord 138kV	1	138			Rebuild line to 795 ACSS		MI			\$350,000.00		
A	2418	METC	1414	12/31/2007	Thetford 345kV	Line Relaying		345			Upgrade 345kV line relaying.		MI			\$300,000.00		
A	2419	METC	1415	10/1/2007	HSC 138kV	Tittabawasee 138kV & Lawndale 138kV	1	138			Install a tap pole and one switch on each of the Tittabawassee HSC and Lawndale-HSC 138kV lines. (Solar Project)		MI			\$160,000.00		

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A	2421	METC	1416	10/1/2007	HSC 138kV	Tittabawasee 138kV	2	138			Install new,second 138kV Tittabawasee-HSC line and 5 total 138kV breakers for connecting the line at each end. (HSC Project)		MI			\$4,527,000.00	Y	
A	2420	METC	1416	10/1/2007	HSC 138kV	Tittabawasee 138kV & Lawndale 138kV	1	138			Install a new 2-mile 138kV double circuit to swap the existing 138kV Tittabawasee and Lawndale line connections into HSC. (HSC Project)		MI			\$2,700,000.00	Y	
A	2422	METC	1417	6/1/2007	Race Street 138kV	138kV Tie Breaker		138			Install a 138kV tie-breaker to loop the Spaulding-Four Mile 138kV Line (Race St)		MI			\$2,200,000.00		
A	2423	METC	1418	5/1/2007	Batavia 138kV	Barton Lake 138kV	1	138			Install a Tap Pole and Two Switches (Kinderhook)		MI			\$160,000.00		
A	2424	METC	1419	6/1/2007	Hackett Junction 138kV	Saginaw River 138kV	1	138			Install a Tap Pole and one Switch (Laundra)		MI			\$80,000.00		
A	2425	METC	1420	6/1/2007	North Belding 138kV	Sanderson Junction 138kV	1	138			Install a Tap Pole and one Switch (Sanderson)		MI			\$80,000.00		
A	2426	METC	1421	12/15/2007	Michigan Junction 138kV	Race Street Junction 138kV	1	138			Install a 138kV tie-breaker and loop the Spaulding-Four Mile 138 kV Line into new Baraga substation (Baraga)		MI			\$240,000.00		
A	2427	METC	1422	6/1/2007	Marshall 138kV	Hughes Junction 138kV	1	138			Install a Tap Pole and one Switch (Marshall)		MI			\$80,000.00		
A	2428	METC	1423	6/1/2007	Emmet 138kV	McNally 138kV	1	138			Install a tap pole and two switches on the Emmet-McNally 138kV line. Purchase the high side of Emmet Substation and a section of the 138kV line from the substation to the Eppler tap point. (Eppler)		MI			\$500,000.00		
A	2429	METC	1424	5/1/2007	Delhi 138kV	Churchill Junction 138kV	2	138			Install aTap Pole and Switches (Trillium)		MI			\$160,000.00		
A	2430	METC	1425	6/1/2008	Keystone 138kV	Elmwood 138kV	1	138			Install a Tap Pole and Switches. Relay upgrades. (Gray Rd)		MI			\$300,000.00		
A	2437	METC	1433	6/1/2008	Beals 138kV	Hazelwood 138kV	1	138			Install bulk substation served from the Beals-Hazelwood 138kV Line (Buskirk)		MI			\$2,200,000.00		
A	2438	METC	1434	6/1/2008	Spaulding 138kV			138			Install bulk substation served from the Spaulding 138kV ring bus (Five Mile)		MI			\$750,000.00		
A	2441	METC	1437	6/1/2008	Argenta 138kV	Milham 138kV	1	138			Install a tap pole and two switches on Argenta-Milham 138kV Line (N Ave)		MI			\$160,000.00		
A	2442	METC	1438	6/1/2008	Wexford 138kV	Tippy 138kV	1	138			Install a tap pole and one switch on Wexford-Tippy 138kV Line (Potvin)		MI			\$80,000.00		
A	2443	METC	1439	10/1/2007	Hemphill 138kV	Weadock 138kV	1	138			Install a tap pole and two switches on Hemphill-Weadock 138kV Line (Busch)		MI			\$160,000.00		
A	2444	METC	1440	6/1/2008	Beals 138kV	Wayland 138kV	1	138			Install a tap pole and two switches on Beals Rd-Wayland-Hazelwood 138kV Line (Huckleberry)		MI			\$80,000.00		
A	2445	METC	1441	6/1/2009	Sternberg 138kV			138			Install bulk substation served from a new Ellis spur from Sternberg (Ellis/Hile Rd)		MI			\$3,250,000.00		
A	2446	METC	1442	10/1/2007	Fillmore 138kV	Four Mile 138kV	1	138			Install bulk substation served from the Fillmore-Four Mile 138kV Line (Eastmanville/Pingree)		MI			\$200,000.00		
A	2448	METC	1444	6/1/2011	Bullock 138kV	Edenville Junction 138kV	1	138			Install a tap pole and two switches on Bullock-Edenville 138kV Line (Dublin)		MI			\$160,000.00		
A	2449	METC	1445	6/1/2010	Emmet 138kV	distribution		138			Install a second distribution transformer at Emmet (Emmet)		MI			\$2,750,000.00		
A	2450	METC	1446	6/1/2010	Gaines 138kV			138			Install bulk substation at Gaines (Gaines)		MI			\$50,000.00		
A	2451	METC	1447	6/1/2010	Eureka 138kV	Vestaburg 138kV	1	138			Install bulk substation served from the Eureka-Deja-Vestaburg 138kV Line (Horseshoe Creek/Deja)		MI			\$2,200,000.00		
A	2453	METC	1449	6/1/2010	Cobb 138kV	Tallmadge 138kV	2	138			Install bulk substation served from the Cobb-Tallmadge #2 138kV Line (Juniper)		MI			\$160,000.00		
A	2039	MP	1	6/30/2008	Arrowhead	Capacitor		230		2 x 75 Mvar		I4	MN			\$1,858,227.20		
A	318	MP	1	6/30/2008	Arrowhead 230-230 kV	Phase-Shifter	1	230	230	800		I4	MN			\$13,741,772.80		
A	319	MP	1	6/30/2008	Arrowhead 345/230 kV	transformer	1	345	230	800		I4	MN			\$10,400,000.00		
A	2258	MP	1358	12/30/2006	Grand Rapids	Capacitor		115		1x27 Mvar	add new	b11	MN			\$320,000.00		
A	1098	MPC/XEL/OTP	279	7/1/2010	Boswell	Wilton	1	230		390	Add a new 230 kV line between Boswell and Wilton	H4	MN		85	\$35,963,000.00	Y	
A	3032	MRES	755	6/1/2007	Alexandria Switching Station	Capacitors		115		25 Mvar	Add a 1 x 25 MVAR capacitor bank at the Alexandria Switching Station	G5	MN			\$530,000.00		
A	3034	NIPS	757	2/1/2007	Dune Acres	Capacitor		138			Add Capacitor - (1) 100 MVAR step	L8	IN			\$1,083,600.00		
A	970	NIPS	925	12/1/2006	ISG2	Marktown	1	138		316	Upgrade Connections and Circuit		IN		0.6	\$240,500.00		

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A	2128	NIPS	1298	5/1/2008	Inland #5	Marktown	1	138		316/380	Upgrade Connections and Circuit			2.2		\$750,000.00		
A	377	OTP	274	8/1/2008	Appleton	Louisburg	1	115		96	Convert an existing 41.6 kV line to 115 kV	G5	MN	6.9		\$474,000.00		
A	378	OTP	275	8/1/2008	Dawson	Canby	1	115		96	Convert an existing 41.6 kV line to 115 kV	G8	MN	21.1		\$538,000.00		
A	2266	OTP	1362	8/1/2008	Louisburg	Dawson	1	115		96	Convert an existing 41.6 kV line to 115 kV	G6	MN	14.4		\$988,000.00		
A	2516	OTP	1462	9/1/2007	Rugby	substation		230			upgrade the Rugby Substation to accommodate the interconnection of the Interconnection Customer's 230 kV radial transmission line into the Rugby Substation.		ND			\$705,931.00	Y	
A	2515	OTP	1462	9/1/2007	Rugby	bus		230			radial bus within the Rugby Substation needed to accommodate the interconnection of the Interconnection Customer's 230 kV radial transmission line into the substation 230 kV bus.		ND			\$104,809.00		
A	2514	OTP	1462	9/1/2007	Rugby	radial line		230			The new 230 KV overhead radial transmission line Interconnection Facilities from the Interconnection Customer's collector substation to the Transmission Owner's Rugby Substation.		ND		9	\$88,000.00		
A	60	SIPC	81	6/1/2007	Marion	Carrier Mills	1	161		286		K11	IL		27	\$7,083,000.00		
A	1900	WPSC	1205	8/1/2006	Cheboygan II	Breaker		69			Add Breaker at Cheboygan II		MI			\$550,000.00		
A	1901	WPSC	1206	8/1/2006	Lake County	Bass Lake		69		102.4 MVA	Rebuild Overloaded Line		MI	8.35		\$1,800,000.00		
A	1902	WPSC	1207	8/1/2006	Hersey	Osceola		69		35.9 MVA	Rerate Overloaded Line		MI	4.02		\$200,000.00		
A	1903	WPSC	1208	8/1/2006	Oden	12MVAR cap. Bank		69			Add 12MVAR at Oden Sub.		MI			\$300,000.00		
A	1926	WPSC	1226	2/1/2008	Kalkaska Generation	Westwood	1	69		102.4	Rebuild 69 kV Line		MI	11.62	0	\$2,905,000.00		
A	1927	WPSC	1227	2/1/2008	Gaylord Generation	Bagley Junction	1	69		102.4	Rebuild 69 kV Line		MI	4	0	\$1,000,000.00		
A	1928	WPSC	1228	8/1/2008	Westwood	New Load		69			Add 14MW Load to Westwood		MI			\$1,800,000.00		
A	1929	WPSC	1229	11/1/2006	Plains X	Bus Upgrade		69			Upgrade existing 69KV bus		MI			\$625,000.00		
A	1930	WPSC	1230	9/1/2006	White Cloud	Bus Upgrade		69			Upgrade existing 69KV bus		MI			\$625,000.00		
A	1931	WPSC	1231	6/1/2006	Superior	New Load		69			Add new load tap off 69KV line		MI			\$550,000.00		
A	1994	WPSC	1272	8/1/2010	Redwood 138	Redwood 69		138	69	75MVA	Add 75MV transformer		MI	0		\$1,900,000.00		
A	2563	WPSC	1465	10/1/2007	G418, 69 kV line upgrades			69			69 kV line upgrades		MI			\$1,080,000.00	Y	
A	2562	WPSC	1465	10/1/2007	Redwood 138/69	transformer		138	69				MI			\$2,022,328.00	Y	
A	2526	WPSC	1465	10/1/2007	Donaldson Creek Sub	generator		138	1	138.9 MW	new wind generation interconnecting at Donaldson Creek Substation		MI					
A	2528	WPSC	1465	10/1/2007	Donaldson Creek Sub	radial line		138			Construction of a new 138 kV transmission line from the Generating Facility Collector Substation to the Transmission Owner's Donaldson Creek 138 kV Substation will be required.		MI		6	\$1,080,000.00		
A	2529	WPSC	1465	10/1/2007	Donaldson Creek Sub	network upgrades		138			138 kV circuit breakers at POI		MI			\$845,291.00	Y	
A	2527	WPSC	1465	10/1/2007	Donaldson Creek Sub	interconnection upgrades		138			The 138 kV double circuit line with one side operated at 69 kV and the other at 138 kV, connecting the Transmission Owner's Donaldson Creek Substation and the Generating Facilities' 138 kV Collector Station		MI			\$164,997.00		
A	306	XEL	56	12/31/2010	Lindstrom	Shafer	1	115		310	New line	Q4	MN	2.8		\$5,800,000.00		
A	303	XEL	56	12/31/2010	Lawrence Creek	St Croix Falls	1	161		371	New 161 kV line	Q4	MN		2.05	\$9,080,000.00		
A	301	XEL	56	12/31/2010	Chisago	Lindstrom	1	115		310	New 115 kV line	Q4	MN	7		\$10,100,000.00		
A	310	XEL	56	12/31/2010	Shafer	Lawrence Creek	1	115		310	New line	Q4	MN	6.2		\$3,500,000.00		
A	304	XEL	56	12/31/2010	Lawrence Creek 161-115 kV	transformer	1	161	115	336	New substation with 161-115 kV transformer	Q4	MN			\$6,000,000.00		
A	563	XEL	267	5/1/2007	Lawrence	Minnehaha	1	115		310	Upgrade existing line	G7	SD	5.2		\$829,667.00		
A	564	XEL	268	5/1/2007	Minnehaha	Lincoln County	1	115		310	Upgrade existing line	G7	SD	5.8		\$925,398.00		
A	1137	XEL	269	6/1/2007	Prairie Island	Red Rock	2	345		1198	Upgrade existing line	Q6	MN	32		\$807,000.00		
A	1138	XEL	270	6/1/2007	Champlin	Champlin Tap	1	115		310	Upgrade existing line	Q4	MN	2.4		\$382,923.00		
A	277	XEL	272	6/1/2007	Air Lake	Vermillion River	1	115		200	New line	TC det	MN		4.2	\$3,359,095.21		
A	572	XEL	366	6/1/2007	Sherco	Monticello	1	115		310	Upgrade existing line	H5	MN	2.2	1	\$714,344.00		
A	573	XEL	366	6/1/2007	Sherco 345-115 kV	transformer	1	345	115	448	New transformer	H5	MN			\$3,001,443.00		
A	574	XEL	366	6/1/2007	St Cloud	I94 Industrial Park tap	1	115		310	Upgrade existing line	H5	MN	5		\$850,409.00		

MTEP06 Appendix A - Project Facilities Recommended for Board Approval - 1/30/2007

App AB	Facil ID	Reporting Source	PrjID	Expected ISD	From Sub or Location	To Sub or Device Description	Ckt	Voltage (kV)	LS kV	Rating (Normal / Emergency)	Upgrade Description	Map Grid	State	Miles Upg	Miles New	Estimated Facility Cost	Cost Shared	Post Stamp
A	569	XEL	366	6/1/2007	I94 Industrial Park tap	Salida Crossing	1	115		310	Upgrade existing line	H5	MN	14.3		\$2,432,170.00		
A	571	XEL	366	6/1/2007	Salida Crossing	Sherco	1	115		310	Upgrade existing line	H5	MN	2.5	1	\$765,368.00		
A	268	XEL	377	1/1/2007	Minn Valley	Redwood Falls Tap	1	115		310	Upgrade existing 115 kV line	G6	MN	27.2		\$9,380,127.53		
A	307	XEL	385	10/1/2007	Nobles Co	Lakefield Jct	1	345		2085	New line	G7	MN		42	\$37,070,397.41		
A	308	XEL	385	10/1/2007	Nobles Co	Fenton	1	115		600	New line	G7	MN		12	\$7,913,905.06		
A	309	XEL	385	10/1/2007	Nobles Co 345-115 kV	transformer	1	345	115	600	New transformer	G7	MN			\$5,792,804.96		
A	272	XEL	385	10/1/2007	Redwood Falls Tap	Franklin	1	115		310	Upgrade existing 115 kV line	H6	MN	13		\$3,185,000.00		
A	537	XEL	385	11/1/2007	Buffalo Ridge	Yankee	1	115		620	New 115 kV line		MN					
A	311	XEL	385	11/1/2007	Split Rock	Nobles Co	1	345		2085	New line	G7	MN		52	\$44,966,947.42		
A	2315	XEL	385	11/1/2007	Yankee	Brookings County	1	115		620	New 115 kV line		MN					
A	302	XEL	385	11/1/2007	Fenton	Chanarambie	1	115		600	New 115 kV line	G6	MN		14	\$7,412,392.63		
A	2041	XEL	385	11/1/2007	Nobles Co	Capacitor		115		40 Mvar	New capacitor	G7	MN			\$634,038.22		
A	2283	XEL	385	11/1/2008	Brookings Co	White	2	345		2085	New 345 kV line	G7	SD/MN					
A	975	XEL	385	6/1/2010	Nobles Co 345-115 kV	transformer	2	345	115	672	New transformer	G7	MN			\$5,792,804.96		
A	2038	XEL	417	6/1/2007	Westgate	Capacitor		115		80 Mvar	New capacitor	H6	MN			\$1,500,000.00		
A	800	XEL	609	6/1/2007	Long Lake	Oakdale (from Woodbury)	1	115		310	Upgrade existing line	P5	MN	3.7		\$760,000.00		
A	1359	XEL	671	6/1/2007	Oakdale	Tanners Lake	1	115		223	Upgrade existing line	P5	MN	5.2		\$800,000.00		
A	1361	XEL	673	6/1/2008	Champlin Tap	Crooked Lake	1	115		223	Upgrade existing line	TC det	MN	3.1		\$310,000.00		
A	1362	XEL	674	5/1/2008	High Bridge	Rogers Lake	1	115		585	Upgrade existing line	TC det	MN	4.2		\$2,400,000.00		
A	3088	XEL	780	11/1/2007	Fieldon Township	Series Capacitor		345		20 ohms	New series capacitor on LGS-Wilmarth 345	H6	MN			\$10,100,000.00		
A	803	XEL	1031	3/1/2005	Kasson	Dodge Center	1	69		84	upgrade line	I6	MN	7.8		\$780,000.00		
A	1079	XEL	1034	6/1/2006	Loon Lake 115-69 kV	transformer	1	115	69	112		H6	MN			\$1,774,000.00		
A	2274	XEL	1364	5/1/2007	Lakefield Jct	Lakefield Generation	1	345		1165	Raise the structures to increase the thermal rating	G6	MN					
A	2275	XEL	1365	6/1/2007	Edina	Eden Prairie	1	115		310	Reconductor	TC det	MN	4.7		\$3,730,000.00		
A	2277	XEL	1366	5/1/2008	Colvill Generating station	Transformer	1	161	115	187	New sub with transformer relocated from Cannon Falls substation	I5	MN			\$10,428,380.00	Y	
A	2281	XEL	1366	5/1/2008	Colvill Generating station	Spring Creek	1	161		234	Build in and out of the Covill generating station from Cannon Falls - Spring Creek line	I5	MN			\$365,000.00	Y	
A	2280	XEL	1366	5/1/2008	Colvill Generating station	Empire	1	115		200	Build in and out of the Colvill generating station from Cannon Falls - Empire 115 kV line	I5	MN			\$3,150,000.00	Y	
A	2278	XEL	1366	5/1/2008	Colvill Generating station	Cannon Falls	1	115		140	Build in and out of the Colvill generating station from Cannon Falls - Empire 115 kV line	I5	MN			\$0.00	Y	
A	2279	XEL	1366	5/1/2008	Colvill Generating station	Cannon Falls	2	115		167	Build in and out of the Covill generating station from Cannon Falls - Spring Creek line	I5	MN			\$0.00	Y	
A	2491	XEL	1456	11/1/2007	Yankee	transformer		118	36.2	120 MVA	a new 120 MVA, 118-36.2 kV transformer, a 115 kV breaker, switches, and 34.5 kV breakers and switches and all other associated equipment.		MN			\$2,826,000.00	Y	
A	2490	XEL	1456	11/1/2007	Yankee	feeders		34.5			Two 50 MW 34.5 kV feeders and all associated equipment		MN			\$531,600.00		
A	2303	XEL	1457	6/1/2010	Nobles County	Fenton	2	115		620	New 115 kV line plus permitting and ROW		MN			\$13,560,000.00	Y	
A	2565	XEL	1457	12/31/2010	Nobles County	substation		345			345 kV substation upgrades		MN			\$344,270.00	Y	Y
A	2494	XEL	1457	12/31/2010	Nobles	feeders		34.5			four new 50 MW 34.5 kV feeders and all associated equipment at Nobles County Sub.		MN			\$1,100,000.00		
A	2550	XEL	1457	12/31/2010	Nobles County	substation		115			Substation upgrades		MN			\$11,992,730.00	Y	
A	2552	XEL	1457	12/31/2010	Fenton County	substation		115			Substation upgrades		MN			\$776,000.00	Y	
A	2551	XEL	1457	12/31/2010	Hazel Creek (Hazel Run)	substation		115			New Substation and in-and-out taps to transmission		MN			\$10,962,000.00	Y	
A	2549	XEL	1458	6/1/2010	Hazel Creek	Capacitor		115		53 MVAR	Capacitor Bank, 115 kV CB, 0.33 Mvar SVC		MN			\$5,290,000.00	Y	
A	2299	XEL	1458	6/1/2010	Yankee	Brookings County	2	115		310	New 115 kV line plus permitting and ROW	G7	MN			\$9,955,000.00	Y	
A	2554	XEL	1458	12/31/2010	Brookings Co	substation		345	115	448 MVA	Substation upgrades (new 345/115 transformer, 3-115 kV CB, associated equip)		MN			\$6,101,122.00	Y	
A	2553	XEL	1458	12/31/2010	Yankee	substation		115		120 MVA	Substation upgrades (new 115/34.5 transformer, 8-115 kV CB, 4 -34.5 kV CB)		MN			\$7,120,000.00	Y	
A	2566	XEL	1458	12/31/2010	Brookings Co	substation		345			Substation upgrades 4-345 kV CB		MN			\$1,313,878.00	Y	Y

MTEP06 Appendix A - Project Facilities Recommended for Board Approval - 1/30/2007

App AB	Facil ID	Reporting Source	PrijID	Expected ISD	From Sub or Location	To Sub or Device Description	Ckt	Voltage (kV)	LS kV	Rating (Normal / Emergency)	Upgrade Description	Map Grid	State	Miles Upg	Miles New	Estimated Facility Cost	Cost Shared	Post Stamp
A	2496	XEL	1458	11/30/2011	Yankee	feeders		34.5			four new 50 MW underground feeder lines and all associated equipment		MN			\$2,202,000.00		
A	2564	XEL	1459	1/1/2009	Dakota County Sub	in-and-out tap		345			tap Blue Lake-Prairie Island 345 kV ine		MN			\$2,425,500.00	Y	Y
A	2523	XEL	1464	11/15/2005	McHenry	Souris		115		12 MW	new generation interconnection on the McHenry - Souris 115 kV line		ND					
A	2548	XEL	1489	6/1/2011	Woodbury	Tanners Lake	1	115			Upgrade to 310 MVA		MN		3.49	\$525,000.00		
A	2484	XEL (NSP)	1454	10/1/2007	Yankee	Transformer		115	34.5	120 MVA	New Transformer, plus 1 115 kv breaker and two 34.5 kV breakers		MN			\$2,306,000.00		
A	2488	XEL (NSP)	1455	5/1/2009	Riverside Generating Plant	breakers		115			IC to install 115 kV breakers on IC side of interconnection facilities as well as two sets of metering equipment		MN			\$165,000.00		
A	2489	XEL (NSP)	1455	5/1/2009	Riverside Generating Plant	Apache Substation		115		63 kA CB	IC to install three new 115 kV, 63 kA interrupting rating circuit breakers, six 115 kV switches, two 115 kV current coupling voltage transformers, as well as relocate the existing Apache 115 kV line to a new termination in the substation.		MN			\$2,605,000.00		
A	645	XEL/WAPA	385	11/1/2007	Brookings Co	White	1	345		600		G6	SD		2			
A	646	XEL/WAPA	385	11/1/2007	Brookings Co	345/115 transformer	1	345	115	672		G6	SD			\$12,179,190.00		
A	828	DEM	853	6/1/2015	West Lafayette	Cumberland Ave	1	138		306	13806 reconductor with 954ACSR 100C 604F6325	L9	IN	2		\$646,000.00		

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-52

NYISO/MISO 3-8. Were the Replacement PARs designed and constructed to perform the same function as the Original PAR was designed and constructed to perform?

- a. If your answer to NYISO/MISO 3-8 is “no,” please explain the differing purposes that the Original PAR and Replacement PARs were each constructed to perform, and provide copies of all Documents that support your response.
- b. If your answer to NYISO/MISO 3-8 is “no,” please provide the design specifications for both the Original PAR and Replacement PARs.

Response: In general, yes. The Original PAR performed a function of controlling loop flow but had lesser capability than the New PARs. MISO understands that the New PARs have greater capabilities help to control Lake Erie loop flow than the Original PAR. MISO does not have in its possession or control the design specifications of the Original PAR or the New PARs which it understands are different. MISO maintains its prior objection to the extent such information is not within MISO’s possession or control and refers NYISO to ITC for information responsive to this request. MISO also states that it has identified approximately 18,000 potentially relevant documents responsive to NYISO data requests and is engaged in relevance and privilege review. MISO intends to attempt in good faith to provide a more complete response, subject to the Protective Order issued on January 23, 2012 on a rolling basis as Documents are identified.

Sponsored by: Kevin Frankeny

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-53

REDACTED
PROTECTED MATERIAL

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-54

NYISO/ITC 1-14. Please explain why the costs of the Replacement PARs were not allocated within MISO to other than ITC customers, and provide copies of all Documents that ITC relies on to support its explanation.

Response to NYIS/ITC 1-14: The project was approved as a like for like replacement and thus was not eligible for cost sharing within MISO under MISO tariff Attachment FF. Please refer to the Midwest ISO MTEP06 Midwest ISO Transmission Expansion Plan, December 2006 (Revised February 2007) pages 173, 182, Appendix A page 7, Appendix A page 19 which is available at: <https://www.midwestiso.org/Planning/Pages/StudyRepository.aspx>.

Response prepared by Carlo Capra

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-55

PP-230-4
US Department of Energy

JAN 5 2009

Electricity, Delivery and Energy Reliability

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

International Transmission Company)
d/b/a ITCTransmission)
)
)

Docket No. PP-230-3

REQUEST OF
INTERNATIONAL TRANSMISSION COMPANY
D/B/A ITCTRANSMISSION
TO AMEND PRESIDENTIAL PERMIT

Pursuant to Executive Order No. 10485, as amended by Executive Order 12038; Section 202(e) of the Federal Power Act, 16 U.S.C. § 824(e); and Section 320, *et. seq.*, of the Rules of Administrative Procedure of the Department of Energy ("DOE" or the "Department"), 10 C.F.R. § 205.320 *et. seq.*, International Transmission Company d/b/a ITCTransmission ("ITC") respectfully requests DOE to amend the above-referenced Presidential Permit held by ITC to authorize modifications to facilities interconnecting ITC with Hydro One Networks Inc. ("Hydro One") on the United States-Canada border (the "Interconnection Facilities").

Presidential Permit PP-230-3, among other things, authorized ITC to operate and maintain the Interconnection Facilities, including one 230,000 volt (230kV) transmission line, and one 675-MVA phase shifting transformer connecting ITC's Bunce Creek Station located in Maryville, Michigan with Hydro One's Scott Transformer Station located in Sarnia, Ontario. As explained below, the Bunce Creek phase shifting transformer failed while in service in March, 2003. ITC hereby requests authorization to replace the aforementioned transformer with two 700-MVA phase shifting transformers connected in series. To ensure the reliability of service provided over the Interconnection

Facilities and over the transmission systems located in regions adjacent to the Interconnection Facilities, ITC commits that the operation of the Interconnection Facilities, as modified, will comply with all applicable criteria, standards, and guidelines established by the North American Electric Reliability Corporation (“NERC”) and directives of the Midwest Independent Transmission System Operator, Inc. (“Midwest ISO”), the NERC-registered Reliability Coordinator for the Interconnection Facilities.

In support of this application, ITC is submitting herewith technical information regarding the new transformers and two recent reports jointly prepared and issued by the Midwest ISO and by PJM Interconnection, L.L.C. (“PJM”), which confirm the need to control inadvertent power flows around Lake Erie as the new transformers are intended to do.

ITC hereafter provides the information required under Section 205.322 of DOE’s regulations, 10 C.F.R. § 205.322.

I. INFORMATION REGARDING APPLICANT

1. The exact legal name of the applicant is International Transmission Company d/b/a *ITCTransmission*. ITC is a regulated public utility incorporated under the laws of the State of Michigan and is authorized to conduct business in Michigan. ITC has its principal offices at 27175 Energy Way, Novi, Michigan 48377. ITC is an independent, stand-alone transmission company engaged exclusively in the transmission of electric energy in interstate commerce. Transmission service over ITC’s facilities is provided by the Midwest ISO pursuant to its Transmission and Energy Markets Tariff.

2. ITC is not a party to a partnership agreement with any entity with a relation to the Interconnection Facilities.

3. Communications concerning this application should be addressed to the following:

James Frankowski
ITC Holdings Corp.
27175 Energy Way
Novi, MI 48377
Tel: (248) 946-3540
jfrankowski@ltctransco.com

John R. Staffier
Stuntz, Davis & Staffier, P.C.
555 Twelfth Street, N.W., Suite 630
Washington, D.C. 20004
Tel: (202) 737-8060
jstaffier@sdsatty.com

4. All of the transmission facilities covered by Presidential Permit PP-230-3 are wholly owned by ITC. The portions of the transmission lines that cross the international border that are located in Michigan are wholly owned by ITC. The portions of those lines that are located in Ontario are owned by Hydro One.

5. ITC (as successor to Detroit Edison Company ("DTE")) and Hydro One (as successor to Ontario Hydro), are parties to an Interconnection Agreement dated as of January 29, 1975, as amended on July 20, 1976; June 21, 1979; April 1, 1985; October 3, 1988; and February 1, 1991. A copy of the Interconnection Agreement is on file with the DOE Office of Fossil Energy.

6. A signed opinion of counsel, stating that the modification to ITC's Presidential Permit being requested herein is within ITC's corporate powers and that ITC has complied with or will comply with all pertinent federal and state laws, is attached hereto as Attachment A.

II. INFORMATION ABOUT THE FACILITIES

The electrical systems of ITC and Hydro One are interconnected at four points on the border between the United States and Canada. The U.S. facilities were originally owned and operated by DTE and the Federal Power Commission issued Presidential Permits to DTE authorizing the installation and operation of each facility. See 54 FPC ¶ 332 (1975); 48 FPC 752 (1972); 35 FPC 292 (1966); 16 FPC 1348 (1956); and 12 FPC 1359 (1953). Ownership of the facilities was subsequently transferred from DTE to ITC and, accordingly, DOE issued Presidential Permits to ITC covering the facilities. See Permits PP-230-2 (2001) and PP-230-3 (2003). These facilities are identified as follows:

- (a) Facility B3N, a 230 kV transmission line, including one 675-MVA phase shifting transformer connecting ITC's Bunce Creek Station, located in Marysville, Michigan, with Hydro One's Scott Transformer Station, located in Sarnia, Ontario. The transmission line was originally authorized under Presidential Permit PP-21, and the transformer was originally authorized in Presidential Permit PP-230-2;
- (b) Facility L4D, a 345 kV transmission line connecting ITC's St. Clair Generating Station, located in East China Township, Michigan, with Hydro One's Lambton Generating Station, located in Moore Township, Ontario, originally authorized under Presidential Permit PP-38;
- (c) Facility L51D, a 230 kV transmission line connecting ITC's St. Clair Generating Station, located in East China Township, Michigan with Hydro One's Lambton Generating Station, located in Moore Township, Ontario, originally authorized under Presidential Permit PP-58; and
- (d) Facility J5D, a 230 kV transmission line connecting ITC's Waterman Station, located in Detroit, Michigan, with Hydro One's

J. Clark Keith Generating Station, located in Windsor, Ontario, originally authorized under Presidential Permit PP-21.

ITC does not propose to make any physical changes to the existing overhead conductors, shield wires, supporting structures or rights of way currently authorized in Presidential Permit PP-230-3. ITC does, however, request authorization permitting it to install and place into service two 700-MVA phase shifting transformers connected in series at the Bunce Creek station, to replace the previously authorized 675-MVA transformer.

As referenced above, the 675-MVA transformer at Bunce Creek was originally authorized in Presidential Permit PP-230-2, issued on April 19, 2001. As stated in the Permit, the purpose of the transformer was to help provide “enhanced control over the inadvertent power flow between Michigan and Ontario and, by extension, around Lake Erie” (Permit at 2), so that “under normal operating conditions ... the electrical flow on the Michigan-Ontario interface will match the Michigan-Ontario scheduled transactions across the interface.” (Permit at 6).

The Bunce Creek transformer failed while in service in March, 2003. Shortly thereafter, the tower supporting the Canadian side of the Bunce Creek/Scott transmission line collapsed due to inclement weather, causing the line itself to fail. Due to unexpected delays in Canada, replacement of the tower and restringing of the line was not completed until the Fall of 2006.

When the transmission line was restored to service, replacement facilities for the Bunce Creek transformer were ordered. In recognition of the failure of the original transformer, however, ITC chose a differently designed unit and decided to replace the single failed unit with two 700-MVA units connected in series. Each unit will be capable

of shifting plus or minus 30 degrees, giving them a total of plus or minus 60 degrees of shifting capability in series. The failed 675-MVA transformer, in contrast, had only plus or minus 45 degrees of shifting capability.

Since the two new transformers will nominally have 15 degrees more shifting capability than the failed transformer, they should be capable of providing some increased amount of control over unscheduled electrical flows when necessary. However, the intended function of the new units will be the same as the original unit was authorized to provide in 2001 -- to control unscheduled flows so that actual flow matches scheduled flow, to the maximum extent possible. In that sense, therefore, the new units should perhaps best be viewed as replacement facilities providing an already authorized service, rather than as new facilities providing a new service.

As indicated in ITC's November 7, 2008 letter to DOE regarding Presidential Permit PP-230-2, the first of the two new transformers was delivered to Port Huron, Michigan in late October, 2008. It has been transported from there to the Bunce Creek Station and is now being installed, a process that will take several months. The transformer, however, will not be energized and placed into service until after the second unit has been delivered and installed in the Fall of 2009. Until then, the new transformer will not have any impact on the flow of energy between the U.S. and Canada.

Technical information detailing the specifications of the new transformers and a drawing showing the new configuration of the Bunce Creek Station facilities are included in Attachment B. Attachment C is an affidavit verifying the matters set forth in this application in accordance with Section 322(e) of DOE's regulations, 10 C.F.R. §205.322(e). Attachment D includes Phase I and Phase II reports jointly prepared and

issued on May 25, 2007 and November 12, 2008, respectively, by the Midwest ISO and PJM entitled “Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint”. Those reports confirm that inadvertent power flows around Lake Erie continue to be a significant problem and specifically endorse the prompt commissioning of flow control devices on the Michigan-Ontario interface as an important part of the solution. (See e.g. the May 25, 2007 report at 3-6). The New York Independent System Operator, Inc. (“NYISO”) expressed similar views in an emergency rate filing that it submitted to the Federal Energy Regulatory Commission (“FERC”) in Docket No. ER08-1281 on July 21, 2008, to address problems related to the scheduling of transactions over circuitous paths around Lake Erie. (See NYISO filing at 26-27). In sum, each of the three regional transmission organizations that together operate the U.S. electrical transmission system around Lake Erie have specifically and very recently endorsed the need to promptly activate flow control facilities on the Michigan-Ontario interface. Their positions, and the reports included in Attachment D, confirm the beneficial effects of controlling inadvertent power flow around Lake Erie and matching actual power flows to scheduled flows to the maximum practical extent. Accordingly, the attached reports fully support installation and operation of the new 700-MVA Bunce Creek transformers to control inadvertent power flows, as proposed herein.

III. ENVIRONMENTAL IMPACT INFORMATION

The modifications to the Interconnection Facilities for which ITC seeks authorization will be made in their entirety within the boundaries of ITC’s Bunce Creek Station. None of the modifications are for the integration of a major new source of

generation into a main transmission system. For these reasons, the proposed modifications to the Interconnection Facilities will not have any significant environmental impact. Accordingly, like the installation of the original 675-MVA transformer at Bunce Creek (See PP-230-2 at 4), installation of the replacement units clearly qualifies for a categorical exclusion from environmental review under Appendix B to Subpart B, paragraph B4.6 of the revised DOE Regulations implementing the National Environmental Policy Act.

IV. PRACTICAL ALTERNATIVES TO PROPOSED MODIFICATIONS

ITC does not believe that there are any practical alternatives to the modifications to the Interconnection Facilities for which it seeks authorization.

V. SERVICE AND FEE

In accordance with the requirements of 10 C.F.R. § 205.326, copies of this application will be provided to the following:

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Mary Jo Kunkle
Executive Secretary
Michigan Public Service Commission
6545 Mercantile Way, Suite 11
Lansing, Michigan 48911

A check in the amount of \$150 made payable to the Treasurer of the United States is enclosed in payment of the fee specified in 10 C.F.R. § 205.326.

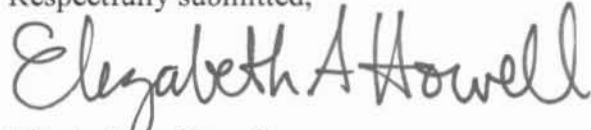
VI. REQUEST FOR EXPEDITED CONSIDERATION

ITC respectfully requests that DOE act on this request in an expedited manner in order to insure that the new replacement facilities discussed herein can be placed into service as soon as they are ready, in the Fall of 2009. Accordingly, ITC requests that notice of this filing be published in the Federal Register as soon as practicable; that the period for the submission of comments, protests, or requests to intervene be shortened; and that DOE issue its order in an expedited manner.

VII. CONCLUSION

For the foregoing reasons, ITC respectfully requests the Department of Energy to amend Presidential Permit PP-230-3 to permit modification of the Interconnection Facilities authorized thereunder as described herein.

Respectfully submitted,



Elizabeth A. Howell
Vice President, Operations
International Transmission Company
d/b/a ITCTransmission
27175 Energy Way
Novi, MI 48377
Tel: (248) 946-3000
ehowell@Itctransco.com

Dated: ~~December 30, 2008~~
January 5, 2009

ATTACHMENT A

Opinion of Counsel



December 30, 2008

Anthony J. Como
Director
Permitting and Siting
Office of Electric Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., SW
Room 6H-050, OE-20
Washington, DC 20585

Re: Presidential Permit Order No. PP-230-3

Dear Mr. Como,

In connection with the application of International Transmission Company d/b/a *ITCTransmission* ("ITC") to amend its Presidential Permit No. PP-230-3, and in satisfaction of the requirements of Section 205.322(a)(6) of the Department of Energy's regulations, 10 C.F.R. § 205.322 (a)(6), I have reviewed ITC's Articles of Incorporation and its Bylaws, and I hereby confirm that the modifications to the permit being requested by ITC, including the proposed installation and operation of new transformation facilities at ITC's Bunce Creek Station in Marysville, Michigan, is within ITC's corporate power. I further confirm that ITC has complied and will continue to comply with all applicable Federal and State laws regarding its Bunce Creek facilities.

Very truly yours,

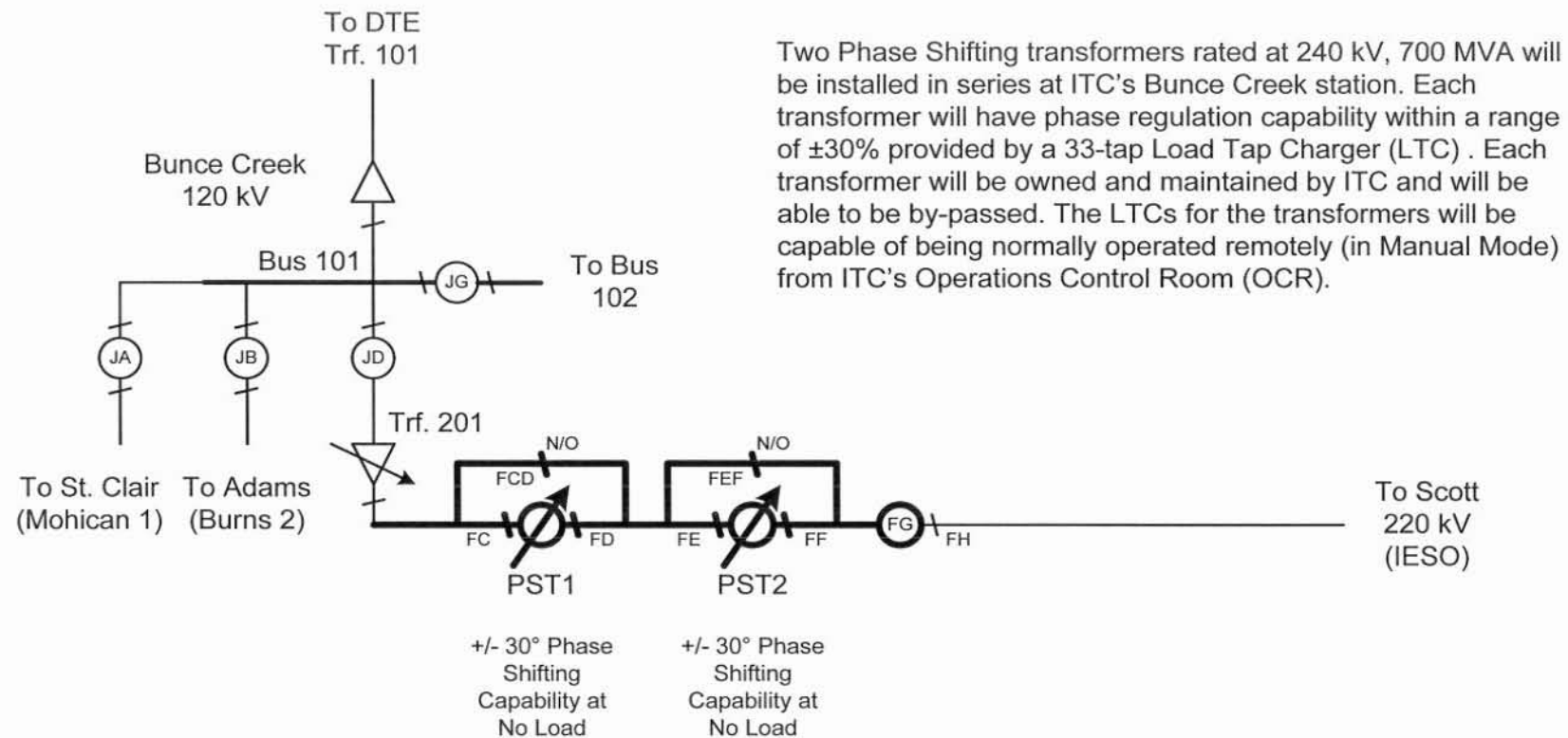
A handwritten signature in cursive script, reading 'James Frankowski', is written over a horizontal line.

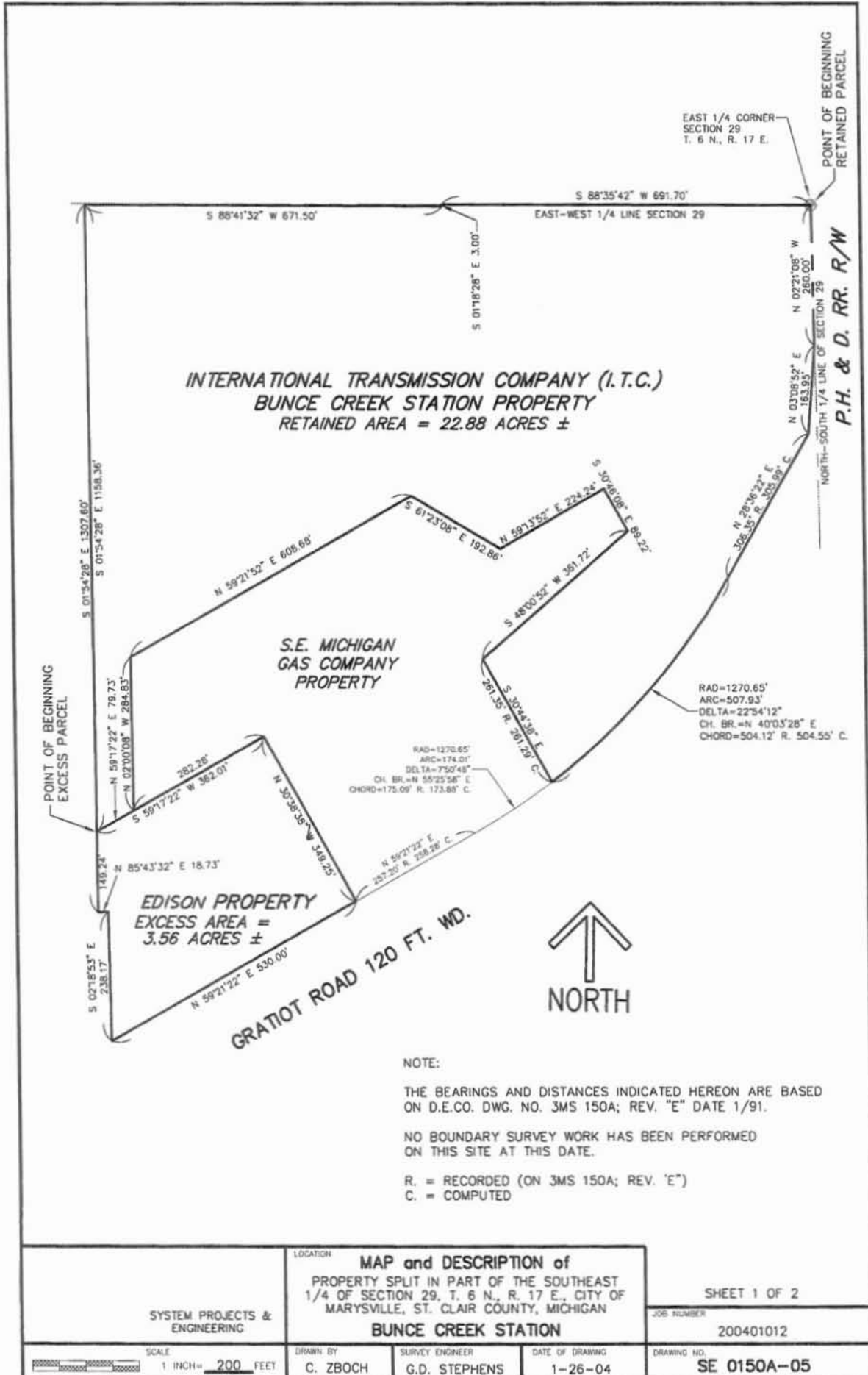
James Frankowski
Senior Attorney
ITC Holdings Corp.
Attorney for International Transmission
Company d/b/a *ITCTransmission*

ATTACHMENT B

Facility Information

Bunce Creek Phase Shifters





ATTACHMENT C

Verification

AFFIDAVIT OF ELIZABETH A. HOWELL

STATE OF MICHIGAN)

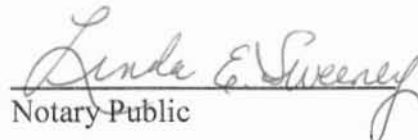
COUNTY OF OAKLAND)

I, Elizabeth A. Howell, Vice President, Operations, of International Transmission Company d/b/a ITC *Transmission* ("ITC"), being first duly sworn, hereby depose and say that I have read the attached "Request of International Transmission Company d/b/a ITC *Transmission* to Amend Presidential Permit" being filed by ITC in OFE Docket No. PP-230-3, that I am familiar with the contents thereof and that all of the facts and statements contained therein are true and correct to the best of my knowledge, information and belief.



Elizabeth A. Howell
Vice President, Operations
International Transmission Company
d/b/a ITC *Transmission*

Sworn and subscribed before me, a Notary Public, this 30th day of December, 2008.


Notary Public

My Commission expires: 5/26/2015

LINDA E. SWEENEY
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES May 26, 2015
ACTING IN COUNTY OF OAKLAND

ATTACHMENT D

MISO/PJM Loop Flow Reports

Investigation of Loop Flows Across Combined Midwest ISO And PJM Footprint

May 25, 2007



DOCKET NO. ER11-1844
EXHIBIT NO. NYI-56

Detroit Edison



Date: November 12, 1998

To: Robert J. Buckler
President, DTE Energy Distribution

Robert S. Lenart
Manager of Transmission

From: Murray W. Davis *CW*
Director of Transmission Projects

Subject: Approval to Proceed with Loop Flow Reduction Transmission Improvement Project.

Problem

Counter clockwise Lake Erie Circulation (from OH into Michigan) has increased from 1100 MW peak to 1600 MW peak during summer peak load conditions. This change has reduced our ability to import power from Ontario Hydro. Since the typical capability of this interface is 1800 MW, then under peak load conditions only 200 MW can be imported. Third party transactions from PJM, NY, and AEP have caused significant contributions to Lake Erie Circulation which have benefited others, while "loading up" Ontario Hydro and Detroit Edison facilities. This high level of Lake Erie Circulation also prevents Detroit Edison from making purchases from the South due to the heavy loading on the QFW (OH – N.Y. Interface). There were 25 TLR's last summer, 18 of which occurred on the OH – MI and QFW Interfaces resulting in 11,000 MW's of Michigan transactions to be curtailed.

Solution

To alleviate the above problem, two concepts have been adopted: (a) increase the capability by adding a 1000 MVA autotransformer on the L51D OH – MI interconnection, and paralleling two existing auto-transformers on the L4D OH – MI interconnection, provides about a 500 MW increase in capability for the OH – MI interconnections; and (b) add three phase shifters one in each of the three OH – MI interconnections (i.e. B3N, L4D, and L51D) to control the Lake Erie Circulation (LEC). The benefits of the phase shifters depend on their settings. The phase shifters can be set to block 500 MW's of LEC which would increase the maximum capability to 1000 MW. This concept is diagrammatically shown on Figure 1. This project provides both a benefit in importing more power from OH through increased capacity and by blocking the loop flow and the additional benefit of obtaining more import capability on either the OH – MI or Southern Interface, therefore, providing operating flexibility.

Page 2
November 12, 1998

Cost and Schedule

The original plan (until yesterday) was to share the project cost between OH, DE, and CE, such that OH would assume \$21M and DE and CE would assume \$10.5M each for a total cost of \$42M. However, CE declined to participate yesterday based on a decision of David W. Joos (that it did not fit into their future strategic plan), therefore the cost of the project would have to be re-allocated. If DE decides not to participate in this project, then OH would install the three phase shifters in the B3N, L51D and L4D, respectively, and DE would be disadvantaged due to the reduction in import capability from the South, and the loss of increased capacity without the 1000 MVA auto-transformer installed in the L51D. Therefore, it is appropriate for DE to search for a compromise plan that both OH and DE could accept.

The total project cost could be lowered if DE purchased (as originally planned) the 1000 MVA autotransformer, but installed this unit on the OH side of the L51D. DE would still maintain ownership and control of this unit. There is both a reactive supply component of \$2M that would be transferred to OH and a lower installation cost, a saving of about \$1M. This would result in a \$3M saving to DE. If OH would also install this unit at their cost of \$2M, then the \$21M cost for the DE portion would decline from \$21M to \$16.0M. OH has not agreed to this proposal, but at this time it looks favorable, in that the \$2M reactive component can be combined with another OH project. Whether, or not, the \$2M of extra installation cost for the 1000 MVA autotransformer can be borne by OH is still undecided, but this plan is acceptable to Chris Mak of OH and it is being seriously evaluated by OH construction engineers. We must come to a decision on this issue by this Monday (November 16, 1998), or the in-service date of June 1, 2000 is questionable (due to the very short time available to build the three phase shifters and the one autotransformer).

Benefits

The benefits of the project remain unchanged with CE declining to participate, but the cost for DE increased from \$10.5 to \$16M. The project for DE yields the following major benefits:

1. A maximum increase in capacity of 1000 MW's, or 500 MW of fixed capacity increase and \pm 500 MW's of controllable.
2. A reduction in loss capacity of about \$1.1M / yr and a reduction in energy losses of about \$.8M / yr.
3. A reduction in TLR's (from 25 to 7 for last year) – 18 TLR's could be eliminated by this project.
4. An increase in revenue through additional power sales.

Page 3
November 12, 1998

5. A reduction in our cost for transmission service (for example, transmission service through OH is lower than through AEP when open access occurs in OH on July 2000).
6. A reduction in the uncertainty in planning and scheduling power. Less purchased power options are needed because more sources are available from the East and South.
7. If an emergency occurs, more resource options are available.
8. The Operation and Facilities agreements with OH are nearly finalized and DE will realize 400 MW of QFW capacity increase from OH during emergencies; and receive favorable treatment of incremental capability from the South when phase shifters are blocking (if DE drops out of this project, OH will undoubtedly operate phase shifters in full block during high LEC and therefore DE would have reduced capabilities from the South.).
9. We have negotiated very favorable positions with respect to the cost of facilities for DE (phase shifter at \$.7M below next bidder, and autotransformer \$.5M below next bidder – re-bidding at a later date will increase these costs by about \$2M).
10. The market power concern for DE would be reduced by increasing the OH – MI import capability up to 1000 MW.
11. During the transition period of open access, DE may be required to provide back up, unless increased import capability allows customers access to external markets. The increased capability on the OH – MI Interface will reduce DE's responsibility to provide this back up.

CC: W. E. Carter

Approved by R. J. Buckler

Proposed Project - Install Phase Shifters in All MI-OH Interconnections and Increase Capability

- Cost to DECO \$16M (Total Project Cost is \$41M, OH to pay balance)
- Increases Transfer Capability from OH -- Depending on Phase Shifter Setting, Increase can be up to 1000MW's (\$16/kW)
- Adds Operating Flexibility -- Phase Shifter Adjustments Change MI's Interface Flows

MI-OH Interface

- Project increases Flow Limit by 500 MWs
- Has Frequently Limited MI's ability to import power

MI-South Interface

- Flow Limit Unchanged by Project

QFW Interface (in OH)

- Flow Limit Unchanged by Project
- Has Frequently Limited MI's ability to import power

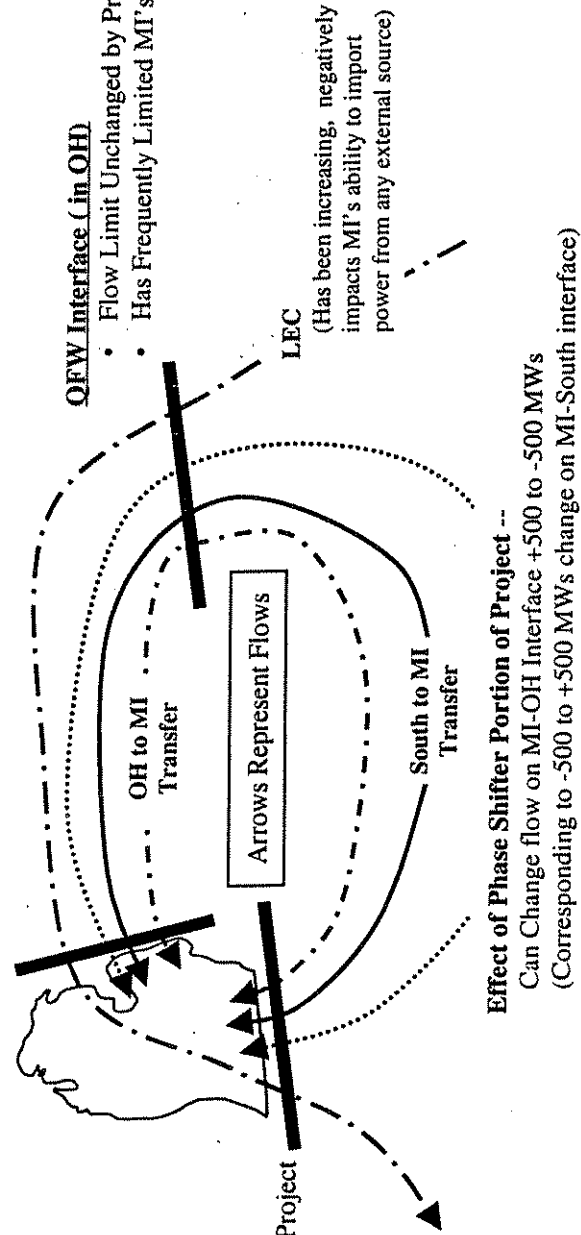


Figure 1

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-57

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application)
of INDIANA MICHIGAN POWER COMPANY,)
d/b/a AMERICAN ELECTRIC POWER, for)
approvals in connection with)
2000 PA 141 Section 10v.)
_____ /

Case No. U-12780

In the matter of the application of)
INTERNATIONAL TRANSMISSION COMPANY,)
CONSUMERS ENERGY COMPANY AND GREAT)
LAKES ENERGY COOPERATIVE for approvals)
in connection with 2000 PA 141 Section 10v.)
_____ -)

Case No. U-12781

BRIEF OF
THE DETROIT EDISON COMPANY

I.

HISTORY OF PROCEEDING

Section 10v of the Customer Choice and Electric Reliability Act, 2000 PA 141 (Act 141) requires electric utilities serving more than 100,000 retail customers in the State of Michigan to file a joint plan with the Commission by January 1, 2001 detailing measures to expand by June 5, 2002 the available transmission capability by at least 2000 megawatts (MW) over the available transmission capability in place on January 1, 2000. The joint plan should describe the facilities needed to complete the capacity expansion, including those required of other interconnected systems, as well as the associated cost recovery.

Three utilities, Consumers Energy (CE), Great Lakes Energy Cooperative, and International Transmission Company (ITC) on behalf of the Detroit Edison Company (Edison), agreed upon a plan and on December 28, 2000 filed a Joint Report detailing the

actions required to achieve the 2000 MW expansion including identifying the additional facilities required, a proposed schedule for accomplishing the actions, the cost of the actions, and the proposed ratemaking treatment for the costs. This application was docketed as Case No. U-12781.

Also on December 28, the plan of Indiana Michigan Power Company doing business as American Electric Power (AEP) filed its plan, which was docketed as Case No. U-12780. On January 8, 2001 the Michigan Public Service Commission issued a notice of hearing in accordance with Section 10v setting the initial hearing for February 7, 2001. Interventions or notices of appearance were filed by Energy Michigan (EM), Ontario Power Generation Inc. (OPGI), First Power LLC, Dynegy Inc., the Association of Businesses Advocating Tariff Equity (ABATE), Exelon Energy, Inc., PG&E National Energy Group (PG&E), and Midland Co-Generation Venture LLP (Midland). The Michigan Public Service Commission Staff (Staff) also filed an appearance.

On February 7, 2001 the initial hearing was held at the offices of the Michigan Public Service Commission. At that hearing the interventions of EM, OPGI, First Power LLC, Dynegy Inc., ABATE, Exelon Energy, PG &E and Midland were granted. A schedule was developed, and it was determined that the Applicants would separately recommend by February 9, 2001 the names of potential independent experts for use by the Staff. The Staff, after reviewing the material provided, recommended to the Commission that Power Technologies Inc. be used as an expert to conduct an independent review of the transmission plans filed by the utility Applicants.

On March 16, 2001, testimony and exhibits of ITC witness Thomas W. Vitez were filed, along with testimonies and exhibits of CE witnesses Timothy J. Sparks and Benjamin

M. Ruhl, and testimonies and exhibits of AEP witnesses Bernard Pasternack and Kent D. Curry.

Staff and intervenor testimony was filed on April 25, and included the testimony and exhibits of ABATE witness James R. Dauphinais, testimony of EM witness David A. Blecker, and testimony and exhibits of Staff witnesses William J. Celio and Ricardo R. Austria. Mr. Austria is an employee of Power Technologies, Inc.

Rebuttal testimony was filed on May 18, and consisted of Testimony and exhibits of ITC witness Vitez; testimony and exhibits of CE witnesses Ruhl and Sparks; testimony and exhibits of AEP witnesses Pasternack and Dennis W. Bethel; testimony of EM witness Blecker, and testimony of ABATE witness Dauphinais.

On May 30, 2001, a motion was heard to delay the scheduled cross-examination so that ongoing settlement discussions could continue. After discussion, it was agreed by the parties that the hearing should be adjourned to June 6, 2001 at which time, if a joint proposal could not be developed, cross-examination would continue.

On June 6, the hearing was resumed pursuant to adjournment, at which point AEP stated:

AEP will not contest in this proceeding the testimonies of Messrs. Vitez, Sparks, Celio, Blecker, and Dauphinais to the extent that they urge that the second Dumont Transformer should be included in the joint plan approved by the Commission.

AEP will at this time unilaterally stipulate to the joint report filed by the other utilities. And thus, we will not offer into the record in this proceeding either the plan filed by AEP or the testimony of Mr. Pasternak in support of that plan. (3TR39, lines 2-11)

After some discussion it was agreed that all testimony (except for the withdrawn direct and rebuttal testimony of Mr. Pasternak), and exhibits presented by all parties would

be bound into the record without objection, and three further exhibits, A-14, A-15, and I-16 could be developed and offered through limited cross-examination of AEP witness Dennis W. Bethel. At the close of cross-examination of Mr. Bethel on June 6, 2001, the hearing was concluded and the record closed. The record consists of 3 volumes, 251 pages of transcript, and 16 exhibits.

II.

POSITION OF EDISON

A. Summary

The fundamental difference between the Joint Report filed by ITC, CE, and Great Lakes, and the withdrawn AEP report was the installation of a second Dumont Transformer on the AEP transmission system. (Vitez, 3TR112, Sparks, 3TR 137, Austria, 3TR192, Celio, 3TR202) Edison believes that with the AEP stipulation adopting the Joint Report filed by Edison, CE, and Great Lakes, the requirements of Section 10v have been met by all Applicants, either directly or through a corporate affiliate. Allowable cost recovery for those facilities should be consistent with the Joint Report and Act 141.

B. ITC Witness

ITC witness Vitez supported the Joint Report submitted by the Applicants. Mr. Vitez is a Principal Engineer in Transmission projects, where he has performed planning studies, has been involved in numerous regional and interregional studies, and chairs the East Central Reliability Council (ECAR) Future System Study Group and is a member of the North American Electric Reliability Council's (NERC) Distribution Factors Task Force. Mr. Vitez participated in the development and writing of the Joint Report that he supports, and was involved in the process that originally attempted to develop the original joint plan.

The Joint Report that was developed was the product of extensive studies and modeling, and provides the means to increase commercial capability into Michigan. Mr. Vitez explained why it was not practical to permanently expand Available Transfer Capability, but that increasing firm commercial capability into Michigan increases the total amount of transmission service available to the market. (3TR114-115) Mr. Vitez also indicated that speculative generation projects should not be counted on to mitigate constraints.

The Joint Report identified seven (7) projects that were required by ITC to increase firm commercial capability into Michigan by 2,000 MW. These projects included adding a 1,000 MVA 345/230 kV transformer in the L51D interconnection with Hydro One, adding a 675 MVA Phase Angle Regulator in the B3N interconnection with Hydro One, installing a 35 mile 345 kV line from Belle River to Blackfoot, constructing a Blackfoot 345 kV switching station, reconductoring the Bunce Creek-Adams 120kV line, installing various capacitors, and installing a 230/120 kV transformer at Elm station. (3TR121) All projects were either complete or in progress, and Mr. Vitez indicated ITC's commitment to complete these necessary projects (3TR121). Mr. Vitez indicated that the total cost of the 7 projects was \$50.7 million. (Exhibit A-3, page 12)

The Joint Report also identified projects required by other in-state and out-of-state entities necessary to increase firm commercial capability into Michigan.

III.

SECTION 10v REQUIREMENTS ARE SATISFIED

The Joint Report filed by ITC, CE, and Great Lakes, and stipulated to by AEP (hereinafter "Joint Plan"), clearly identifies the necessary upgrades required to meet the Section 10v requirement of increasing by at least 2000 MW the available transmission capability over that in place as of January 1, 2000. No party contests the adequacy of the proposed upgrades. No party has set forth evidence showing that any additional or other facilities or equipment should be included in the plans. EM witness, David A. Blecker, expresses a concern with regard to ITC's Ontario Interface. However, the concern really is in the nature of an objection to the market rules in Ontario. ITC owns only two interconnections with out-of-state entities: the First Energy interconnection and the Hydro One interconnection. The focus of actions under Section 10v must be directed on ITC's efforts to upgrade interconnections and facilities it controls and owns. As noted in the rebuttal testimony of Mr. Vitez, ITC is working to open the Ontario market. (3TR127-128) However, that activity remains outside of the coverage of Section 10v and largely outside the control of either the Commission or the parties in this case. Notwithstanding Mr. Blecker's concerns, the Commission can only conclude that the requirements of Section 10v have been satisfied and that the proposed upgrades described in the Joint Plan and their associated costs are reasonable and prudent.

IV.

ASSURANCE OF RECOVERY

The Joint Plan provides in Section IX-"Ratemaking Treatment," the following:

Each transmission owner shall independently evaluate the need and be responsible for making any regulatory filings necessary for recovery of expenditures related to this joint plan of transmission capability expansion. Such filings shall be made to the appropriate regulatory agency having jurisdiction over the facilities at issue.

It is intended at that transmission related costs of the transmission capability expansion plan shall be recovered through each respective Company's Open Access Transmission Tariffs (OATT) on file at the FERC. As specified in Section 10v of PA 141, each Transmission Owner expects that the Commission will ensure that the utilities remain whole for any prudent expenditures necessary which are made in response to Section 10v of PA 141 for which recovery is not allowed through the FERC OATT.

Section 10v provides for cost recovery as follows:

(3) The commission may order modifications to the joint plan to make it consistent with this act. If the electric utilities are unable to agree upon a joint plan to meet the requirements of this act, the commission shall conduct a hearing to establish a joint plan. The commission shall authorize recovery from benefiting customers of all reasonable and prudent costs incurred by transmission owners for authorized actions taken and facilities installed to meet the requirements of this section that are not recovered through FERC transmission rates.

(4) If an electric utility or an affiliate that is the owner of the transmission assets is denied cost recovery of the reasonable and prudent costs expended to implement the joint plan, then the electric utility or affiliate shall have no further obligation to implement the joint plan. If an electric utility or its affiliate is subsequently granted cost recovery, then the obligation to implement the original joint plan is required. If cost recovery of the reasonable and prudent costs of implementing the joint plan is denied, an electric utility or its affiliate shall develop a new joint plan as provided under this section.

The cost for the proposed transmission upgrades undertaken by ITC, the transmission affiliate of Detroit Edison, is \$50,700,000. (Exhibit A-3, page 12) It seems clear that what is contemplated by the statute is recovery for "actions taken" and "facilities installed" to meet the upgrade requirements that are not recovered through FERC transmission rates. Therefore, Edison believes that the primary cost recovery vehicle is through a FERC-approved ITC transmission tariff or subsequent Alliance RTO tariff. Recovery of improvements on the AEP system, such as installation of the second Dumont transformer, similarly should be recovered through a transmission tariff or from the incremental revenues generated from the sale of the additional transmission capacity associated with the Dumont upgrade. However, Edison believes that contingency cost recovery must be addressed as provided for in Section 10v in the event FERC-authorized cost recovery is inadequate. Accordingly, it is Edison's position the Commission should adopt the proposed ratemaking procedure set forth in the Joint Plan and, in addition, establish a definite procedure and schedule which takes into account a reasonable time period during which the numerous uncertainties of cost recovery can be resolved.

Therefore, Edison proposes that the Joint Applicants file separate reports no later than December 31, 2003 detailing the costs and associated revenues with the various projects identified in the Joint Plan to upgrade the transmission capacity into Michigan. In the event FERC-authorized rates are deemed insufficient to recover the full cost of all such transmission upgrades, the Commission shall initiate a case within 60 days to determine an appropriate procedure to recover such costs from all benefiting customers in a timely manner by a uniform kWh surcharge.

V.

CONCLUSION

For the reasons set forth above, Detroit Edison requests that the Commission issue an order approving the Joint Plan and the transmission facility upgrades described therein as reasonable and prudent, and as satisfying the requirements of Section 10v of Act 141. Furthermore, the Commission should set forth a definite procedure and schedule for cost recovery of those transmission upgrades not recovered through FERC-approved rates and charges.

Respectfully submitted,

THE DETROIT EDISON COMPANY

BY: Bruce R. Maters
Bruce R. Maters (P-28080)
Jon P. Christinidis (P-47352)
Legal Department
2000 2nd Avenue, 688 WCB
Detroit, Michigan 48226
(313) 235-7481

Dated: June 29, 2001

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
INDIANA MICHIGAN POWER COMPANY,)
d/b/a AMERICAN ELECTRIC POWER,) **Case No. U-12780**
for certain approvals in connection with)
2000 PA 141 Section 10v.)

In the matter of the application of)
INTERNATIONAL TRANSMISSION COMPANY,)
CONSUMERS ENERGY COMPANY, and) **Case No. U-12781**
GREAT LAKES ENERGY COOPERATIVE.)
for certain approvals in connection with)
2000 PA 141 Section 10v.)

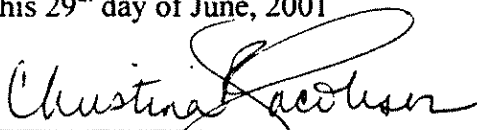
PROOF OF SERVICE

STATE OF MICHIGAN)
) SS.
COUNTY OF WAYNE)

DORIS J. HILL-SHAVERS, being first duly sworn, deposes and says that on the 29th day of June, 2001, a copy of **THE DETROIT EDISON COMPANY'S INITIAL BRIEF** was served upon the parties listed on the attached Service List by electronic mail, and first class mail.


DORIS J. HILL-SHAVERS

Subscribed and sworn to before me
this 29th day of June, 2001



CHRISTINA R. JACOBSON
NOTARY PUBLIC WAYNE CO., MI
MY COMMISSION EXPIRES Mar 10, 2005

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-58

Case Nos.: 1:12780/U-12781
Exhibit: A- (TJS-1)
Witness: TJSparks
Date: March, 2001
Page: 7 of 25

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JOINT REPORT

I. INTRODUCTION

A-5

This Joint Report is being submitted by Consumers Energy Company, International Transmission Company on behalf of The Detroit Edison Company, and Great Lakes Energy Company (Filing Parties) pursuant to the provisions of 2000 PA 141, Section 10v(1), MCL 460.10v(1) (PA 141), to discuss the proposed methods to permanently expand available transmission capability. The Joint Report describes the commitments of the Filing Parties to make the necessary upgrades to their transmission systems to support permanently expanding the system's firm commercial capability. Firm commercial capability is the sum of firm Available Transfer Capability (unsold firm transfer capability) and firm transmission reservations (sold firm transfer capability). Further, the Joint Report also describes the costs of the upgrades, implementation schedules and the proposed method for recovery of those costs.

Section 10v of PA 141 requires as follows:

1. Electric utilities serving more than 100,000 retail customers in this state are to file, by January 1, 2001, a joint plan with the Michigan Public Service Commission (Commission) detailing measures to permanently expand, by June 5, 2002, the available transmission capability by at least 2,000 megawatts (MW) over the available transmission capability in place as of January 1, 2000.
2. The joint plan must detail all actions including additional facilities required, the proposed schedule for accomplishing the actions, the cost of the actions, and the proposed ratemaking treatment for the costs. The joint plan shall also identify all actions and facilities that are required of other transmission owners, including out-of-state entities, to accommodate the actions described in the joint plan.
3. The Commission may order modifications to the joint plan to make it consistent with PA 141. If the electric utilities are unable to agree upon a joint plan to meet the requirements of this act, the Commission shall conduct a hearing to establish a joint plan. The Commission shall authorize recovery from benefiting customers of all reasonable and prudent costs incurred by transmission owners for authorized actions taken and facilities installed to meet the requirements of Section 10v that are not recovered through Federal Energy Regulatory Commission (FERC) transmission rates.
4. If an electric utility or an affiliate that is the owner of the transmission assets is denied cost recovery of the reasonable and prudent costs expended to implement the joint plan, then the electric utility or affiliate shall have no further obligation to implement the joint plan. If an electric utility or its affiliate is

A-5

subsequently granted cost recovery, then the obligation to implement the original joint plan is required. If cost recovery of the reasonable and prudent costs of implementing the joint plan is denied, an electric utility or its affiliate shall develop a new joint plan as provided under this section.

American Electric Power (AEP) is not a party to this Joint Report. American Electric Power had participated in joint study work described later in this filing and also participated in preparation for this filing. In the end, however, the Filing Parties did not agree that AEP's plan for system expansion would result in upgrades to AEP's transmission system needed to meet the requirements of Section 10v of PA 141. American Electric Power's expansion plan of its system, as presented in initial drafts of this filing, did not support the expansion of firm commercial capability within AEP's system available to Michigan customers. As a result, the Filing Parties withdrew from the original joint report. The Filing Parties submit the following plan to address changes to their transmission systems needed to support the requirements of PA 141 Section 10v.

II. IDENTIFICATION OF FILING PARTIES

A. Consumers Energy – Michigan Electric Transmission Company

A-5

Consumers Energy Company and Michigan Electric Transmission Company (Michigan Transco) have applied for various regulatory approvals necessary to accomplish the transfer of Consumers Energy's transmission assets to Michigan Transco. This includes approvals from the FERC and the Securities and Exchange Commission (SEC). As of the date this Joint Report is filed with the Commission, these approvals are still pending. For more details, please see Consumers Energy's Application filed in Commission Case No. U-12726.

B. DTE Energy – International Transmission Company

Starting in May 2000, DTE Energy, Detroit Edison and the International Transmission Company (ITC) applied for and obtained all the necessary regulatory approvals to transfer Detroit Edison's transmission assets, including the rights and responsibilities, to ITC. This involved obtaining FERC, SEC and the United States Department of Energy (DOE) approval for this transfer. As of the close of business on January 1, 2001, Detroit Edison and ITC will have completed the transfer of these transmission assets and therefore, ITC will own all transmission assets, including their associated rights and responsibilities, within the Detroit Edison service territory.

C. Great Lakes Energy

Great Lakes Energy is not a transmission provider, but is the largest customer-owned electric utility in the state of Michigan, serving more than 115,000 customers and covering parts of 26 counties. The present company was created in 1998 by a three-way merger of Great Lakes Energy Cooperative (Newaygo) with Top O' Michigan Rural Electric Company (Boyne City) and Western Michigan Electric Cooperative (Scottville). Great Lakes Energy Cooperative (Newaygo) was created by a 1996 merger of O&A Electric Cooperative (Newaygo) and Oceana Electric Cooperative (Hart).

Great Lakes Energy is one of four member owners of its transmission provider, Wolverine Power Supply Cooperative, Inc (Wolverine). Wolverine owns and operates 1,600 miles of transmission network throughout the western and northern portions of Michigan. Wolverine is interconnected with Consumers Energy at eleven (11) locations throughout Michigan and four (4) municipal systems.

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Case Nos.: U-12780/U-1278
Exhibit: A- (TJS-1)
Witness: TJS/Sparks
Date: March, 2001
Page: 11 of 25

III. AVAILABLE TRANSMISSION CAPABILITY DISCUSSION

The Filing Parties interpret the '*available transmission capability*' term used in Section 10v PA 141 to mean the simultaneous firm commercial capability into the lower peninsula of Michigan¹ during summer months. Therefore, a 2,000 MW increase in '*available transmission capability*' would mean transmission enhancements that facilitate an increase of 2,000 MW of firm commercial import capability on a coordinated, simultaneous basis into the lower peninsula of Michigan during summer months.

Available Transfer Capability (ATC) is a common measure of transmission system transfer capability remaining in the physical transmission network for further commercial activity over and above reliability reserve margins and already committed uses. The FERC, North American Electric Reliability Council (NERC) and the electric industry have defined firm ATC by the following general equation:

$$\text{Firm ATC} = \text{TTC} - \text{TRM} - \text{CBM} - \text{Existing Firm Reserved Transmission Commitments (including native/network load service)}$$

TTC is defined by NERC as the amount of electric power that can be transferred over the interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre- and post-contingency system conditions.

TRM is defined by NERC as that amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

CBM is defined by NERC as that amount of transmission transfer capability reserved by load serving entities to ensure access to generation from interconnected systems to meet generation reliability requirements.

Available Transfer Capability is calculated by individual Transmission Providers for each commercial transmission path within its transmission system. Due to the physics of electric power flow, parallel path (loop) flow occurs among transmission paths. Within the East Central Area Reliability Coordination Agreement (ECAR) region, Transmission Providers submit ATC values for paths that include their systems. These ATC values consider internal system constraints for each of the Transmission Providers along a path. In addition, Transmission Providers that are not along a path can submit ATC values for that

¹ The Michigan Electric Coordinated Systems (MECS) Control Area is the operating Control Area for the lower peninsula of Michigan, excluding American Electric Power's service territory in southwestern Michigan. The terms 'MECS' and 'lower peninsula of Michigan' are used interchangeably throughout this document.

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path if they are impacted by parallel path flows resulting from the path. These values are submitted to the ECAR Open Access Same time Information System (OASIS). The final ATC value for a given transmission path will be coordinated using the most limiting ATC values submitted for that path.

No amount of investment by any Company participating in this report can ensure additional firm commercial capability is exclusively dedicated to Michigan customers, unless Michigan customers purchase this extra capability. As required by FERC Order 888, the availability of this transfer capability can only be secured for future use by a Transmission Service reservation(s) from the appropriate Transmission Provider(s). A request for transmission service reservation is made via the Transmission Provider's OASIS. As required by FERC Order 888, all ATC (including the additional transmission transfer capability resulting from the transmission improvements identified in this joint plan) must be offered to buyers on a first-come, first-served basis. Therefore, increased firm commercial capability resulting from the transmission facility enhancements associated with the plan as described herein could be purchased by non-Michigan entities, precluding use of this additional transfer capability by Michigan customers.

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IV. EXISTING IMPORT CAPABILITY

PA 141 requires '*available transmission capability*' in place as of January 1, 2000, be expanded by 2,000 MW. The Filing Parties believe the intent of this requirement is to expand the '*available transmission capability*' in place as of the summer months of 2000, since the firm commercial capability available for firm power imports into the lower peninsula of Michigan is the lowest during summer months. Pertinent ATC values submitted to the ECAR OASIS node in June 2000, by the Filing Parties for the summer months of 2000, are listed in column 2 of Exhibit 1.

The values presented in Exhibit 1 are non-simultaneous MECS path import values, not MECS simultaneous import values. To determine the MECS simultaneous import values from Exhibit 1, power flow analysis tools must be used as well as assumptions made as to the power import source direction. In general, the MECS simultaneous firm commercial import capability for summer 2000 would be approximately 3,500 to 3,800 MW. Therefore, in order to meet the requirements of Section 10v of PA 141, the joint plan must provide for an ultimate MECS simultaneous firm commercial import capability of 5,500 to 5,800 MW.

The 3,500-3,800 MW benchmark is supported by information submitted to the Commission on March 7, 1997, by Consumers Energy in Case No. U-11290. In that submission, Consumers Energy stated that the simultaneous import capability of the Michigan Electric Coordinated Systems (MECS) Control Area was 3,500 MW. During a September 1999 meeting with the Commission Staff, Consumers Energy again presented information stating the existing simultaneous import capability into the MECS to be 3,500 to 3,800 MW.

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V. INDIVIDUAL COMPANY ASSESSMENTS

Consumers Energy, International Transmission Company and Wolverine (Great Lakes Energy's transmission provider) perform the "Transmission Planning" function as a normal course of business. Part of the "Transmission Planning" function entailed performing individual company assessments, identifying system constraints, developing mitigation plans and proceeding to implement appropriate system upgrades to improve transmission transfer capability prior to PA 141.

In addition, Consumers Energy and Detroit Edison, along with other Michigan and neighbor Transmission Providers, performed a joint study specifically looking at enhancing Michigan import capability in anticipation of PA 141. The following is a description of individual company assessments. Section VI describes the joint study.

Consumers Energy

As a normal course of business, Consumers Energy has continued to enhance the capability of its transmission system to meet service requirements of its customers. In early 1999, Consumers Energy identified internal system thermal and voltage limitations to a 6,000 MW import level into Michigan. Projects developed to remove the thermal and voltage constraints found in this study were approved by Consumers Energy management.

In 2000, a second 345/138 kV transformer was added to the Battle Creek Substation, 138 kV lines were reconfigured in the Battle Creek area, and completion of the northern Grand Rapids 138 kV loop was finished by constructing the remaining 5.6 mile 138 kV line section. In 2001, Consumers Energy anticipates completion of the Battle Creek-Oneida-Majestic 345 kV loop. This project involves adding 20 miles of 345 kV line on the empty side of the Oneida to Oneida Jct 345 kV tower line and two new 345 kV circuit breakers at Oneida Substation. The installation of 290 MVAR of 138 kV shunt capacitors are also planned for 2001. Northern Indiana Public Service Company has announced plans to increase capacity on the 138 kV interconnection with Consumers Energy in 2001. These projects will incrementally increase the firm commercial capability on the AEP to MECS path and NIPS to MECS path by 1,094 MW and 233 MW respectively.

By June 2002, Consumers Energy plans to upgrade the Delhi-Tompkins 138 kV line to double circuit with system reconfiguration modifications at Tihart Substation. An additional 130 MVAR of 138 kV shunt capacitors are also planned. These projects will incrementally increase the firm commercial capability on the AEP to MECS path by 656 MW. In total, the AEP to MECS path will realize an increase of 1,750 MW and the NIPS to MECS path will realize an increase of 233 MW of firm commercial capability from 2000 to 2002.

These projects are primarily located in the Kalamazoo-Lansing-Jackson area to relieve 138 kV system overloads and low voltage conditions that result if 345 kV facility outages were to occur during heavy Michigan imports.

International Transmission Company

As part of its effort to improve the firm commercial capability into the state, in 1998/1999, Detroit Edison's transmission organization (now known as International Transmission Company) performed joint transmission studies with Hydro One Networks (formerly Ontario Hydro Services Company and Ontario Hydro). These studies identified projects that were required to increase import capability from Ontario and control parallel path flow north of Lake Erie (Lake Erie circulation). During this same period, Detroit Edison's transmission organization also performed internal system studies and identified projects that would be required to reinforce its internal system so that the enhancements made to the Ontario interface could be fully utilized to reliably import additional power. The projects discussed below were not operational prior to the January 1, 2000, date specified in section 10v of PA 141.

The projects implemented to enhance the transfer capability across the Ontario interface include the addition of a new 1,000 MVA 345/230 kV autotransformer into the L51D interconnection with Ontario. This autotransformer increased this interface's firm commercial capability by approximately 400 MW. Also, as part of this project, a 650 MVA phase angle regulator was installed in the B3N interconnection. The B3N phase angle regulator, operating in concert with similar phase angle regulators added by Hydro One in the L4D and L51D interconnections, as well as the existing phase angle regulator in the J5D interconnection, enables the control of 600-700 MW of parallel path flow north of Lake Erie (Lake Erie circulation). As this circulating power was using a significant portion of the International Transmission Company-Ontario interface, the control of 600-700 MW of circulating power translates into an increase in the firm commercial capability of that interface. In total, the Hydro One to MECS path will realize an increase of 820 MW of firm commercial capability from 2000 to 2002.

In addition to the upgrades made directly on the interface, several internal International Transmission Company system upgrades were planned and are being implemented. These projects will be completed prior to the June 5, 2002 requirement of PA141. At various places on International Transmission Company's system, capacitors are being added to maintain a proper voltage profile after the addition of the new phase angle regulators and associated potential for increased power flow. In addition, International Transmission Company is in the process of constructing a new 4.7 mile transmission tower line which is part of a new 35 mile 345 kV line from Blackfoot to Jewell and rearranging circuitry to form the new Belle River-Blackfoot Circuit. The Blackfoot

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Project also entails construction of a new 345 kV switching station at Blackfoot and the addition of 345 kV circuit breakers at Belle River and Madrid.

At Elm, a 230/120 kV transformer and station is being built. This new transformer will increase import capability by relieving loading on the nearby Warren 230/120 kV transformer, which may limit imports from the east.

International Transmission Company is also reconductoring the 29 mile Bunce Creek – Adams 120 kV line. The Bunce Creek – Adams circuit reconductoring supports the potential for increased power flow associated with the International Transmission Company-Ontario interface upgrades.

These projects are primarily located in St. Clair, Macomb, Lapeer and Wayne Counties. They are being constructed to relieve overloads on the interconnections with Ontario and 120 kV lines in Oakland and Macomb County that result if 345 kV facility outages occur during heavy Michigan imports.

Wolverine Power Supply Cooperative, Inc.

As a normal course of business, Wolverine Power Supply Cooperative has continued to enhance the capability of its transmission system to meet the service requirements of its customers. In 2000, Wolverine completed its most recent comprehensive long-range plan to assess internal thermal and voltage limitations on its system over the next 10 years. Projects identified in this study necessary to remove the thermal and voltage limitations are either underway or being reviewed by Wolverine management.

In 2000, Wolverine completed construction of the Vestaburg interconnection. This 69/138 kV interconnection will increase the ability of power transfer between Consumers Energy and Wolverine by approximately 75 MW. This project included construction of a complete interconnection with low and high side circuit breakers as well as the addition of approximately 7 MVAR of shunt capacitors. This interconnection is scheduled to be energized in March 2001.

By 2002, Wolverine plans to add another 69/138 kV interconnection at Gaylord. This interconnection will increase Wolverine's first contingency capabilities in the north end of its system. This station will consist of a complete interconnection with high and low side circuit breakers.

Exhibit 3 shows the projects either under construction or under review by Wolverine management. These projects are located throughout Michigan and are designed to relieve 69 kV system overloads and low voltage conditions that result if 69 kV or 138 kV facility outages occur during heavy load periods.

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VI. MICHIGAN IMPORT SYSTEM STUDY GROUP

Besides performing individual company assessments, Consumers Energy and Detroit Edison participated in a joint study along with AEP, FirstEnergy, Northern Indiana Public Service Company and Hydro One Networks to determine transmission system constraints to power imports into the lower peninsula of Michigan. The study scope was to identify transmission system constraints for 6,000 MW of power imports into the lower peninsula of Michigan and to develop plans/projects, conceptual cost estimates and construction lead times to mitigate the identified transmission constraints. The 6,000 MW study level was chosen to conduct the study. Several system upgrades identified by earlier individual company assessments were modeled as in-service in the joint study. Two reports were published.

The first report, *Michigan 6,000 MW Import Constraint Assessment*, identified transmission system constraints for a non-simultaneous 6,000 MW non-firm power import level into Michigan. The second report, *Michigan 6,000 MW Import Constraint Mitigation Assessment*, identified mitigation measures for those constraints identified in the first report and provided conceptual costs and lead-times for implementing the measures. Both reports were reviewed by the Michigan Import System Study Group (MISS G) member utilities and representatives of the staffs of the Michigan, Indiana and Ohio Regulatory Commissions prior to publication. The first report was issued as final in March 2000. The second report was issued as final in July 2000. These reports can be viewed in their entirety at www.ecar.org/CompanyPublications/default.htm.

The MISS G study provided valuable insight into the existing transmission system constraints that may limit increasing firm commercial capability transmission capacity within Michigan and neighboring transmission systems. The MISS G study, however, did not focus on enhancing firm commercial capability. It focused on identifying and mitigating transmission constraints limiting First Contingency Total Transfer Capability² (FCTTC). Increasing FCTTC does not guarantee an increase in firm commercial capability.

² First Contingency Total Transfer Capability is the Total Transfer Capability between Control Areas assuming the unavailability of the single most critical electric system element. First Contingency Total Transfer Capability is a non-firm commercial capability versus a firm commercial capability.

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VII. NEW GENERATION CONNECTIONS

Consumers Energy and International Transmission Company have several Independent Power Producer (IPP) generation projects under study totaling several thousand MW. American Electric Power, Hydro One Networks, FirstEnergy and Northern Indiana Public Service Company have IPP projects currently under review and study. Each generation project is unique, and may impact Michigan import capability as well as import requirements. Michigan's future firm commercial capability may be significantly impacted by the generation projects that progress to commercial operation.

The addition of new independent generation in Michigan does complement the underlying purpose of this Section 10v requirement – the ability of Michigan consumers to have generation supplier choice. The siting of new, independent generation within Michigan provides and supports additional choice, which is the overall objective of Section 10v.

American Electric Power, Consumers Energy and International Transmission Company currently have under study the transmission system impact of approximately 14,000 MW of additional generation that desires to locate in Michigan's lower peninsula. Approximately 1,000 MW of this proposed generation have signed Interconnection Agreements with the appropriate Transmission Provider. American Electric Power has an additional 5,000 MW under study that have proposed locations in northern, northeastern, and east-central Indiana and northwest Ohio.

Wolverine completed 50 MW of new generation in 2000. In addition, Wolverine plans to complete construction of two additional projects, totaling 90 MW of generation, for operation by June 2001. The new projects improve voltage and reliability on Wolverine's transmission system. These projects add to the available sources of supplier choice generation and reduce reliance on interconnections with Michigan's neighboring utilities.

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VIII. IDENTIFIED PROJECTS

Incorporating the work completed by the individual Filing Parties, as discussed in Section V and the MISS G study, Exhibit 2 lists projects identified to achieve an additional 2,000 MW of firm commercial capability into the lower peninsula of Michigan within Consumers Energy's and International Transmission Company's transmission systems. Exhibit 3 lists projects required to adequately serve Wolverine Power Supply Cooperative transmission customers. Exhibit 4 lists projects within the AEP, FirstEnergy, Northern Indiana Public Service Company and Hydro One Networks transmission systems identified to achieve an additional 2,000 MW of FCTTC into Michigan's lower peninsula. Projects listed in Exhibit 4 may not achieve an additional 2,000 MW of firm commercial capability. At a minimum, they are a "good start" toward achieving that goal.

Consumers Energy is committed to constructing all of the identified projects needed to achieve a minimum of 5,500-5,800 MW of MECS simultaneous firm import commercial capability. As Exhibit 2 shows, Consumers Energy's estimated project costs are \$36,865,000. All of the projects have been approved by Company management, some are completed, others are scheduled for completion by June 2002. Consumers Energy's commitment to this plan and completion of these projects represents its compliance with Section 10v of PA 141.

International Transmission Company is committed to constructing all of the identified projects needed to achieve a minimum of 5,500-5,800 MW of MECS simultaneous firm import commercial capability. International Transmission Company's estimated project costs are \$50,700,000. All projects have been approved by Company management and are under design and construction with scheduled completion on or before June 2002. International Transmission Company's commitment to this plan and completion of these projects represents Detroit Edison's compliance with Section 10v of PA 141.

Constraints and mitigating projects were identified in neighboring Company's transmission systems as shown in Exhibit 4. Some of the required projects are in the process of being engineered, designed and constructed, some have been completed, while other identified projects have no commitment by the respective companies to be constructed. American Electric Power, FirstEnergy, Hydro One Networks Inc, and Northern Indiana Public Service Company have not committed to the completion of Exhibit 4 projects.

Columns 3 and 4 of Exhibit 1 show anticipated summer firm commercial capability values for MECS import paths that will be posted to the OASIS node by the Filing Parties.

The transmission path firm commercial capabilities shown in column 4 of Exhibit 1 increase Michigan import path capability by 2,820 MW from summer 2000

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levels (column 2 of Exhibit 1). The net effect of the incremental path increases will increase the simultaneous firm commercial import capability of the lower peninsula of Michigan available during summer months from 3,500 to 3,800 MW to 5,500 to 5,800 MW (the required 2,000 MW increase) within the Consumers Energy and International Transmission Company systems. Individual path increases beyond 2,000 MW are required due to parallel flow effects and import generation source direction discussed earlier. Transmission system constraints outside of MECS, ECAR's coordination process and Ontario's lack of an Open Access Transmission Tariff³ may affect the firm commercial import capability of MECS.

³ For International Transmission Company's firm commercial capability across the Hydro One to MECS path to be accessible to market participants, an Open Access Transmission Tariff (OATT) or arrangement for firm transmission service through Ontario must be offered in Ontario. Presently, Ontario does not offer an OATT or equivalent and current plans for electric market operations in Ontario will not provide for such transmission service.

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IX. RATEMAKING TREATMENT

Each transmission owner shall independently evaluate the need and be responsible for making any regulatory filings necessary for recovery of expenditures related to this joint plan of transmission capability expansion. Such filings shall be made to the appropriate regulatory agency having jurisdiction over the facilities at issue.

It is intended that the transmission related costs of the transmission capability expansion plan shall be recovered through each respective Company's Open Access Transmission Tariffs (OATT) on file at the FERC. As specified in Section 10v of PA 141, each Transmission Owner expects that the Commission will ensure that the utilities remain whole for any prudent expenditures necessary which are made in response to Section 10v of PA 141 for which recovery is not allowed through the FERC OATT.

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Exhibit 1 – MECS Summer 2000 and Anticipated Summer 2001 and 2002 Uncoordinated¹, Non-simultaneous Import Values

(1) Interface	(2) Summer 2000 ⁴	(3) Summer 2001	(4) Summer 2002	(5) Summer 2000 to 2002 Increment
<u>FirstEnergy to MECS path</u>				
Total Transfer Capability	3380 ⁴	3380	3380	
Transmission Reliability Margin	0 ⁴	0	0	
Capacity Benefit Margin	980	1080	1080	
Firm Commercial Capability ¹	2400	2300	2300	(100)
<u>Hydro One to MECS path⁶</u>				
Total Transfer Capability	2280	2330	2400	
Transmission Reliability Margin	1200	1200	500	
Capacity Benefit Margin	600 ²	600	600	
Firm Commercial Capability ¹	480	530	1300	820
<u>Northern Indiana Public Service Company to MECS path</u>				
Total Transfer Capability	60	293	293	
Transmission Reliability Margin	0	0	0	
Capacity Benefit Margin	30	30	30	
Firm Commercial Capability ¹	30	263	263	233
<u>American Electric Power to MECS path</u>				
Total Transfer Capability	2880	4450	4962	
Transmission Reliability Margin	160	520	392	
Capacity Benefit Margin	1200	1316	1300	
Firm Commercial Capability	1520	2614	3270	1750
<u>Wisconsin Electric Company to MECS path</u>				
Total Transfer Capability	63	200	200	
Transmission Reliability Margin	0	20	20	
Capacity Benefit Margin	0	0	0	
Firm Commercial Capability ¹	63	180	180	117

¹Firm Commercial Capability = firm ATC (unsold firm transfer capability) + firm transmission system reservations (sold firm transfer capability)

²A network limit of 4820 MW associated with a TRM of 1140 MW was calculated for this path in June 2000. This produced an import level greater than the contract path limit. The path TTC and TRM values, then, were adjusted to reflect the contract path limit as shown in Exhibit 1.

³The CBM value shown in the June 2000 OASIS posting was 300 MW, which assumed a 600 MW reservation. The actual reservation value was 300 MW. Thus, CBM would be adjusted to 600 MW. For subsequent months, the CBM OASIS posting was adjusted to 600 MW.

⁴Import values submitted to the ECAR OASIS in June 2000 were used to establish summer 2000 MECS import capability instead of using January 2000 submitted values. Consumers Energy and Detroit Edison changed their CBM allocation method during the spring of 2000. Firm commercial import capability increases occurred due to this change since CBM allocation effectively was changed from 193% to 100%. Since the firm commercial import capability increase was not caused by a physical increase in the transmission system, the June 2000 OASIS submittals were used to establish the 'available transmission capability' in place as of January 1, 2000.

⁵Within the ECAR Coordination Agreement region, Transmission Providers submit ATC values for paths that include their systems. These ATC values consider internal system constraints for each of the Transmission Providers along a path. In addition, Transmission Providers that are not along a path can submit ATC values for that path if they are impacted by parallel path flows. These values are submitted to the ECAR OASIS. The final ATC value for a given path will be coordinated using the most limiting ATC values submitted for that path. The values shown in the table are the Filing Parties inputs into this process.

⁶For International Transmission Company's firm commercial capability across the Hydro One to MECS path to be accessible to market participants, an Open Access Transmission Tariff (OATT) or arrangement for firm transmission service through Ontario must be offered in Ontario. Presently, Ontario does not offer an OATT or equivalent and current plans for electric market operations in Ontario will not provide for such transmission service.

EXHIBIT 2 – Identified Projects in Consumers Energy's and International Transmission Company's Systems (MECS) Required to Increase Michigan Firm Commercial Import Capability by 2,000 MW

Transmission Owner	Required Project	State	Cost (\$k)	Lead Time (months)	Plan Status
Consumers Energy	Battle Creek-Verona 138 kV line reconfigure	MI	\$500	Complete	Complete
	Race Street-Spaulding 138 kV line	MI	\$2,200	Complete	Complete
	Battle Creek Substation – add 2 nd 345-138 kV transformer	MI	\$6,100	Complete	Complete
	Oneida 345 kV loop	MI	\$5,500	In progress	June, 2001
	Morrow Substation – replace switches	MI	\$50	In progress	June, 2001
	Argenta Substation – replace wavetrap and circuit connector	MI	\$45	In progress	June, 2001
	Palisades Substation – replace wavetraps	MI	\$50	In progress	June, 2001
	Island Road Substation – change current transformer taps	MI	\$0	In progress	June, 2001
	Delhi-Tompkins-Tihart 138 kV lines and sub reconfigure	MI	\$13,250	In progress	June, 2002
	138 kV capacitor installations	MI	\$9,170	In progress	June, 2002
			\$36,865		
International Transmission Company	L51D – add 1,000 MVA 345/230 kV transformer	MI	\$7,700	Complete	Complete
	B3N – add 675 MVA Phase Angle Regulator	MI	\$9,150	Complete	Complete
	Install 35 mile 345 kV line from Belle River to Blackfoot	MI	\$15,900	Complete	Complete
	Construct Blackfoot 345 kV switching station	MI	\$5,250	In progress	June, 2001
	Reconductor Bunce Creek-Adams 120 kV line	MI	\$5,200	In progress	Dec, 2001
	Capacitor Installations	MI	\$2,550	Complete	Complete
	Install 230/120 kV transformer at Elm	MI	\$4,950	In progress	May, 2002
			\$50,700		
Consumers Energy + International Transmission Company Subtotal			\$87,565		

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EXHIBIT 3 – Identified Projects in Wolverine's System

Transmission Owner	Required Project	State	Cost (\$k)	Lead Time (months)	Plan Status
Wolverine Power Supply Cooperative	Vestaburg 138/69 kV Interconnection	MI	2,670	Complete	March, 2001
	Gaylord – Alpine 69 kV Reconductor	MI	450	In Review	2002
	Gaylord 138/69 kV Interconnect	MI	1,800	In Progress	2002
	Grand Traverse – Grawn 69 kV Line Reconductor	MI	520	In Review	2002
	Hart – Redwood 69 kV Line Reconductor	MI	260	In Review	2003
	Hart – Scottville 44-69 kV Conversion	MI	710	In Review	2003
	Hart Substation Ring Bus Conversion	MI	1,100	In Review	2003
	Hart – Baseline 69 kV Line Reinforcement	MI	500	In Review	2003
	Grand Traverse / Traverse City Reinforcement	MI	1,500	In Review	2003
Wolverine Subtotal			\$9,510		

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EXHIBIT 4 – Identified Projects in Non-MECS Systems to Achieve a 2,000 MW Increase in First Contingency Total Transfer Capability into MECS

Transmission Owner	Required Project	State	Cost (\$k)	Lead Time (months)	Plan Status
American Electric Power	Capacitors – installed prior to summer 1999	IN, OH	\$4,140	Complete	Complete
	Capacitors – installed prior to summer 2000	IN, OH	\$3,959	Complete	Complete
	Transformer Reactor Switches	OH	\$445	Complete	Complete
	Marysville Substation – Spare 765/345 kV transformer	OH	\$16,141	In progress	May 2001
	Orange Substation – New 765/138 kV Substation	OH	\$38,151	In progress	June 2001
	Dumont Substation – add 2 nd 765/345 kV transformer	IN	\$20,000	24	No Plan
	Cook Substation – replace wavetrapp	MI	\$50	3	No Plan
			\$82,886		
FirstEnergy	Allen Junction Substation – add 138 kV capacitor	OH	\$300	9	No Plan
	Greenfield-Lakeview 138 kV line – structurally modify tower	OH	\$3,500	24	No Plan
	Bayshore Substation – replace wavetrapp, relay, bus work	OH	\$156	Complete	Complete
			\$3,956		
Northern Indiana Public Service Company	Barton Lake Substation – add two 138-69 kV transformers	IN	\$9,300	In progress	June, 2001
	Barton Lake area - construct two new 69 kV lines				
	State Line-Wolf Lake-Sheffield 138 kV line – reconductor and review/rerate present ratings	IN	\$1,630	NIPS planned project ¹ 9	May, 2002
	LaGrange Substation – add 138 kV capacitor	IN	\$2,500	24	No Plan
	Leesburg-Northeast-Goshen Jct 138 kV line – rebuild and review/rerate present ratings	IN	\$1,200	12	No Plan
	Dune Acres-Michigan City #1 and #2 138 kV lines – reconductor and review/rerate present ratings	IN	\$136	9	No Plan
	Michigan City-LaPorte Jct 138 kV line – review/rerate present ratings	IN	\$10	3	No Plan
	LaGrange Substation – upgrade 138-69 kV transformers #1 and #2	IN	\$3,200	18	No Plan
	Hiple-Lagrange 138 kV line – review/rerate present ratings	IN	\$60	6	No Plan
			\$18,036		
Hydro One Networks Inc	L4D – parallel two existing 345-230 kV transformers and add one 845 MVA 230 kV Phase Angle Regulator	ON	\$22,000	In progress	May, 2001
	L51D – add one 845 MVA 230 kV Phase Angle Regulator				
Non-MECS Subtotal			\$126,878		
Grand Total			\$223,953		

¹ NIPS capital improvement projects that also eliminate two limiting elements as identified in the MISS G report

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-59

Direction of Transaction	# of Transactions	MW
MISO->ONT	749	59644
ONT->MISO	1464	186731
Total	2213	246375

TagName	Source	Sink	Flowgate	TLRConfirmationTime	TLREffectiveTime	TLRLevel	IssuingRC	ScheduleMW	TDF	CutMW	ImpactStatus	TLRHour	OutsideRestriction
	MISO-EXP (ONT)	ONT	3250		1/12/2009 12:00	TLR Level 3A	PJM	100	5.003038	100	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/13/2009 1:00	TLR Level 3A	PJM	100	5.458598	100	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/13/2009 1:00	TLR Level 3A	PJM	33	5.458598	33	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/13/2009 7:00	TLR Level 3A	PJM	104	5.292301	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 7:00	TLR Level 3A	PJM	51	5.292301	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 8:00	TLR Level 3A	PJM	104	5.308484	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 8:00	TLR Level 3A	PJM	51	5.308484	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 16:00	TLR Level 3A	PJM	104	5.297507	83	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 16:00	TLR Level 3A	PJM	51	5.297507	41	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 17:00	TLR Level 3A	PJM	104	5.280073	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/13/2009 17:00	TLR Level 3A	PJM	51	5.280073	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 5:00	TLR Level 3A	PJM	104	5.298422	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 5:00	TLR Level 3A	PJM	51	5.298422	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 6:00	TLR Level 3A	PJM	104	5.303334	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 6:00	TLR Level 3A	PJM	51	5.303334	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 7:00	TLR Level 3A	PJM	473	5.365261	116	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 7:00	TLR Level 3A	PJM	104	5.365261	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 7:00	TLR Level 3A	PJM	51	5.365261	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 12:00	TLR Level 3A	PJM	104	5.46183	57	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 12:00	TLR Level 3A	PJM	51	5.46183	28	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	1613		1/14/2009 18:00	TLR Level 3A	TVA	104	5.033962	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	1613		1/14/2009 18:00	TLR Level 3A	TVA	51	5.033962	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/14/2009 22:00	TLR Level 3A	PJM	100	5.498296	66	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/14/2009 22:00	TLR Level 3A	PJM	100	5.498296	66	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/14/2009 22:00	TLR Level 3A	PJM	50	5.498296	50	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/14/2009 22:00	TLR Level 3A	PJM	200	5.498296	132	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/14/2009 23:00	TLR Level 3A	PJM	200	5.486883	183	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/14/2009 23:00	TLR Level 3A	PJM	100	5.486883	92	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/14/2009 23:00	TLR Level 3A	PJM	100	5.486883	92	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 0:00	TLR Level 3A	PJM	200	5.487386	200	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 0:00	TLR Level 3A	PJM	100	5.487386	100	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 0:00	TLR Level 3A	PJM	100	5.487386	100	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 0:00	TLR Level 3A	PJM	100	5.487386	100	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 1:00	TLR Level 3A	PJM	100	5.498573	100	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 1:00	TLR Level 3A	PJM	50	5.498573	50	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 1:00	TLR Level 3A	PJM	75	5.498573	75	Curtailed	Next Hour	NO
	MISO-EXP (ONT)	ONT	3250		1/15/2009 4:00	TLR Level 3A	PJM	104	5.489339	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 4:00	TLR Level 3A	PJM	51	5.489339	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 4:00	TLR Level 3A	MISO	104	6.704223	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 4:00	TLR Level 3A	MISO	51	6.704223	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 5:00	TLR Level 3A	PJM	104	5.486101	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 5:00	TLR Level 3A	PJM	51	5.486101	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 5:00	TLR Level 3A	MISO	104	6.701478	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 5:00	TLR Level 3A	MISO	51	6.701478	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 6:00	TLR Level 3A	PJM	104	5.487226	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 6:00	TLR Level 3A	PJM	51	5.487226	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 6:00	TLR Level 3A	MISO	104	6.622639	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 6:00	TLR Level 3A	MISO	51	6.622639	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 7:00	TLR Level 3A	PJM	104	5.486796	104	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3250		1/15/2009 7:00	TLR Level 3A	PJM	51	5.486796	51	Curtailed	Next Hour	CA - ONT
	MISO-EXP (ONT)	ONT	3571		1/15/2009 7:00	TLR Level 3A	MISO	104	6.622572	104	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	3571	1/15/2009 7:00 TLR Level 3A	MISO	51	6.622572	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 4:00 TLR Level 3A	MISO	104	6.704632	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 4:00 TLR Level 3A	MISO	51	6.704632	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 5:00 TLR Level 3A	MISO	104	6.704721	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 5:00 TLR Level 3A	MISO	51	6.704721	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 6:00 TLR Level 3A	MISO	104	6.703481	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 6:00 TLR Level 3A	MISO	51	6.703481	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 7:00 TLR Level 3A	MISO	104	6.7312	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 7:00 TLR Level 3A	MISO	51	6.7312	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/16/2009 21:00 TLR Level 3A	TVA	473	5.042651	79	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 3:00 TLR Level 3A	PJM	19	6.198553	19	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	1/17/2009 6:00 TLR Level 3A	PJM	104	6.210641	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 6:00 TLR Level 3A	PJM	51	6.210641	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 7:00 TLR Level 3A	PJM	104	6.20025	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 7:00 TLR Level 3A	PJM	51	6.20025	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/17/2009 7:00 TLR Level 3A	TVA	104	5.115336	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/17/2009 7:00 TLR Level 3A	TVA	51	5.115336	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 7:00 TLR Level 3A	PJM	104	5.493875	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 7:00 TLR Level 3A	PJM	51	5.493875	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 8:00 TLR Level 3A	PJM	104	6.188203	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 8:00 TLR Level 3A	PJM	51	6.188203	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/17/2009 8:00 TLR Level 3A	TVA	104	5.109645	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/17/2009 8:00 TLR Level 3A	TVA	51	5.109645	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 8:00 TLR Level 3A	PJM	104	5.472578	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 8:00 TLR Level 3A	PJM	51	5.472578	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 9:00 TLR Level 3A	PJM	104	6.145813	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 9:00 TLR Level 3A	PJM	51	6.145813	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 9:00 TLR Level 3A	PJM	104	5.494071	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 9:00 TLR Level 3A	PJM	51	5.494071	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 21:00 TLR Level 3A	PJM	104	5.41103	1	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 21:00 TLR Level 3A	PJM	51	5.41103	1	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 22:00 TLR Level 3A	PJM	104	5.282729	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 22:00 TLR Level 3A	PJM	51	5.282729	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 23:00 TLR Level 3A	PJM	104	5.278502	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 23:00 TLR Level 3A	PJM	51	5.278502	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 0:00 TLR Level 3A	PJM	104	5.304669	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 0:00 TLR Level 3A	PJM	104	5.304669	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 0:00 TLR Level 3A	PJM	51	5.304669	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 0:00 TLR Level 3A	PJM	51	5.304669	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 1:00 TLR Level 3A	PJM	104	5.355016	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 1:00 TLR Level 3A	PJM	51	5.355016	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 2:00 TLR Level 3A	PJM	104	5.484429	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 2:00 TLR Level 3A	PJM	51	5.484429	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 3:00 TLR Level 3A	PJM	104	5.480491	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 3:00 TLR Level 3A	PJM	51	5.480491	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 4:00 TLR Level 3A	PJM	104	5.488565	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 4:00 TLR Level 3A	PJM	51	5.488565	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 5:00 TLR Level 3A	PJM	104	5.487625	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 5:00 TLR Level 3A	PJM	51	5.487625	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 6:05 TLR Level 3A	PJM	104	5.48806	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 6:05 TLR Level 3A	PJM	51	5.48806	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 7:00 TLR Level 3A	PJM	104	5.483918	104	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	3250	1/18/2009 7:00 TLR Level 3A	PJM	51	5.483918	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 8:00 TLR Level 3A	PJM	104	5.484688	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 8:00 TLR Level 3A	PJM	51	5.484688	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 9:00 TLR Level 3A	PJM	51	5.482242	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 10:00 TLR Level 3A	PJM	51	5.481369	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 11:00 TLR Level 3A	PJM	51	5.486742	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 13:00 TLR Level 3A	PJM	51	5.487567	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/18/2009 20:00 TLR Level 3A	TVA	104	5.137791	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/18/2009 20:00 TLR Level 3A	TVA	51	5.137791	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 20:00 TLR Level 3A	PJM	104	5.467511	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 20:00 TLR Level 3A	PJM	51	5.467511	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/18/2009 21:00 TLR Level 3A	TVA	104	5.093436	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/18/2009 21:00 TLR Level 3A	TVA	104	5.093436	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/18/2009 21:00 TLR Level 3A	TVA	51	5.093436	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/18/2009 21:00 TLR Level 3A	TVA	51	5.093436	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 21:00 TLR Level 3A	PJM	104	5.469183	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 21:00 TLR Level 3A	PJM	51	5.469183	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 22:00 TLR Level 3A	PJM	104	5.48156	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 22:00 TLR Level 3A	PJM	51	5.48156	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/18/2009 23:00 TLR Level 3A	PJM	100	5.492145	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 0:00 TLR Level 3A	PJM	100	5.504223	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 1:00 TLR Level 3A	PJM	100	5.51684	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 2:00 TLR Level 3A	PJM	100	5.454307	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 14:00 TLR Level 3A	PJM	50	5.295959	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/19/2009 23:00 TLR Level 3A	PJM	104	5.365262	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 23:00 TLR Level 3A	PJM	51	5.365262	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/19/2009 23:00 TLR Level 3A	MISO	104	6.494373	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/19/2009 23:00 TLR Level 3A	MISO	51	6.494373	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 0:00 TLR Level 3A	PJM	104	5.290157	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 0:00 TLR Level 3A	PJM	51	5.290157	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 3:00 TLR Level 3A	PJM	100	5.283775	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/20/2009 3:00 TLR Level 3A	PJM	104	5.283775	32	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 3:00 TLR Level 3A	PJM	51	5.283775	16	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 4:00 TLR Level 3A	PJM	104	5.290513	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 4:00 TLR Level 3A	PJM	51	5.290513	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 6:00 TLR Level 3A	PJM	104	5.292144	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 6:00 TLR Level 3A	PJM	51	5.292144	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 14:00 TLR Level 3A	PJM	473	5.654837	473	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 15:00 TLR Level 3A	PJM	473	5.531533	473	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 16:00 TLR Level 3A	PJM	473	5.717987	473	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 17:00 TLR Level 3A	PJM	473	5.385102	473	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 18:00 TLR Level 3A	PJM	473	5.379789	4	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/21/2009 11:00 TLR Level 3A	TVA	473	5.236366	210	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/21/2009 15:00 TLR Level 3A	TVA	100	5.257408	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	1613	1/21/2009 15:00 TLR Level 3A	TVA	100	5.257408	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	1613	1/21/2009 16:00 TLR Level 3A	TVA	100	5.188547	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	1613	1/21/2009 17:00 TLR Level 3A	TVA	140	5.270004	140	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/21/2009 17:00 TLR Level 3A	PJM	140	5.423277	140	Curtailed	Next Hour	TLR on Flowgate 1613
MISO-EXP (ONT)	ONT	3250	1/22/2009 15:00 TLR Level 3A	PJM	100	5.591295	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/22/2009 16:00 TLR Level 3A	PJM	22	5.593173	22	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/22/2009 17:00 TLR Level 3A	PJM	104	5.956156	97	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/22/2009 17:00 TLR Level 3A	PJM	51	5.956156	48	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	3250	1/22/2009 23:00 TLR Level 3A	PJM	100	6.038513	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 0:00 TLR Level 3A	PJM	100	5.664123	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 1:00 TLR Level 3A	PJM	100	6.025906	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/23/2009 1:00 TLR Level 3A	PJM	100	6.025906	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 1:00 TLR Level 3A	PJM	75	6.025906	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 2:00 TLR Level 3A	PJM	100	5.657582	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 2:00 TLR Level 3A	PJM	200	5.657582	200	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 2:00 TLR Level 3A	PJM	100	5.657582	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 3:00 TLR Level 3A	PJM	100	6.006823	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 3:00 TLR Level 3A	PJM	200	6.006823	200	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 4:00 TLR Level 3A	PJM	150	5.638658	150	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 15:00 TLR Level 3A	PJM	100	5.612541	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/23/2009 18:00 TLR Level 3A	PJM	104	5.95603	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/23/2009 18:00 TLR Level 3A	PJM	51	5.95603	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/28/2009 16:00 TLR Level 3A	PJM	100	6.193492	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/28/2009 16:00 TLR Level 3A	PJM	75	6.193492	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/28/2009 16:00 TLR Level 3A	PJM	75	6.193492	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/28/2009 16:00 TLR Level 3A	PJM	75	6.193492	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/28/2009 16:00 TLR Level 3A	PJM	100	6.193492	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/28/2009 16:00 TLR Level 3A	PJM	100	6.193492	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 0:00 TLR Level 3A	PJM	100	5.911368	8	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 0:00 TLR Level 3A	PJM	50	5.911368	4	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 0:00 TLR Level 3A	PJM	200	5.911368	16	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 0:00 TLR Level 3A	PJM	150	5.911368	12	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 1:00 TLR Level 3A	PJM	100	6.22336	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 1:00 TLR Level 3A	PJM	50	6.22336	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 1:00 TLR Level 3A	PJM	65	6.22336	65	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 1:00 TLR Level 3A	PJM	150	6.22336	150	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 1:00 TLR Level 3A	PJM	100	6.22336	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 1:00 TLR Level 3A	PJM	50	6.22336	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/29/2009 2:00 TLR Level 3A	PJM	50	5.951052	15	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 2:00 TLR Level 3A	PJM	200	5.951052	58	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 2:00 TLR Level 3A	PJM	100	5.951052	29	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 2:00 TLR Level 3A	PJM	100	5.951052	29	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 4:00 TLR Level 3A	PJM	31	5.944531	31	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 6:00 TLR Level 3A	PJM	75	5.912762	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 6:00 TLR Level 3A	PJM	104	5.912762	34	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/29/2009 6:00 TLR Level 3A	PJM	100	5.912762	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/29/2009 6:00 TLR Level 3A	PJM	51	5.912762	16	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	1/29/2009 15:00 TLR Level 3A	MISO	100	11.58532	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 15:00 TLR Level 3A	MISO	100	11.58532	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 15:00 TLR Level 3A	MISO	100	11.58532	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 15:00 TLR Level 3A	MISO	100	11.58532	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 16:00 TLR Level 3A	MISO	100	11.49204	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 16:00 TLR Level 3A	MISO	100	11.49204	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 16:00 TLR Level 3A	MISO	100	11.49204	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 17:00 TLR Level 3A	MISO	126	11.48515	90	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 17:00 TLR Level 3A	MISO	100	11.48515	72	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 17:00 TLR Level 3A	MISO	100	11.48515	72	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 18:00 TLR Level 3A	MISO	100	11.48967	59	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 19:00 TLR Level 3A	MISO	50	11.46838	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	1/29/2009 20:00 TLR Level 3A	MISO	50	11.47227	50	Curtailed	Next Hour	NO

MISO-EXP (ONT)	ONT	3405	1/29/2009 21:00 TLR Level 3A	MISO	125	11.46885	125	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	1/29/2009 21:00 TLR Level 3A	MISO	100	11.46885	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 3:00 TLR Level 3A	PJM	100	5.749268	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 3:00 TLR Level 3A	PJM	50	5.749268	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	2/1/2009 4:00 TLR Level 3A	PJM	100	6.935147	100	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	522	2/1/2009 4:00 TLR Level 3A	PJM	50	6.935147	50	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	3250	2/1/2009 4:00 TLR Level 3A	PJM	100	5.922261	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 4:00 TLR Level 3A	PJM	50	5.922261	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	2/1/2009 5:00 TLR Level 3A	PJM	100	6.952529	100	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	522	2/1/2009 5:00 TLR Level 3A	PJM	50	6.952529	50	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	3250	2/1/2009 5:00 TLR Level 3A	PJM	100	5.706533	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 5:00 TLR Level 3A	PJM	50	5.706533	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	2/1/2009 6:00 TLR Level 3A	PJM	100	7.002065	100	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	522	2/1/2009 6:00 TLR Level 3A	PJM	100	7.002065	100	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	522	2/1/2009 6:00 TLR Level 3A	PJM	50	7.002065	50	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	3250	2/1/2009 6:00 TLR Level 3A	PJM	100	6.055058	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 6:00 TLR Level 3A	PJM	100	6.055058	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 6:00 TLR Level 3A	PJM	50	6.055058	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 7:00 TLR Level 3A	PJM	100	5.796321	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 7:00 TLR Level 3A	PJM	100	5.796321	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/1/2009 16:00 TLR Level 3A	PJM	37	6.277942	37	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/1/2009 17:00 TLR Level 3A	PJM	104	6.022461	37	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/1/2009 17:00 TLR Level 3A	PJM	51	6.022461	18	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 0:00 TLR Level 3A	PJM	100	5.780548	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/2/2009 2:00 TLR Level 3A	PJM	67	5.785975	67	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/2/2009 3:00 TLR Level 3A	PJM	100	6.04363	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/2/2009 4:00 TLR Level 3A	PJM	100	5.796478	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/2/2009 5:00 TLR Level 3A	PJM	104	6.003189	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 5:00 TLR Level 3A	PJM	51	6.003189	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/2/2009 5:00 TLR Level 3A	MISO	104	5.359798	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/2/2009 5:00 TLR Level 3A	MISO	51	5.359798	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 6:00 TLR Level 3A	PJM	104	5.759143	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 6:00 TLR Level 3A	PJM	51	5.759143	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/2/2009 6:00 TLR Level 3A	MISO	104	5.254847	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/2/2009 6:00 TLR Level 3A	MISO	51	5.254847	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/5/2009 6:00 TLR Level 3A	MISO	104	6.098382	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/5/2009 6:00 TLR Level 3A	MISO	51	6.098382	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 6:15 TLR Level 3A	MISO	104	9.84097	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 6:15 TLR Level 3A	MISO	51	9.84097	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 7:00 TLR Level 3A	MISO	104	9.841034	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 7:00 TLR Level 3A	MISO	51	9.841034	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/5/2009 7:00 TLR Level 3A	MISO	104	5.939185	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/5/2009 7:00 TLR Level 3A	MISO	51	5.939185	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 8:00 TLR Level 3A	MISO	104	9.865128	28	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 8:00 TLR Level 3A	MISO	51	9.865128	14	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 17:00 TLR Level 3A	MISO	100	10.10066	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 21:00 TLR Level 3A	MISO	100	9.719097	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 21:00 TLR Level 3A	MISO	100	9.719097	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 21:00 TLR Level 3A	MISO	100	9.719097	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3570	2/6/2009 0:00 TLR Level 3A	MISO	175	6.069949	175	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3570	2/6/2009 0:00 TLR Level 3A	MISO	100	6.069949	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3570	2/6/2009 0:00 TLR Level 3A	MISO	100	6.069949	100	Curtailed	Next Hour	NO

MISO-EXP (ONT)	ONT	3250	2/7/2009 2:00 TLR Level 3A	PJM	104	5.608572	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/7/2009 2:00 TLR Level 3A	PJM	51	5.608572	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/7/2009 2:00 TLR Level 3A	MISO	104	6.256075	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/7/2009 2:00 TLR Level 3A	MISO	51	6.256075	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/7/2009 3:00 TLR Level 3A	PJM	104	5.84082	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/7/2009 3:00 TLR Level 3A	PJM	51	5.84082	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/7/2009 3:00 TLR Level 3A	MISO	104	6.40338	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/7/2009 3:00 TLR Level 3A	MISO	51	6.40338	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/7/2009 4:00 TLR Level 3A	PJM	104	5.616024	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/7/2009 4:00 TLR Level 3A	PJM	51	5.616024	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/7/2009 4:00 TLR Level 3A	MISO	104	6.251502	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/7/2009 4:00 TLR Level 3A	MISO	51	6.251502	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 2:00 TLR Level 3A	PJM	150	5.556698	24	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 2:00 TLR Level 3A	PJM	100	5.556698	16	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 2:00 TLR Level 3A	PJM	100	5.556698	16	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 2:00 TLR Level 3A	PJM	100	5.556698	16	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 2:00 TLR Level 3A	PJM	200	5.556698	31	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	100	5.804664	46	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	100	5.804664	46	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	100	5.804664	46	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	100	5.804664	46	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	100	5.804664	46	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	200	5.804664	92	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 3:00 TLR Level 3A	PJM	50	5.804664	23	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 6:00 TLR Level 3A	PJM	104	5.604988	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 6:00 TLR Level 3A	PJM	51	5.604988	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 6:00 TLR Level 3A	PJM	50	5.604988	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 15:00 TLR Level 3A	PJM	100	5.997497	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 16:00 TLR Level 3A	PJM	100	5.749325	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 17:00 TLR Level 3A	PJM	100	6.011037	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 18:00 TLR Level 3A	PJM	50	5.754384	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 19:00 TLR Level 3A	PJM	50	5.743808	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 19:00 TLR Level 3A	PJM	104	5.743808	11	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 19:00 TLR Level 3A	PJM	51	5.743808	5	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 20:00 TLR Level 3A	PJM	100	6.000683	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 20:00 TLR Level 3A	PJM	100	6.000683	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 20:00 TLR Level 3A	PJM	100	6.000683	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 20:00 TLR Level 3A	PJM	100	6.000683	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 21:00 TLR Level 3A	PJM	50	5.75699	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/9/2009 23:00 TLR Level 3A	PJM	100	5.762035	19	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/9/2009 23:00 TLR Level 3A	PJM	100	5.762035	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/10/2009 0:00 TLR Level 3A	PJM	100	6.001904	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/10/2009 9:00 TLR Level 3A	PJM	50	5.727713	44	Curtailed	Next Hour	TLR on Flowgate 3405
MISO-EXP (ONT)	ONT	3250	2/10/2009 9:00 TLR Level 3A	PJM	50	5.727713	44	Curtailed	Next Hour	TLR on Flowgate 3405
MISO-EXP (ONT)	ONT	3405	2/10/2009 9:00 TLR Level 3A	MISO	50	10.11047	44	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/10/2009 9:00 TLR Level 3A	MISO	50	10.11047	44	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/10/2009 11:00 TLR Level 3A	PJM	50	5.728416	18	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/10/2009 11:00 TLR Level 3A	PJM	100	5.728416	35	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/10/2009 12:00 TLR Level 3A	PJM	75	5.984159	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/10/2009 12:00 TLR Level 3A	PJM	100	5.984159	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/10/2009 12:00 TLR Level 3A	MISO	75	10.11231	75	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	3405	2/10/2009 12:00 TLR Level 3A	MISO	100	10.11231	100	Curtailed	Next Hour	TLR on Flowgate 3250
MISO-EXP (ONT)	ONT	3250	2/12/2009 14:00 TLR Level 3A	PJM	8	6.214501	8	Curtailed	Next Hour	NO

MISO-EXP (ONT)	ONT	3405	2/18/2009 6:00 TLR Level 3A	MISO	104	9.86251	48	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/18/2009 6:00 TLR Level 3A	MISO	51	9.86251	23	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/18/2009 6:00 TLR Level 3A	MISO	100	9.86251	46	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/18/2009 7:00 TLR Level 3A	MISO	104	9.826501	95	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/18/2009 7:00 TLR Level 3A	MISO	51	9.826501	47	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/18/2009 7:00 TLR Level 3A	MISO	100	9.826501	92	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 4:00 TLR Level 3A	MISO	104	5.705836	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 4:00 TLR Level 3A	MISO	51	5.705836	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 5:00 TLR Level 3A	MISO	104	5.713559	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 5:00 TLR Level 3A	MISO	51	5.713559	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 22:00 TLR Level 3A	MISO	104	5.671563	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 22:00 TLR Level 3A	MISO	51	5.671563	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 23:00 TLR Level 3A	MISO	104	5.663571	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/6/2009 23:00 TLR Level 3A	MISO	51	5.663571	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 0:00 TLR Level 3A	MISO	104	5.738635	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 0:00 TLR Level 3A	MISO	51	5.738635	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 1:00 TLR Level 3A	MISO	104	5.694221	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 1:00 TLR Level 3A	MISO	51	5.694221	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 2:00 TLR Level 3A	MISO	104	5.695571	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 2:00 TLR Level 3A	MISO	51	5.695571	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 3:00 TLR Level 3A	MISO	104	5.755503	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 3:00 TLR Level 3A	MISO	51	5.755503	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 4:00 TLR Level 3A	MISO	104	5.578207	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 4:00 TLR Level 3A	MISO	51	5.578207	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 23:00 TLR Level 3A	MISO	104	5.291818	99	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/7/2009 23:00 TLR Level 3A	MISO	51	5.291818	49	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 3:00 TLR Level 3A	MISO	104	5.300058	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 3:00 TLR Level 3A	MISO	51	5.300058	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 4:00 TLR Level 3A	MISO	104	5.369887	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 4:00 TLR Level 3A	MISO	51	5.369887	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 5:00 TLR Level 3A	MISO	104	5.318762	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 5:00 TLR Level 3A	MISO	51	5.318762	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 6:00 TLR Level 3A	MISO	104	5.384923	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/8/2009 6:00 TLR Level 3A	MISO	51	5.384923	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 1:00 TLR Level 3A	MISO	104	5.326536	82	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 1:00 TLR Level 3A	MISO	51	5.326536	40	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 2:00 TLR Level 3A	MISO	104	5.283791	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 2:00 TLR Level 3A	MISO	51	5.283791	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 3:00 TLR Level 3A	MISO	104	5.353569	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 3:00 TLR Level 3A	MISO	51	5.353569	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 4:00 TLR Level 3A	MISO	104	5.286243	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 4:00 TLR Level 3A	MISO	104	5.286243	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 4:00 TLR Level 3A	MISO	51	5.286243	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 4:00 TLR Level 3A	MISO	51	5.286243	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 5:00 TLR Level 3A	MISO	104	5.286758	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 5:00 TLR Level 3A	MISO	51	5.286758	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 16:00 TLR Level 3A	MISO	104	5.050095	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 16:00 TLR Level 3A	MISO	51	5.050095	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 18:00 TLR Level 3A	MISO	104	5.042955	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 18:00 TLR Level 3A	MISO	51	5.042955	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	10/9/2009 23:00 TLR Level 3A	PJM	104	5.042758	7	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	10/9/2009 23:00 TLR Level 3A	PJM	51	5.042758	3	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	2975	10/9/2009 23:00 TLR Level 3A	MISO	104	5.042758	7	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/9/2009 23:00 TLR Level 3A	MISO	51	5.042758	3	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	10/10/2009 1:00 TLR Level 3A	PJM	9	5.104872	9	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	2975	10/10/2009 1:00 TLR Level 3A	MISO	9	5.104872	9	Curtailed	Next Hour	TLR on Flowgate 522
MISO-EXP (ONT)	ONT	2975	10/11/2009 5:00 TLR Level 3A	MISO	104	5.016364	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/11/2009 5:00 TLR Level 3A	MISO	51	5.016364	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 0:00 TLR Level 3A	MISO	100	7.848221	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	15997	10/18/2009 2:00 TLR Level 3A	MISO	104	7.848221	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 2:00 TLR Level 3A	MISO	51	7.848221	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 3:00 TLR Level 3A	MISO	104	7.850106	84	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 3:00 TLR Level 3A	MISO	51	7.850106	41	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 4:00 TLR Level 3A	MISO	104	7.846865	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 4:00 TLR Level 3A	MISO	51	7.846865	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 5:00 TLR Level 3A	MISO	104	7.843679	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 5:00 TLR Level 3A	MISO	51	7.843679	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 6:00 TLR Level 3A	MISO	104	7.825107	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 6:00 TLR Level 3A	MISO	51	7.825107	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 7:00 TLR Level 3A	MISO	104	7.811956	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 7:00 TLR Level 3A	MISO	51	7.811956	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 14:00 TLR Level 3A	MISO	50	7.337492	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	15997	10/18/2009 14:00 TLR Level 3A	MISO	100	7.337492	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	15997	10/18/2009 16:00 TLR Level 3A	MISO	104	7.364186	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 16:00 TLR Level 3A	MISO	51	7.364186	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 17:00 TLR Level 3A	MISO	104	7.369688	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 17:00 TLR Level 3A	MISO	51	7.369688	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 18:00 TLR Level 3A	MISO	104	7.387744	71	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/18/2009 18:00 TLR Level 3A	MISO	51	7.387744	35	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/19/2009 2:00 TLR Level 3A	MISO	104	7.683793	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	15997	10/19/2009 2:00 TLR Level 3A	MISO	51	7.683793	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/21/2009 5:00 TLR Level 3A	MISO	104	5.236794	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/21/2009 5:00 TLR Level 3A	MISO	51	5.236794	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 6:00 TLR Level 3A	MISO	104	5.141496	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 6:00 TLR Level 3A	MISO	51	5.141496	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 7:00 TLR Level 3A	MISO	104	5.320292	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 7:00 TLR Level 3A	MISO	51	5.320292	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 8:00 TLR Level 3A	MISO	104	5.121435	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 8:00 TLR Level 3A	MISO	51	5.121435	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 10:00 TLR Level 3A	MISO	126	5.116946	126	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	10/29/2009 1:15 TLR Level 3A	PJM	100	5.430083	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	10/29/2009 1:15 TLR Level 3A	PJM	100	5.430083	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	10/29/2009 1:15 TLR Level 3A	PJM	100	5.430083	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	10/29/2009 2:00 TLR Level 3A	PJM	100	5.428509	100	Curtailed	Next Hour	TLR on Flowgate 2975
MISO-EXP (ONT)	ONT	522	10/29/2009 2:00 TLR Level 3A	PJM	100	5.428509	100	Curtailed	Next Hour	TLR on Flowgate 2975
MISO-EXP (ONT)	ONT	2975	10/29/2009 2:00 TLR Level 3A	MISO	100	5.428509	100	Curtailed	Next Hour	TLR on Flowgate 522
MISO-EXP (ONT)	ONT	2975	10/29/2009 2:00 TLR Level 3A	MISO	100	5.428509	100	Curtailed	Next Hour	TLR on Flowgate 522
MISO-EXP (ONT)	ONT	2975	10/29/2009 4:00 TLR Level 3A	MISO	104	5.429317	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/29/2009 4:00 TLR Level 3A	MISO	51	5.429317	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/29/2009 5:00 TLR Level 3A	MISO	104	5.496806	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/29/2009 5:00 TLR Level 3A	MISO	51	5.496806	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/30/2009 1:00 TLR Level 3A	MISO	104	5.681452	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/30/2009 1:00 TLR Level 3A	MISO	51	5.681452	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 2:00 TLR Level 3A	PJM	104	5.941367	104	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	522	11/2/2009 2:00 TLR Level 3A	PJM	51	5.941367	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 4:00 TLR Level 3A	PJM	104	5.875524	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 4:00 TLR Level 3A	PJM	51	5.875524	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 5:00 TLR Level 3A	PJM	104	5.970862	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 5:00 TLR Level 3A	PJM	51	5.970862	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 6:00 TLR Level 3A	PJM	104	6.032644	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	11/2/2009 6:00 TLR Level 3A	PJM	51	6.032644	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 2:00 TLR Level 3A	MISO	100	5.442776	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 2:00 TLR Level 3A	MISO	7	5.442776	7	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	2975	11/17/2009 2:00 TLR Level 3A	MISO	104	5.442776	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 2:00 TLR Level 3A	MISO	51	5.442776	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 3:00 TLR Level 3A	MISO	100	5.430645	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 3:00 TLR Level 3A	MISO	104	5.430645	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 3:00 TLR Level 3A	MISO	51	5.430645	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 4:00 TLR Level 3A	MISO	104	5.434007	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 4:00 TLR Level 3A	MISO	51	5.434007	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 5:00 TLR Level 3A	MISO	100	5.434444	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 5:00 TLR Level 3A	MISO	104	5.434444	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 5:00 TLR Level 3A	MISO	51	5.434444	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 6:00 TLR Level 3A	MISO	104	5.434352	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 6:00 TLR Level 3A	MISO	51	5.434352	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 7:00 TLR Level 3A	MISO	100	5.440781	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 7:00 TLR Level 3A	MISO	104	5.440781	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 7:00 TLR Level 3A	MISO	51	5.440781	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 8:00 TLR Level 3A	MISO	100	5.342527	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 8:00 TLR Level 3A	MISO	104	5.342527	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 8:00 TLR Level 3A	MISO	51	5.342527	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/23/2009 20:00 TLR Level 3A	MISO	100	5.029518	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/23/2009 21:00 TLR Level 3A	MISO	100	5.164342	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	2975	11/23/2009 21:00 TLR Level 3A	MISO	100	5.164342	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	2975	11/24/2009 5:00 TLR Level 3A	MISO	104	5.01028	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 5:00 TLR Level 3A	MISO	51	5.01028	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 6:00 TLR Level 3A	MISO	104	5.014966	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 6:00 TLR Level 3A	MISO	51	5.014966	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 12:00 TLR Level 3A	MISO	104	5.0694	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 12:00 TLR Level 3A	MISO	51	5.0694	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 13:00 TLR Level 3A	MISO	104	5.06905	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 13:00 TLR Level 3A	MISO	51	5.06905	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 14:00 TLR Level 3A	MISO	104	5.051536	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/24/2009 14:00 TLR Level 3A	MISO	51	5.051536	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 13:00 TLR Level 3A	MISO	100	12.8168	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 13:00 TLR Level 3A	MISO	104	12.8168	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 14:00 TLR Level 3A	MISO	100	13.49209	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 14:00 TLR Level 3A	MISO	104	13.49209	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 15:00 TLR Level 3A	MISO	100	13.65927	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 15:00 TLR Level 3A	MISO	104	13.65927	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 16:00 TLR Level 3A	MISO	100	13.57397	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 16:00 TLR Level 3A	MISO	104	13.57397	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 17:00 TLR Level 3A	MISO	100	13.53809	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 17:00 TLR Level 3A	MISO	104	13.53809	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 18:00 TLR Level 3A	MISO	100	13.71659	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 18:00 TLR Level 3A	MISO	104	13.71659	104	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	3405	4/4/2011 19:00 TLR Level 3A	MISO	100	13.54802	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 19:00 TLR Level 3A	MISO	104	13.54802	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/5/2011 13:00 TLR Level 3A	MISO	104	11.76183	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/5/2011 17:00 TLR Level 3A	MISO	24	11.7347	24	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	17017	4/5/2011 19:00 TLR Level 3A	MISO	104	11.74617	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/5/2011 20:00 TLR Level 3A	MISO	100	11.68499	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/5/2011 21:00 TLR Level 3A	MISO	100	11.73752	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/5/2011 22:00 TLR Level 3A	MISO	100	11.74632	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	7104	4/5/2011 23:00 TLR Level 3A	ONT	100	38.22868	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/5/2011 23:00 TLR Level 3A	MISO	100	11.79515	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	7104	4/6/2011 0:00 TLR Level 3A	ONT	100	38.10456	70	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/6/2011 0:00 TLR Level 3A	MISO	100	11.75104	70	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	7104	4/6/2011 1:00 TLR Level 3A	ONT	100	38.16793	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	7104	4/6/2011 1:00 TLR Level 3A	ONT	104	38.16793	14	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/6/2011 5:00 TLR Level 3A	MISO	100	11.84377	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/6/2011 5:00 TLR Level 3A	MISO	104	11.84377	104	Curtailed	Next Hour	CA - MISO
MISO-EXP (ONT)	ONT	17017	4/6/2011 6:00 TLR Level 3A	MISO	100	11.57543	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/6/2011 6:00 TLR Level 3A	MISO	104	11.57543	104	Curtailed	Next Hour	CA - MISO
MISO-EXP (ONT)	ONT	17017	4/6/2011 7:00 TLR Level 3A	MISO	100	11.59153	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	4/6/2011 7:00 TLR Level 3A	MISO	104	11.59153	66	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/6/2011 10:00 TLR Level 3A	MISO	104	12.92583	104	Curtailed	Next Hour	CA - MISO
MISO-EXP (ONT)	ONT	3405	4/6/2011 11:00 TLR Level 3A	MISO	100	12.81396	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/6/2011 11:00 TLR Level 3A	MISO	104	12.81396	104	Curtailed	Next Hour	CA - MISO
MISO-EXP (ONT)	ONT	3405	4/6/2011 12:00 TLR Level 3A	MISO	100	12.81802	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/6/2011 12:00 TLR Level 3A	MISO	104	12.81802	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/7/2011 4:00 TLR Level 3A	MISO	50	13.29785	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/7/2011 5:00 TLR Level 3A	MISO	100	13.22707	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/8/2011 5:15 TLR Level 3A	MISO	104	13.52642	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/8/2011 6:00 TLR Level 3A	MISO	104	13.40279	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/8/2011 7:00 TLR Level 3A	MISO	100	13.3226	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/8/2011 7:00 TLR Level 3A	MISO	104	13.3226	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/8/2011 8:00 TLR Level 3A	MISO	100	13.64072	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/8/2011 8:00 TLR Level 3A	MISO	104	13.64072	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/12/2011 2:15 TLR Level 3A	MISO	100	14.933	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/12/2011 2:15 TLR Level 3A	MISO	104	14.933	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 1:00 TLR Level 3A	MISO	100	12.67305	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 1:00 TLR Level 3A	MISO	104	12.67305	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 2:00 TLR Level 3A	MISO	100	13.41555	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 2:00 TLR Level 3A	MISO	104	13.41555	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 3:00 TLR Level 3A	MISO	100	13.41881	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 3:00 TLR Level 3A	MISO	104	13.41881	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 4:00 TLR Level 3A	MISO	100	13.40901	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 4:00 TLR Level 3A	MISO	104	13.40901	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 5:00 TLR Level 3A	MISO	100	13.42536	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 5:00 TLR Level 3A	MISO	104	13.42536	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/13/2011 5:00 TLR Level 3A	MISO	100	15.05692	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/13/2011 5:00 TLR Level 3A	MISO	104	15.05692	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 6:00 TLR Level 3A	MISO	100	13.41743	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 6:00 TLR Level 3A	MISO	104	13.41743	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 7:00 TLR Level 3A	MISO	100	13.45195	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/13/2011 7:00 TLR Level 3A	MISO	104	13.45195	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/13/2011 23:00 TLR Level 3A	MISO	100	14.45252	100	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	2337	4/13/2011 23:00 TLR Level 3A	MISO	104	14.45252	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 6:00 TLR Level 3A	MISO	100	13.56492	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 6:00 TLR Level 3A	MISO	104	13.56492	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 7:00 TLR Level 3A	MISO	100	13.65645	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 7:00 TLR Level 3A	MISO	104	13.65645	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 8:00 TLR Level 3A	MISO	100	13.67847	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 9:00 TLR Level 3A	MISO	100	13.62701	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 10:00 TLR Level 3A	MISO	100	13.65003	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 11:00 TLR Level 3A	MISO	100	13.57728	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 12:00 TLR Level 3A	MISO	100	13.58043	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 13:00 TLR Level 3A	MISO	100	13.86322	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 14:00 TLR Level 3A	MISO	100	13.57205	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 14:00 TLR Level 3A	MISO	104	13.57205	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 15:00 TLR Level 3A	MISO	100	13.55305	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 16:00 TLR Level 3A	MISO	100	12.5757	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 17:00 TLR Level 3A	MISO	100	12.47801	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 18:00 TLR Level 3A	MISO	100	12.59122	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 18:00 TLR Level 3A	MISO	104	12.59122	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 19:00 TLR Level 3A	MISO	100	12.5205	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 19:00 TLR Level 3A	MISO	104	12.5205	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 20:00 TLR Level 3A	MISO	100	12.25889	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 21:00 TLR Level 3A	MISO	100	12.41319	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/14/2011 22:00 TLR Level 3A	MISO	100	15.02967	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 22:00 TLR Level 3A	MISO	100	12.41992	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/15/2011 0:00 TLR Level 3A	MISO	100	15.02713	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/15/2011 1:00 TLR Level 3A	MISO	100	15.08424	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/15/2011 2:00 TLR Level 3A	MISO	100	15.03823	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/15/2011 3:00 TLR Level 3A	MISO	100	15.05568	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/15/2011 6:00 TLR Level 3A	MISO	100	15.75907	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/15/2011 7:00 TLR Level 3A	MISO	100	15.65866	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 13:15 TLR Level 3A	MISO	100	12.86269	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 14:00 TLR Level 3A	MISO	100	12.84618	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 15:00 TLR Level 3A	MISO	100	12.80499	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 15:00 TLR Level 3A	MISO	100	12.80499	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	4/16/2011 16:00 TLR Level 3A	MISO	100	12.85301	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 17:00 TLR Level 3A	MISO	100	12.83249	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 18:00 TLR Level 3A	MISO	100	12.80089	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 18:00 TLR Level 3A	MISO	104	12.80089	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 19:00 TLR Level 3A	MISO	100	12.80517	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 20:00 TLR Level 3A	MISO	100	12.98252	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 21:00 TLR Level 3A	MISO	100	13.03003	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 22:00 TLR Level 3A	MISO	100	12.93194	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/16/2011 22:00 TLR Level 3A	MISO	104	12.93194	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/17/2011 0:00 TLR Level 3A	MISO	100	12.97194	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/17/2011 1:00 TLR Level 3A	MISO	100	12.92879	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/17/2011 2:00 TLR Level 3A	MISO	100	12.96084	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/17/2011 3:00 TLR Level 3A	MISO	100	13.26601	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/18/2011 4:00 TLR Level 3A	MISO	100	11.21218	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/18/2011 4:00 TLR Level 3A	MISO	100	11.21218	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/18/2011 5:00 TLR Level 3A	MISO	100	11.1505	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/18/2011 5:00 TLR Level 3A	MISO	104	11.1505	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/19/2011 5:00 TLR Level 3A	MISO	100	11.25048	100	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	3459	4/19/2011 6:00 TLR Level 3A	MISO	100	11.2783	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 1:00 TLR Level 3A	MISO	100	9.4179	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 2:00 TLR Level 3A	MISO	100	9.297578	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 3:00 TLR Level 3A	MISO	100	9.402982	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 4:00 TLR Level 3A	MISO	100	9.393271	79	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 5:00 TLR Level 3A	MISO	100	9.366772	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 8:10 TLR Level 3A	MISO	100	10.39901	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 10:00 TLR Level 3A	MISO	100	9.818097	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 12:00 TLR Level 3A	MISO	100	9.705314	50	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/25/2011 14:00 TLR Level 3A	MISO	100	9.714314	94	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	5/3/2011 17:00 TLR Level 3A	MISO	104	12.89636	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	17017	5/3/2011 18:00 TLR Level 3A	MISO	104	13.07582	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/9/2011 18:00 TLR Level 3A	ICTE	104	5.694506	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/9/2011 19:00 TLR Level 3A	ICTE	104	5.754837	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/9/2011 20:00 TLR Level 3A	ICTE	104	5.709442	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/18/2011 16:00 TLR Level 3A	MISO	104	6.146237	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/18/2011 17:00 TLR Level 3A	MISO	104	6.175633	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/18/2011 19:00 TLR Level 3A	MISO	104	6.342193	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/18/2011 20:00 TLR Level 3A	MISO	104	6.412531	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/19/2011 1:00 TLR Level 3A	MISO	71	6.771636	71	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/19/2011 16:00 TLR Level 3A	MISO	104	6.603784	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/19/2011 17:00 TLR Level 3A	MISO	104	6.588911	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/19/2011 18:00 TLR Level 3A	MISO	104	6.32631	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/19/2011 19:00 TLR Level 3A	MISO	104	6.416803	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/19/2011 20:00 TLR Level 3A	MISO	104	5.94754	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/25/2011 17:00 TLR Level 3A	MISO	104	6.648245	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/25/2011 18:00 TLR Level 3A	MISO	104	7.376907	5	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/25/2011 19:00 TLR Level 3A	MISO	104	7.352919	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/25/2011 20:00 TLR Level 3A	MISO	104	7.368984	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3167	5/26/2011 0:00 TLR Level 3A	MISO	104	7.384053	8	Curtailed	Next Hour	TLR on Flowgate 16807
MISO-EXP (ONT)	ONT	16893	5/27/2011 11:00 TLR Level 3A	TVA	104	6.960112	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 12:00 TLR Level 3A	TVA	104	6.959237	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 13:00 TLR Level 3A	TVA	104	6.99501	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 14:00 TLR Level 3A	TVA	104	7.060184	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 15:00 TLR Level 3A	TVA	104	6.977157	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 16:00 TLR Level 3A	TVA	104	7.004453	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 17:00 TLR Level 3A	TVA	104	7.053423	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 18:00 TLR Level 3A	TVA	104	6.995097	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 19:00 TLR Level 3A	TVA	104	7.005715	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16893	5/27/2011 20:00 TLR Level 3A	TVA	104	6.9341	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	12/22/2011 5:00 TLR Level 3A	MISO	104	5.48108	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	12/23/2011 4:00 TLR Level 3A	MISO	104	5.489765	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	12/23/2011 23:00 TLR Level 3A	MISO	50	5.596741	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3314	12/23/2011 23:00 TLR Level 3A	MISO	50	5.596741	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3314	12/24/2011 0:00 TLR Level 3A	MISO	50	5.606456	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3314	12/24/2011 0:00 TLR Level 3A	MISO	50	5.606456	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3314	12/24/2011 1:00 TLR Level 3A	MISO	50	5.468693	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/13/2009 5:30 TLR Level 3B	PJM	104	5.302974	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/13/2009 5:30 TLR Level 3B	PJM	104	5.303278	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/13/2009 5:30 TLR Level 3B	PJM	51	5.302974	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/13/2009 5:30 TLR Level 3B	PJM	51	5.303278	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/14/2009 12:15 TLR Level 3B	TVA	104	5.055907	0	Curtailed	Current Hour	CA - ONT

MISO-EXP (ONT)	ONT	1613	1/14/2009 12:15 TLR Level 3B	TVA	51	5.055907	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/14/2009 16:35 TLR Level 3B	TVA	104	5.01636	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/14/2009 16:35 TLR Level 3B	TVA	51	5.01636	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 3:30 TLR Level 3B	MISO	104	6.704632	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3571	1/16/2009 3:30 TLR Level 3B	MISO	51	6.704632	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/16/2009 21:25 TLR Level 3B	TVA	473	5.043374	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 1:30 TLR Level 3B	PJM	104	6.191407	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 1:30 TLR Level 3B	PJM	51	6.191407	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	522	1/17/2009 1:30 TLR Level 3B	PJM	75	6.191407	75	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	522	1/17/2009 2:15 TLR Level 3B	PJM	19	6.201244	19	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	1613	1/17/2009 5:30 TLR Level 3B	TVA	104	5.098878	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	1613	1/17/2009 5:30 TLR Level 3B	TVA	51	5.098878	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 5:30 TLR Level 3B	PJM	104	5.478674	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/17/2009 5:30 TLR Level 3B	PJM	51	5.478674	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 1:30 TLR Level 3B	PJM	100	5.5163	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 1:30 TLR Level 3B	PJM	100	5.516816	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/19/2009 14:30 TLR Level 3B	PJM	50	5.516944	0	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3250	1/19/2009 14:30 TLR Level 3B	PJM	23	5.516944	0	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3250	1/20/2009 12:45 TLR Level 3B	PJM	473	5.671229	473	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 12:45 TLR Level 3B	PJM	473	5.671229	473	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 12:45 TLR Level 3B	PJM	104	5.679338	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 12:45 TLR Level 3B	PJM	104	5.679338	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 12:45 TLR Level 3B	PJM	51	5.679338	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/20/2009 12:45 TLR Level 3B	PJM	51	5.679338	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/22/2009 14:45 TLR Level 3B	PJM	288	5.567812	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/22/2009 14:45 TLR Level 3B	PJM	100	5.567812	100	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3250	1/22/2009 14:45 TLR Level 3B	PJM	100	5.591295	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/22/2009 22:30 TLR Level 3B	PJM	100	6.037373	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	1/26/2009 0:45 TLR Level 3B	PJM	100	5.117734	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	1/26/2009 0:45 TLR Level 3B	PJM	100	5.65693	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 16:15 TLR Level 3B	PJM	104	5.764921	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 16:15 TLR Level 3B	PJM	51	5.764921	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3250	2/2/2009 16:15 TLR Level 3B	PJM	100	5.764921	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3250	2/2/2009 16:15 TLR Level 3B	PJM	100	5.780094	100	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3250	2/2/2009 16:15 TLR Level 3B	PJM	70	5.780094	70	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	75	10.15486	75	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	75	10.15465	75	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	75	10.15486	75	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	100	10.15465	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	100	10.15486	100	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	100	10.15465	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	200	10.15486	159	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	200	10.15465	200	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3405	2/5/2009 15:15 TLR Level 3B	MISO	50	10.15465	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	3570	2/6/2009 23:15 TLR Level 3B	MISO	75	6.290784	75	Curtailed	Current Hour	NO
MISO-EXP (ONT)	ONT	3570	2/20/2009 5:45 TLR Level 3B	MISO	104	6.059753	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/20/2009 5:45 TLR Level 3B	MISO	51	6.059753	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3570	2/20/2009 5:45 TLR Level 3B	MISO	67	6.059753	67	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 4:30 TLR Level 3B	MISO	104	5.140244	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/25/2009 4:30 TLR Level 3B	MISO	51	5.140244	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	10/29/2009 1:30 TLR Level 3B	MISO	100	5.430296	0	Curtailed	Current Hour	TLR on Flowgate 522
MISO-EXP (ONT)	ONT	2975	10/29/2009 1:30 TLR Level 3B	MISO	100	5.430296	0	Curtailed	Current Hour	TLR on Flowgate 522

MISO-EXP (ONT)	ONT	2975	10/29/2009 1:30 TLR Level 3B	MISO	100	5.432306	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	2975	10/29/2009 1:30 TLR Level 3B	MISO	100	5.430296	0	Curtailed	Current Hour	TLR on Flowgate 522
MISO-EXP (ONT)	ONT	2975	10/29/2009 1:30 TLR Level 3B	MISO	100	5.432306	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	11/1/2009 22:30 TLR Level 3B	PJM	100	5.829233	100	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	522	11/1/2009 22:30 TLR Level 3B	PJM	50	5.829233	50	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	15	5.432313	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	15	5.432313	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	100	5.432313	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	100	5.442789	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	104	5.432313	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	104	5.442789	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	51	5.432313	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2975	11/17/2009 0:30 TLR Level 3B	MISO	51	5.442789	51	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 9:45 TLR Level 3B	MISO	100	12.96513	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 9:45 TLR Level 3B	MISO	100	13.39997	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 9:45 TLR Level 3B	MISO	104	12.96513	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 9:45 TLR Level 3B	MISO	104	13.39997	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 11:30 TLR Level 3B	MISO	100	12.75658	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 11:30 TLR Level 3B	MISO	100	13.20514	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 11:30 TLR Level 3B	MISO	104	12.75658	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/4/2011 11:30 TLR Level 3B	MISO	104	13.20514	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/13/2011 22:45 TLR Level 3B	MISO	100	14.45796	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/13/2011 22:45 TLR Level 3B	MISO	100	14.42693	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/13/2011 22:45 TLR Level 3B	MISO	104	14.45796	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	2337	4/13/2011 22:45 TLR Level 3B	MISO	104	14.42693	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 4:20 TLR Level 3B	MISO	100	13.54471	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 4:20 TLR Level 3B	MISO	100	13.55934	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 4:20 TLR Level 3B	MISO	104	13.54471	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3314	4/14/2011 4:20 TLR Level 3B	MISO	104	13.55934	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/15/2011 4:20 TLR Level 3B	MISO	100	15.43077	100	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3405	4/15/2011 4:20 TLR Level 3B	MISO	100	15.62037	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/19/2011 3:45 TLR Level 3B	MISO	100	11.2337	75	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	3459	4/19/2011 3:45 TLR Level 3B	MISO	100	11.29174	0	Curtailed	Current Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 11:30 TLR Level 3B	ICTE	104	6.002176	45	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 13:00 TLR Level 5A	ICTE	104	5.954544	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 14:00 TLR Level 5A	ICTE	104	5.893287	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 15:00 TLR Level 5A	ICTE	104	5.858137	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 16:00 TLR Level 5A	ICTE	104	6.984654	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 17:00 TLR Level 5A	ICTE	104	6.60527	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 18:00 TLR Level 5A	ICTE	104	6.645777	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 19:00 TLR Level 5A	ICTE	104	6.630488	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 20:00 TLR Level 5A	ICTE	104	6.677029	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/24/2011 21:00 TLR Level 5A	ICTE	104	6.688105	4	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/24/2011 22:00 TLR Level 5A	ICTE	64	6.761175	3	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/25/2011 10:00 TLR Level 5A	ICTE	104	6.911915	103	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/25/2011 11:00 TLR Level 5A	ICTE	104	6.863448	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/25/2011 12:00 TLR Level 5A	ICTE	104	7.101058	3	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/25/2011 13:00 TLR Level 5A	ICTE	104	6.834455	2	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/25/2011 14:00 TLR Level 5A	ICTE	104	6.919235	2	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/25/2011 15:00 TLR Level 5A	ICTE	104	6.792198	3	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/25/2011 16:00 TLR Level 5A	ICTE	104	6.801748	6	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/25/2011 17:00 TLR Level 5A	ICTE	104	6.729698	104	Curtailed	Next Hour	CA - ONT

MISO-EXP (ONT)	ONT	16807	5/25/2011 18:00 TLR Level 5A	ICTE	104	6.276639	12	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/25/2011 19:00 TLR Level 5A	ICTE	104	6.249273	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/25/2011 20:00 TLR Level 5A	ICTE	104	6.335413	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/25/2011 23:00 TLR Level 5A	ICTE	104	6.964756	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 0:00 TLR Level 5A	ICTE	104	7.004527	8	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/26/2011 1:00 TLR Level 5A	ICTE	104	7.152369	8	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/26/2011 2:00 TLR Level 5A	ICTE	104	7.177126	7	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/26/2011 3:00 TLR Level 5A	ICTE	104	7.158473	5	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/26/2011 9:00 TLR Level 5A	ICTE	104	7.770365	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 10:00 TLR Level 5A	ICTE	104	7.080322	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 11:00 TLR Level 5A	ICTE	104	7.076143	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 12:00 TLR Level 5A	ICTE	104	7.088253	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 13:00 TLR Level 5A	ICTE	104	7.164203	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 14:00 TLR Level 5A	ICTE	104	7.112864	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 17:00 TLR Level 5A	ICTE	104	7.072799	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 18:00 TLR Level 5A	ICTE	104	7.009771	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 19:00 TLR Level 5A	ICTE	104	6.93448	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 20:00 TLR Level 5A	ICTE	104	6.875563	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/26/2011 21:00 TLR Level 5A	ICTE	104	6.941972	6	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/26/2011 23:00 TLR Level 5A	ICTE	104	6.945638	3	Curtailed	Next Hour	NO
MISO-EXP (ONT)	ONT	16807	5/26/2011 23:10 TLR Level 5A	ICTE	104	6.9175	104	Curtailed	Next Hour	CA - ONT
MISO-EXP (ONT)	ONT	16807	5/27/2011 0:00 TLR Level 5A	ICTE	104	6.846044	2	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7009	1/2/2009 6:00 TLR Level 3A	ONT	50	27.37697	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	1/2/2009 6:00 TLR Level 3A	ONT	100	27.37697	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	1/2/2009 6:00 TLR Level 3A	ONT	200	27.37697	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	1/2/2009 7:00 TLR Level 3A	ONT	50	27.32659	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	1/2/2009 7:00 TLR Level 3A	ONT	100	27.32659	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	1/2/2009 7:00 TLR Level 3A	ONT	200	27.32659	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7010	1/3/2009 1:00 TLR Level 3A	ONT	50	12.96398	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7010	1/3/2009 1:00 TLR Level 3A	ONT	200	12.96398	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7010	1/3/2009 2:00 TLR Level 3A	ONT	50	12.94409	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7010	1/3/2009 2:00 TLR Level 3A	ONT	200	12.94409	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7010	1/3/2009 3:00 TLR Level 3A	ONT	50	12.90521	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7010	1/3/2009 3:00 TLR Level 3A	ONT	200	12.90521	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 4:00 TLR Level 3A	ONT	50	42.00547	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 4:00 TLR Level 3A	ONT	200	42.00547	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 5:00 TLR Level 3A	ONT	50	42.21588	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 5:00 TLR Level 3A	ONT	200	42.21588	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 6:00 TLR Level 3A	ONT	50	42.34092	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 6:00 TLR Level 3A	ONT	200	42.34092	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 7:00 TLR Level 3A	ONT	50	42.40323	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 7:00 TLR Level 3A	ONT	200	42.40323	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 8:00 TLR Level 3A	ONT	50	42.34268	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 8:00 TLR Level 3A	ONT	200	42.34268	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 9:00 TLR Level 3A	ONT	50	42.4001	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 9:00 TLR Level 3A	ONT	200	42.4001	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 10:00 TLR Level 3A	ONT	50	42.34072	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 10:00 TLR Level 3A	ONT	200	42.34072	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 11:00 TLR Level 3A	ONT	50	42.41624	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 11:00 TLR Level 3A	ONT	200	42.41624	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 12:00 TLR Level 3A	ONT	50	42.27312	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 12:00 TLR Level 3A	ONT	200	42.27312	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	9160	1/3/2009 13:00 TLR Level 3A	ONT	50	42.44369	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 13:00 TLR Level 3A	ONT	200	42.44369	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 14:00 TLR Level 3A	ONT	50	42.27098	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 14:00 TLR Level 3A	ONT	200	42.27098	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 15:00 TLR Level 3A	ONT	50	42.44188	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 15:00 TLR Level 3A	ONT	200	42.44188	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 22:00 TLR Level 3A	ONT	50	41.96899	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 22:00 TLR Level 3A	ONT	200	41.96899	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 23:00 TLR Level 3A	ONT	50	42.39079	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/3/2009 23:00 TLR Level 3A	ONT	200	42.39079	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 0:00 TLR Level 3A	ONT	50	42.02522	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 0:00 TLR Level 3A	ONT	200	42.02522	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 1:00 TLR Level 3A	ONT	50	41.96639	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 1:00 TLR Level 3A	ONT	200	41.96639	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 2:00 TLR Level 3A	ONT	50	42.05269	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 2:00 TLR Level 3A	ONT	200	42.05269	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 3:00 TLR Level 3A	ONT	50	41.76754	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 3:00 TLR Level 3A	ONT	200	41.76754	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 4:00 TLR Level 3A	ONT	50	41.79248	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 4:00 TLR Level 3A	ONT	200	41.79248	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 5:00 TLR Level 3A	ONT	50	41.73566	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 5:00 TLR Level 3A	ONT	200	41.73566	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 6:00 TLR Level 3A	ONT	50	41.61679	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 6:00 TLR Level 3A	ONT	200	41.61679	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 7:00 TLR Level 3A	ONT	50	41.57159	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 7:00 TLR Level 3A	ONT	200	41.57159	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 8:00 TLR Level 3A	ONT	100	41.66772	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 8:00 TLR Level 3A	ONT	50	41.66772	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 8:00 TLR Level 3A	ONT	200	41.66772	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 9:00 TLR Level 3A	ONT	100	41.56791	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 9:00 TLR Level 3A	ONT	50	41.56791	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/4/2009 9:00 TLR Level 3A	ONT	200	41.56791	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 1:00 TLR Level 3A	ONT	100	42.31607	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 1:00 TLR Level 3A	ONT	50	42.31607	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 1:00 TLR Level 3A	ONT	200	42.31607	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 2:00 TLR Level 3A	ONT	100	42.28236	34	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 2:00 TLR Level 3A	ONT	50	42.28236	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 2:00 TLR Level 3A	ONT	200	42.28236	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 3:00 TLR Level 3A	ONT	200	42.54029	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 4:00 TLR Level 3A	ONT	100	42.48773	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 4:00 TLR Level 3A	ONT	50	42.48773	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 4:00 TLR Level 3A	ONT	200	42.48773	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 5:00 TLR Level 3A	ONT	50	42.56247	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 5:00 TLR Level 3A	ONT	200	42.56247	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 6:00 TLR Level 3A	ONT	50	42.38282	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/5/2009 6:00 TLR Level 3A	ONT	200	42.38282	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/9/2009 2:00 TLR Level 3A	ONT	200	41.43449	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/9/2009 3:00 TLR Level 3A	ONT	200	41.47106	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/9/2009 4:00 TLR Level 3A	ONT	200	41.39476	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/9/2009 5:00 TLR Level 3A	ONT	50	41.54598	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/9/2009 5:00 TLR Level 3A	ONT	200	41.54598	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 1:00 TLR Level 3A	ONT	50	41.37977	50	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	9160	1/12/2009 1:00 TLR Level 3A	ONT	200	41.37977	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 2:00 TLR Level 3A	ONT	50	41.42547	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 2:00 TLR Level 3A	ONT	200	41.42547	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 3:00 TLR Level 3A	ONT	50	41.56384	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 3:00 TLR Level 3A	ONT	200	41.56384	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 4:00 TLR Level 3A	ONT	50	42.49019	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 4:00 TLR Level 3A	ONT	200	42.49019	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 5:00 TLR Level 3A	ONT	50	42.4428	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/12/2009 5:00 TLR Level 3A	ONT	200	42.4428	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 2:00 TLR Level 3A	ONT	50	41.89825	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 2:00 TLR Level 3A	ONT	200	41.89825	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 3:00 TLR Level 3A	ONT	50	41.99068	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 3:00 TLR Level 3A	ONT	200	41.99068	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 4:00 TLR Level 3A	ONT	50	41.9003	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 4:00 TLR Level 3A	ONT	200	41.9003	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 5:00 TLR Level 3A	ONT	50	41.96511	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/18/2009 5:00 TLR Level 3A	ONT	200	41.96511	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 0:00 TLR Level 3A	ONT	50	42.21341	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 0:00 TLR Level 3A	ONT	200	42.21341	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 1:00 TLR Level 3A	ONT	50	42.18138	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 1:00 TLR Level 3A	ONT	200	42.18138	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 2:00 TLR Level 3A	ONT	50	42.34401	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 2:00 TLR Level 3A	ONT	200	42.34401	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 3:00 TLR Level 3A	ONT	50	42.18503	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 3:00 TLR Level 3A	ONT	200	42.18503	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 4:00 TLR Level 3A	ONT	50	42.18406	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 4:00 TLR Level 3A	ONT	200	42.18406	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 5:00 TLR Level 3A	ONT	50	42.2025	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 5:00 TLR Level 3A	ONT	200	42.2025	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 6:00 TLR Level 3A	ONT	50	42.23691	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/25/2009 6:00 TLR Level 3A	ONT	200	42.23691	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/26/2009 5:00 TLR Level 3A	ONT	50	43.23119	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/26/2009 5:00 TLR Level 3A	ONT	200	43.23119	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 0:00 TLR Level 3A	ONT	50	43.98567	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 0:00 TLR Level 3A	ONT	200	43.98567	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 1:00 TLR Level 3A	ONT	50	44.0767	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 1:00 TLR Level 3A	ONT	200	44.0767	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 2:00 TLR Level 3A	ONT	50	44.06885	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 2:00 TLR Level 3A	ONT	200	44.06885	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 3:00 TLR Level 3A	ONT	50	43.94231	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 3:00 TLR Level 3A	ONT	200	43.94231	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 4:00 TLR Level 3A	ONT	50	43.91465	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 4:00 TLR Level 3A	ONT	200	43.91465	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 5:00 TLR Level 3A	ONT	50	43.82406	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/27/2009 5:00 TLR Level 3A	ONT	200	43.82406	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/30/2009 5:00 TLR Level 3A	ONT	50	41.26313	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/30/2009 5:00 TLR Level 3A	ONT	200	41.26313	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/30/2009 6:00 TLR Level 3A	ONT	50	41.3409	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	1/30/2009 6:00 TLR Level 3A	ONT	200	41.3409	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	2/7/2009 0:00 TLR Level 3A	ONT	200	41.95514	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 1:00 TLR Level 3A	ONT	200	29.76964	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 2:00 TLR Level 3A	ONT	200	29.81234	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	2/7/2009 3:00 TLR Level 3A	ONT	200	29.7797	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 4:00 TLR Level 3A	ONT	200	29.90113	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 5:00 TLR Level 3A	ONT	200	29.3573	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 6:00 TLR Level 3A	ONT	200	31.52181	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 7:00 TLR Level 3A	ONT	200	29.79741	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/7/2009 23:00 TLR Level 3A	ONT	200	28.95098	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 0:00 TLR Level 3A	ONT	200	28.91769	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 1:00 TLR Level 3A	ONT	200	28.94695	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 2:00 TLR Level 3A	ONT	200	28.88141	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 3:00 TLR Level 3A	ONT	200	29.17188	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 4:00 TLR Level 3A	ONT	200	29.12341	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 5:00 TLR Level 3A	ONT	200	29.16431	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/8/2009 6:00 TLR Level 3A	ONT	200	28.60753	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	2/11/2009 1:00 TLR Level 3A	ONT	200	41.42076	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	2/11/2009 2:00 TLR Level 3A	ONT	200	41.43719	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	2/11/2009 3:00 TLR Level 3A	ONT	200	41.41885	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	2/11/2009 4:00 TLR Level 3A	ONT	200	41.42917	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	2/11/2009 5:00 TLR Level 3A	ONT	200	41.47359	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/17/2009 3:00 TLR Level 3A	ONT	200	29.23352	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/17/2009 4:00 TLR Level 3A	ONT	200	29.18116	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	2/17/2009 5:00 TLR Level 3A	ONT	200	29.1985	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/2/2009 0:00 TLR Level 3A	ONT	100	40.82767	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/2/2009 1:00 TLR Level 3A	ONT	100	40.77467	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/2/2009 2:00 TLR Level 3A	ONT	100	40.7959	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/2/2009 3:00 TLR Level 3A	ONT	100	40.87106	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/2/2009 4:00 TLR Level 3A	ONT	100	40.87407	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/2/2009 23:00 TLR Level 3A	ONT	100	42.21535	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 0:00 TLR Level 3A	ONT	100	42.10789	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 1:05 TLR Level 3A	ONT	100	42.12955	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 2:00 TLR Level 3A	ONT	100	42.10771	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 3:00 TLR Level 3A	ONT	100	42.21342	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 4:00 TLR Level 3A	ONT	100	42.53886	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 5:00 TLR Level 3A	ONT	100	42.48004	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 6:00 TLR Level 3A	ONT	100	42.61202	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 22:00 TLR Level 3A	ONT	100	43.61283	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/3/2009 23:00 TLR Level 3A	ONT	100	43.5483	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/4/2009 0:00 TLR Level 3A	ONT	100	43.33916	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/4/2009 1:00 TLR Level 3A	ONT	100	43.53006	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/4/2009 2:00 TLR Level 3A	ONT	100	43.90445	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/4/2009 3:00 TLR Level 3A	ONT	100	43.96458	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/4/2009 4:00 TLR Level 3A	ONT	100	43.59558	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	6124	10/11/2009 9:00 TLR Level 3A	MISO	100	5.245516	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 9:00 TLR Level 3A	NYIS	35	11.62718	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 9:00 TLR Level 3A	NYIS	100	11.77957	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 9:00 TLR Level 3A	NYIS	200	11.62718	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	6124	10/11/2009 10:00 TLR Level 3A	MISO	100	5.242888	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 10:00 TLR Level 3A	NYIS	35	11.54034	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 10:00 TLR Level 3A	NYIS	100	11.69344	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 10:00 TLR Level 3A	NYIS	100	11.54034	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 10:00 TLR Level 3A	NYIS	150	11.54034	49	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/11/2009 10:00 TLR Level 3A	NYIS	200	11.54034	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 11:00 TLR Level 3A	NYIS	35	11.62111	35	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7004	10/11/2009 11:00 TLR Level 3A	NYIS	100	11.77726	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 11:00 TLR Level 3A	NYIS	100	11.62111	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 11:00 TLR Level 3A	NYIS	200	11.62111	151	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 12:00 TLR Level 3A	NYIS	35	11.55135	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 12:00 TLR Level 3A	NYIS	100	11.55135	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 12:00 TLR Level 3A	NYIS	100	11.55135	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 12:00 TLR Level 3A	NYIS	200	11.55135	151	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 13:00 TLR Level 3A	NYIS	35	11.62721	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 13:00 TLR Level 3A	NYIS	100	11.78383	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 13:00 TLR Level 3A	NYIS	100	11.62721	15	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/11/2009 13:00 TLR Level 3A	NYIS	100	11.62721	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 13:00 TLR Level 3A	NYIS	200	11.62721	151	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 14:00 TLR Level 3A	NYIS	35	11.55287	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 14:00 TLR Level 3A	NYIS	100	11.7119	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 14:00 TLR Level 3A	NYIS	100	11.55287	12	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/11/2009 14:00 TLR Level 3A	NYIS	100	11.55287	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 14:00 TLR Level 3A	NYIS	200	11.55287	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 15:00 TLR Level 3A	NYIS	100	11.79779	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 15:00 TLR Level 3A	NYIS	100	11.6365	7	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/11/2009 15:00 TLR Level 3A	NYIS	100	11.6365	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 15:00 TLR Level 3A	NYIS	200	11.6365	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 16:00 TLR Level 3A	NYIS	100	11.80562	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 16:00 TLR Level 3A	NYIS	100	11.64445	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 16:00 TLR Level 3A	NYIS	200	11.64445	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 17:00 TLR Level 3A	NYIS	100	11.61692	35	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/11/2009 17:00 TLR Level 3A	NYIS	100	11.61692	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 17:00 TLR Level 3A	NYIS	150	11.61692	53	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/11/2009 17:00 TLR Level 3A	NYIS	200	11.61692	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 18:00 TLR Level 3A	NYIS	100	11.6946	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/11/2009 18:00 TLR Level 3A	NYIS	200	11.6946	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/14/2009 23:00 TLR Level 3A	ONT	100	42.68172	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/14/2009 23:00 TLR Level 3A	ONT	200	42.68172	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 0:00 TLR Level 3A	ONT	100	42.60444	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 0:00 TLR Level 3A	ONT	200	42.60444	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 1:00 TLR Level 3A	ONT	100	42.79861	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 1:00 TLR Level 3A	ONT	200	42.79861	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 2:00 TLR Level 3A	ONT	100	42.84143	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 2:00 TLR Level 3A	ONT	200	42.84143	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 3:00 TLR Level 3A	ONT	100	42.75063	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 3:00 TLR Level 3A	ONT	200	42.75063	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 4:00 TLR Level 3A	ONT	100	42.84139	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/15/2009 4:00 TLR Level 3A	ONT	200	42.84139	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 3:00 TLR Level 3A	ONT	50	43.82012	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 3:00 TLR Level 3A	ONT	100	43.82012	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 3:00 TLR Level 3A	ONT	200	43.82012	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 3:00 TLR Level 3A	ONT	500	43.82012	400	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 4:00 TLR Level 3A	ONT	200	43.75503	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 4:00 TLR Level 3A	ONT	500	43.75503	400	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 23:00 TLR Level 3A	ONT	100	43.06097	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/16/2009 23:00 TLR Level 3A	ONT	200	43.06097	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 0:00 TLR Level 3A	ONT	100	43.11135	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 0:00 TLR Level 3A	ONT	200	43.11135	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	9160	10/17/2009 1:00	TLR Level 3A	ONT	100	43.02612	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 1:00	TLR Level 3A	ONT	200	43.02612	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 2:00	TLR Level 3A	ONT	100	43.10145	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 2:00	TLR Level 3A	ONT	200	43.10145	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 3:00	TLR Level 3A	ONT	100	43.02577	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 3:00	TLR Level 3A	ONT	200	43.02577	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 4:00	TLR Level 3A	ONT	100	43.17712	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 4:00	TLR Level 3A	ONT	100	43.17712	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 4:00	TLR Level 3A	ONT	200	43.17712	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 4:00	TLR Level 3A	ONT	200	43.17712	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 22:00	TLR Level 3A	ONT	100	43.17852	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 22:00	TLR Level 3A	ONT	200	43.17852	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 23:00	TLR Level 3A	ONT	100	43.17732	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/17/2009 23:00	TLR Level 3A	ONT	200	43.17732	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 0:00	TLR Level 3A	ONT	100	43.28644	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 0:00	TLR Level 3A	ONT	200	43.28644	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 1:00	TLR Level 3A	ONT	100	43.24629	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 1:00	TLR Level 3A	ONT	100	43.24629	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 1:00	TLR Level 3A	ONT	200	43.24629	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 1:00	TLR Level 3A	ONT	200	43.24629	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 2:00	TLR Level 3A	ONT	100	43.28644	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 2:00	TLR Level 3A	ONT	200	43.28644	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 3:00	TLR Level 3A	ONT	100	43.24921	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 3:00	TLR Level 3A	ONT	200	43.24921	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 4:00	TLR Level 3A	ONT	100	43.37857	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 4:00	TLR Level 3A	ONT	200	43.37857	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 5:00	TLR Level 3A	ONT	100	43.43248	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 5:00	TLR Level 3A	ONT	200	43.43248	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 22:00	TLR Level 3A	ONT	100	43.0462	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 22:00	TLR Level 3A	ONT	200	43.0462	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 23:00	TLR Level 3A	ONT	100	43.12883	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/18/2009 23:00	TLR Level 3A	ONT	200	43.12883	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 0:00	TLR Level 3A	ONT	100	43.50467	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 0:00	TLR Level 3A	ONT	200	43.50467	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 1:00	TLR Level 3A	ONT	100	43.48275	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 1:00	TLR Level 3A	ONT	200	43.48275	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 2:00	TLR Level 3A	ONT	100	43.4921	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 2:00	TLR Level 3A	ONT	200	43.4921	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 3:00	TLR Level 3A	ONT	100	43.34373	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 3:00	TLR Level 3A	ONT	200	43.34373	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 4:00	TLR Level 3A	ONT	100	43.32151	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 4:00	TLR Level 3A	ONT	200	43.32151	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 22:00	TLR Level 3A	ONT	100	43.30016	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 22:00	TLR Level 3A	ONT	200	43.30016	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 23:00	TLR Level 3A	ONT	100	43.39583	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/19/2009 23:00	TLR Level 3A	ONT	200	43.39583	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 0:00	TLR Level 3A	ONT	100	43.63924	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 0:00	TLR Level 3A	ONT	200	43.63924	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 1:00	TLR Level 3A	ONT	100	43.42002	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 1:00	TLR Level 3A	ONT	200	43.42002	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 2:00	TLR Level 3A	ONT	100	43.67537	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 2:00	TLR Level 3A	ONT	200	43.67537	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	9160	10/20/2009 3:00	TLR Level 3A	ONT	100	43.7071	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 3:00	TLR Level 3A	ONT	200	43.7071	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 4:00	TLR Level 3A	ONT	100	43.58126	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 4:00	TLR Level 3A	ONT	200	43.58126	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 22:00	TLR Level 3A	ONT	100	42.24589	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 22:00	TLR Level 3A	ONT	200	42.24589	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 23:00	TLR Level 3A	ONT	100	42.20913	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/20/2009 23:00	TLR Level 3A	ONT	200	42.20913	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 0:00	TLR Level 3A	ONT	100	42.31657	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 0:00	TLR Level 3A	ONT	200	42.31657	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 1:00	TLR Level 3A	ONT	100	42.2046	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 1:00	TLR Level 3A	ONT	200	42.2046	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 2:00	TLR Level 3A	ONT	100	42.30204	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 2:00	TLR Level 3A	ONT	200	42.30204	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 3:00	TLR Level 3A	ONT	100	42.26279	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 3:00	TLR Level 3A	ONT	200	42.26279	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 4:00	TLR Level 3A	ONT	100	42.26828	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	10/21/2009 4:00	TLR Level 3A	ONT	200	42.26828	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/21/2009 22:00	TLR Level 3A	ONT	100	28.5665	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/21/2009 22:00	TLR Level 3A	ONT	200	28.5665	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/21/2009 23:00	TLR Level 3A	ONT	100	28.60379	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/21/2009 23:00	TLR Level 3A	ONT	200	28.60379	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 0:00	TLR Level 3A	ONT	100	28.45569	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 0:00	TLR Level 3A	ONT	200	28.45569	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 1:00	TLR Level 3A	ONT	100	28.77417	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 1:00	TLR Level 3A	ONT	200	28.77417	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 2:00	TLR Level 3A	ONT	100	28.81849	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 2:00	TLR Level 3A	ONT	200	28.81849	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 3:00	TLR Level 3A	ONT	100	28.63942	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 3:00	TLR Level 3A	ONT	200	28.63942	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 4:00	TLR Level 3A	ONT	100	29.95289	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 4:00	TLR Level 3A	ONT	200	29.95289	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 22:00	TLR Level 3A	ONT	100	29.05036	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 22:00	TLR Level 3A	ONT	200	29.05036	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 23:00	TLR Level 3A	ONT	100	29.01755	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/22/2009 23:00	TLR Level 3A	ONT	200	29.01755	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/23/2009 0:00	TLR Level 3A	ONT	100	29.95645	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/23/2009 0:00	TLR Level 3A	ONT	200	29.95645	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 10:00	TLR Level 3A	NYIS	100	11.12215	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 10:00	TLR Level 3A	NYIS	200	11.12215	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 11:00	TLR Level 3A	NYIS	100	11.20547	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 11:00	TLR Level 3A	NYIS	200	11.20547	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 12:00	TLR Level 3A	NYIS	100	11.11923	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 12:00	TLR Level 3A	NYIS	100	11.11923	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 12:00	TLR Level 3A	NYIS	200	11.11923	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 12:00	TLR Level 3A	NYIS	200	11.11923	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 13:00	TLR Level 3A	NYIS	100	11.20937	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 13:00	TLR Level 3A	NYIS	200	11.20937	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 14:00	TLR Level 3A	NYIS	100	11.11871	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 14:00	TLR Level 3A	NYIS	200	11.11871	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 15:00	TLR Level 3A	NYIS	100	11.36783	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 15:00	TLR Level 3A	NYIS	200	11.36783	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7004	10/24/2009 16:00	TLR Level 3A	NYIS	100	11.27239	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 16:00	TLR Level 3A	NYIS	200	11.27239	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 17:00	TLR Level 3A	NYIS	100	11.34944	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 17:00	TLR Level 3A	NYIS	200	11.34944	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 18:00	TLR Level 3A	NYIS	100	11.38436	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 18:00	TLR Level 3A	NYIS	200	11.38436	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 19:00	TLR Level 3A	NYIS	100	11.39113	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 19:00	TLR Level 3A	NYIS	200	11.39113	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 20:00	TLR Level 3A	NYIS	100	11.38465	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 20:00	TLR Level 3A	NYIS	200	11.38465	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 21:00	TLR Level 3A	NYIS	100	11.39124	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 21:00	TLR Level 3A	NYIS	200	11.39124	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 22:00	TLR Level 3A	NYIS	100	11.36074	65	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 22:00	TLR Level 3A	NYIS	200	11.36074	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/24/2009 22:00	TLR Level 3A	ONT	100	30.46054	65	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/24/2009 22:00	TLR Level 3A	ONT	200	30.46054	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 23:00	TLR Level 3A	NYIS	100	11.2078	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/24/2009 23:00	TLR Level 3A	NYIS	200	11.2078	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/24/2009 23:00	TLR Level 3A	ONT	100	30.29784	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/24/2009 23:00	TLR Level 3A	ONT	200	30.29784	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 0:00	TLR Level 3A	NYIS	100	11.16847	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 0:00	TLR Level 3A	NYIS	200	11.16847	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 0:00	TLR Level 3A	ONT	100	30.61042	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 0:00	TLR Level 3A	ONT	200	30.61042	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 1:00	TLR Level 3A	NYIS	100	11.21426	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 1:00	TLR Level 3A	NYIS	200	11.21426	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 1:00	TLR Level 3A	ONT	100	30.50949	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 1:00	TLR Level 3A	ONT	200	30.50949	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 2:00	TLR Level 3A	NYIS	50	11.03169	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 2:00	TLR Level 3A	NYIS	100	11.03169	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 2:00	TLR Level 3A	NYIS	200	11.03169	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 2:00	TLR Level 3A	ONT	50	30.6903	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 2:00	TLR Level 3A	ONT	100	30.6903	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 2:00	TLR Level 3A	ONT	200	30.6903	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 3:00	TLR Level 3A	NYIS	100	11.21416	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 3:00	TLR Level 3A	NYIS	200	11.21416	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 3:00	TLR Level 3A	ONT	100	30.50857	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 3:00	TLR Level 3A	ONT	200	30.50857	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 4:00	TLR Level 3A	NYIS	100	11.2	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 4:00	TLR Level 3A	NYIS	200	11.2	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 4:00	TLR Level 3A	ONT	100	30.55738	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 4:00	TLR Level 3A	ONT	200	30.55738	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 5:00	TLR Level 3A	NYIS	100	11.2044	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 5:00	TLR Level 3A	NYIS	200	11.2044	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 5:00	TLR Level 3A	ONT	100	30.57911	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 5:00	TLR Level 3A	ONT	200	30.57911	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 6:00	TLR Level 3A	NYIS	100	11.21872	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 6:00	TLR Level 3A	NYIS	200	11.21872	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 7:00	TLR Level 3A	NYIS	100	11.24094	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 7:00	TLR Level 3A	NYIS	200	11.24094	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 8:00	TLR Level 3A	NYIS	35	11.20749	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 8:00	TLR Level 3A	NYIS	100	11.20749	50	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7004	10/25/2009 8:00 TLR Level 3A	NYIS	200	11.20749	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 9:00 TLR Level 3A	NYIS	35	11.18743	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 9:00 TLR Level 3A	NYIS	100	11.18743	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 9:00 TLR Level 3A	NYIS	200	11.18743	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 10:00 TLR Level 3A	NYIS	35	11.20373	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 10:00 TLR Level 3A	NYIS	100	11.20373	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 10:00 TLR Level 3A	NYIS	200	11.20373	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 11:00 TLR Level 3A	NYIS	35	11.21059	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 11:00 TLR Level 3A	NYIS	100	11.21059	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 11:00 TLR Level 3A	NYIS	200	11.21059	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 12:00 TLR Level 3A	NYIS	35	11.22221	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 12:00 TLR Level 3A	NYIS	100	11.22221	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 12:00 TLR Level 3A	NYIS	200	11.22221	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 13:00 TLR Level 3A	NYIS	35	11.2188	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 13:00 TLR Level 3A	NYIS	100	11.2188	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 13:00 TLR Level 3A	NYIS	200	11.2188	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 14:00 TLR Level 3A	NYIS	35	11.23294	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 14:00 TLR Level 3A	NYIS	100	11.23294	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 14:00 TLR Level 3A	NYIS	200	11.23294	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 15:00 TLR Level 3A	NYIS	100	11.22169	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 15:00 TLR Level 3A	NYIS	200	11.22169	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 16:00 TLR Level 3A	NYIS	75	11.43868	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 16:00 TLR Level 3A	NYIS	100	11.2517	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 16:00 TLR Level 3A	NYIS	200	11.2517	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 16:00 TLR Level 3A	NYIS	50	11.2517	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 17:00 TLR Level 3A	NYIS	20	11.33105	20	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 17:00 TLR Level 3A	NYIS	75	11.51247	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 17:00 TLR Level 3A	NYIS	100	11.33105	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 17:00 TLR Level 3A	NYIS	200	11.33105	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 17:00 TLR Level 3A	NYIS	50	11.33105	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 18:00 TLR Level 3A	NYIS	20	11.34023	20	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 18:00 TLR Level 3A	NYIS	75	11.52171	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 18:00 TLR Level 3A	NYIS	100	11.34023	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 18:00 TLR Level 3A	NYIS	75	11.34023	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 18:00 TLR Level 3A	NYIS	200	11.34023	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 19:00 TLR Level 3A	NYIS	20	11.32836	20	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 19:00 TLR Level 3A	NYIS	75	11.51218	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 19:00 TLR Level 3A	NYIS	100	11.32836	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 19:00 TLR Level 3A	NYIS	200	11.32836	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 20:00 TLR Level 3A	NYIS	20	11.32192	20	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 20:00 TLR Level 3A	NYIS	100	11.32192	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 20:00 TLR Level 3A	NYIS	200	11.32192	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 21:00 TLR Level 3A	NYIS	20	11.34132	20	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 21:00 TLR Level 3A	NYIS	100	11.34132	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/25/2009 21:00 TLR Level 3A	NYIS	200	11.34132	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 23:00 TLR Level 3A	ONT	100	29.34023	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/25/2009 23:00 TLR Level 3A	ONT	200	29.34023	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 0:00 TLR Level 3A	ONT	100	29.63234	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 0:00 TLR Level 3A	ONT	200	29.63234	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 1:00 TLR Level 3A	ONT	100	29.3432	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 1:00 TLR Level 3A	ONT	200	29.3432	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 2:00 TLR Level 3A	ONT	100	29.92993	100	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	10/26/2009 2:00	TLR Level 3A	ONT	200	29.92993	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 3:00	TLR Level 3A	ONT	100	30.21098	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	10/26/2009 3:00	TLR Level 3A	ONT	200	30.21098	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/31/2009 20:00	TLR Level 3A	NYIS	100	10.82114	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/31/2009 20:00	TLR Level 3A	NYIS	200	10.82114	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/31/2009 21:00	TLR Level 3A	NYIS	100	10.78851	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/31/2009 21:00	TLR Level 3A	NYIS	200	10.78851	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/31/2009 22:00	TLR Level 3A	NYIS	100	10.79616	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	10/31/2009 22:00	TLR Level 3A	NYIS	150	10.79616	150	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	10/31/2009 22:00	TLR Level 3A	NYIS	200	10.79616	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 9:00	TLR Level 3A	NYIS	100	10.9015	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 9:00	TLR Level 3A	NYIS	200	10.9015	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 10:00	TLR Level 3A	NYIS	100	10.7651	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 10:00	TLR Level 3A	NYIS	200	10.7651	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 11:00	TLR Level 3A	NYIS	100	10.76968	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 11:00	TLR Level 3A	NYIS	100	10.76968	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 11:00	TLR Level 3A	NYIS	200	10.76968	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 11:00	TLR Level 3A	NYIS	200	10.76968	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 12:00	TLR Level 3A	NYIS	100	10.76984	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	11/1/2009 12:00	TLR Level 3A	NYIS	200	10.76984	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 9:00	TLR Level 3A	NYIS	100	15.00158	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 9:00	TLR Level 3A	NYIS	200	15.00158	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 10:00	TLR Level 3A	NYIS	100	14.94856	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 10:00	TLR Level 3A	NYIS	200	14.94856	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 11:00	TLR Level 3A	NYIS	100	14.95406	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 11:00	TLR Level 3A	NYIS	200	14.95406	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 12:00	TLR Level 3A	NYIS	100	14.63685	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 12:00	TLR Level 3A	NYIS	200	14.63685	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7001	11/14/2009 12:00	TLR Level 3A	NYIS	100	13.77881	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7001	11/14/2009 12:00	TLR Level 3A	NYIS	200	13.77881	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 13:00	TLR Level 3A	NYIS	100	14.65197	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 13:00	TLR Level 3A	NYIS	200	14.65197	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 14:00	TLR Level 3A	NYIS	100	14.67958	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 14:00	TLR Level 3A	NYIS	200	14.67958	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 15:00	TLR Level 3A	NYIS	100	15.36097	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 15:00	TLR Level 3A	NYIS	200	15.36097	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 16:00	TLR Level 3A	NYIS	100	15.36017	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 16:00	TLR Level 3A	NYIS	200	15.36017	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 17:00	TLR Level 3A	NYIS	100	15.36175	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 17:00	TLR Level 3A	NYIS	200	15.36175	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 18:00	TLR Level 3A	NYIS	100	15.35423	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 18:00	TLR Level 3A	NYIS	200	15.35423	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 19:00	TLR Level 3A	NYIS	100	15.35157	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 19:00	TLR Level 3A	NYIS	200	15.35157	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 20:00	TLR Level 3A	NYIS	100	15.35401	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 20:00	TLR Level 3A	NYIS	200	15.35401	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/14/2009 21:00	TLR Level 3A	NYIS	200	15.35495	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 0:00	TLR Level 3A	ONT	100	36.25986	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 0:00	TLR Level 3A	ONT	200	36.25986	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 1:00	TLR Level 3A	ONT	100	36.44474	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 1:00	TLR Level 3A	ONT	200	36.44474	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 2:00	TLR Level 3A	ONT	100	36.65179	100	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	9160	11/15/2009 2:00 TLR Level 3A	ONT	200	36.65179	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 3:00 TLR Level 3A	ONT	100	36.68503	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 3:00 TLR Level 3A	ONT	200	36.68503	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 4:00 TLR Level 3A	ONT	100	36.6674	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 4:00 TLR Level 3A	ONT	200	36.6674	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 5:00 TLR Level 3A	ONT	100	36.68136	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 5:00 TLR Level 3A	ONT	200	36.68136	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 6:00 TLR Level 3A	ONT	200	36.41496	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 7:00 TLR Level 3A	ONT	100	36.46741	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/15/2009 7:00 TLR Level 3A	ONT	200	36.46741	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 11:00 TLR Level 3A	NYIS	100	15.39104	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 11:00 TLR Level 3A	NYIS	200	15.39104	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 12:00 TLR Level 3A	NYIS	100	15.39381	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 12:00 TLR Level 3A	NYIS	200	15.39381	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 13:00 TLR Level 3A	NYIS	100	15.3604	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 13:00 TLR Level 3A	NYIS	200	15.3604	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 14:00 TLR Level 3A	NYIS	100	15.42912	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	11/15/2009 14:00 TLR Level 3A	NYIS	200	15.42912	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 0:00 TLR Level 3A	ONT	40	37.75227	40	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 0:00 TLR Level 3A	ONT	100	37.75227	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 0:00 TLR Level 3A	ONT	200	37.75227	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 1:00 TLR Level 3A	ONT	100	37.66871	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 1:00 TLR Level 3A	ONT	200	37.66871	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 2:00 TLR Level 3A	ONT	100	37.14978	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 2:00 TLR Level 3A	ONT	200	37.14978	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 3:00 TLR Level 3A	ONT	100	37.19025	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 3:00 TLR Level 3A	ONT	200	37.19025	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 4:00 TLR Level 3A	ONT	100	37.1978	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 4:00 TLR Level 3A	ONT	200	37.1978	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 5:00 TLR Level 3A	ONT	100	38.0317	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 5:00 TLR Level 3A	ONT	200	38.0317	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 6:00 TLR Level 3A	ONT	100	37.8377	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	11/16/2009 6:00 TLR Level 3A	ONT	200	37.8377	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 0:00 TLR Level 3A	ONT	100	25.2412	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 0:00 TLR Level 3A	ONT	200	25.2412	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 1:00 TLR Level 3A	ONT	100	25.25558	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 1:00 TLR Level 3A	ONT	200	25.25558	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 2:00 TLR Level 3A	ONT	100	25.24096	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 2:00 TLR Level 3A	ONT	200	25.24096	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 3:00 TLR Level 3A	ONT	100	25.23728	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 3:00 TLR Level 3A	ONT	200	25.23728	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 4:00 TLR Level 3A	ONT	100	25.2132	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 4:00 TLR Level 3A	ONT	200	25.2132	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 5:00 TLR Level 3A	ONT	100	25.23395	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 5:00 TLR Level 3A	ONT	200	25.23395	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 23:00 TLR Level 3A	ONT	100	25.49124	65	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/17/2009 23:00 TLR Level 3A	ONT	200	25.49124	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 0:00 TLR Level 3A	ONT	100	25.51776	65	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 0:00 TLR Level 3A	ONT	200	25.51776	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 1:00 TLR Level 3A	ONT	100	25.49797	45	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 1:00 TLR Level 3A	ONT	200	25.49797	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 2:00 TLR Level 3A	ONT	200	25.53596	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	11/18/2009 3:00	TLR Level 3A	ONT	200	25.49515	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 4:00	TLR Level 3A	ONT	100	25.55236	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 4:00	TLR Level 3A	ONT	200	25.55236	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 5:00	TLR Level 3A	ONT	100	25.543	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/18/2009 5:00	TLR Level 3A	ONT	200	25.543	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 0:00	TLR Level 3A	ONT	100	25.08687	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 0:00	TLR Level 3A	ONT	200	25.08687	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 1:00	TLR Level 3A	ONT	100	25.16472	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 1:00	TLR Level 3A	ONT	200	25.16472	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 2:00	TLR Level 3A	ONT	100	25.15274	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 2:00	TLR Level 3A	ONT	200	25.15274	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 3:00	TLR Level 3A	ONT	100	25.13118	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 3:00	TLR Level 3A	ONT	200	25.13118	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 4:00	TLR Level 3A	ONT	100	25.09777	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 4:00	TLR Level 3A	ONT	200	25.09777	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 5:00	TLR Level 3A	ONT	100	25.12133	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 5:00	TLR Level 3A	ONT	200	25.12133	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 6:00	TLR Level 3A	ONT	100	25.12502	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 6:00	TLR Level 3A	ONT	200	25.12502	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 7:00	TLR Level 3A	ONT	100	24.77683	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 7:00	TLR Level 3A	ONT	200	24.77683	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 23:00	TLR Level 3A	ONT	100	24.43961	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 23:00	TLR Level 3A	ONT	200	24.43961	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/19/2009 23:00	TLR Level 3A	ONT	50	24.56309	1	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 0:00	TLR Level 3A	ONT	100	24.43877	65	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 0:00	TLR Level 3A	ONT	200	24.43877	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 1:00	TLR Level 3A	ONT	100	24.55332	65	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 1:00	TLR Level 3A	ONT	200	24.55332	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 2:00	TLR Level 3A	ONT	100	24.42019	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 2:00	TLR Level 3A	ONT	200	24.42019	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 3:00	TLR Level 3A	ONT	100	24.52903	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 3:00	TLR Level 3A	ONT	200	24.52903	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 4:00	TLR Level 3A	ONT	200	24.39257	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 4:00	TLR Level 3A	ONT	50	24.48322	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 5:00	TLR Level 3A	ONT	200	24.43655	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 5:00	TLR Level 3A	ONT	50	24.52866	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/20/2009 6:00	TLR Level 3A	ONT	200	24.4998	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 3:00	TLR Level 3A	ONT	150	24.60733	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 3:00	TLR Level 3A	ONT	150	24.60733	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 3:00	TLR Level 3A	ONT	100	24.60733	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 3:00	TLR Level 3A	ONT	100	24.60733	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 3:00	TLR Level 3A	ONT	200	24.60733	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 3:00	TLR Level 3A	ONT	200	24.60733	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 4:00	TLR Level 3A	ONT	150	24.69509	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 4:00	TLR Level 3A	ONT	100	24.69509	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 4:00	TLR Level 3A	ONT	200	24.69509	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 5:00	TLR Level 3A	ONT	150	24.61214	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 5:00	TLR Level 3A	ONT	100	24.61215	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 5:00	TLR Level 3A	ONT	200	24.61215	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 6:00	TLR Level 3A	ONT	150	24.70024	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 6:00	TLR Level 3A	ONT	100	24.70024	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 6:00	TLR Level 3A	ONT	200	24.70024	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	11/22/2009 7:00 TLR Level 3A	ONT	150	24.57776	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 7:00 TLR Level 3A	ONT	100	24.57777	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/22/2009 7:00 TLR Level 3A	ONT	200	24.57777	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 0:00 TLR Level 3A	ONT	100	24.43234	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 0:00 TLR Level 3A	ONT	200	24.43234	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 1:00 TLR Level 3A	ONT	100	24.56411	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 1:00 TLR Level 3A	ONT	200	24.56411	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 2:00 TLR Level 3A	ONT	100	24.40478	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 2:00 TLR Level 3A	ONT	200	24.40478	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 3:00 TLR Level 3A	ONT	100	24.55393	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 3:00 TLR Level 3A	ONT	200	24.55393	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 4:00 TLR Level 3A	ONT	100	24.51611	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 4:00 TLR Level 3A	ONT	200	24.51611	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 5:00 TLR Level 3A	ONT	100	24.25655	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/23/2009 5:00 TLR Level 3A	ONT	200	24.25655	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 0:00 TLR Level 3A	ONT	100	24.97797	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 0:00 TLR Level 3A	ONT	200	24.97797	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 1:00 TLR Level 3A	ONT	100	25.09366	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 1:00 TLR Level 3A	ONT	200	25.09366	200	Curtailed	Next Hour	CA - MISO
ONT	MISO-IMP (ONT)	7009	11/26/2009 2:00 TLR Level 3A	ONT	100	25.04731	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 2:00 TLR Level 3A	ONT	200	25.04731	153	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 3:00 TLR Level 3A	ONT	100	25.00406	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 3:00 TLR Level 3A	ONT	200	25.00406	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 4:00 TLR Level 3A	ONT	100	24.96256	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 4:00 TLR Level 3A	ONT	200	24.96256	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/26/2009 5:00 TLR Level 3A	ONT	100	25.01057	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 1:00 TLR Level 3A	ONT	100	25.3444	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 1:00 TLR Level 3A	ONT	200	25.3444	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 2:00 TLR Level 3A	ONT	100	25.46782	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 2:00 TLR Level 3A	ONT	200	25.46782	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 3:00 TLR Level 3A	ONT	100	25.39016	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 3:00 TLR Level 3A	ONT	200	25.39016	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 4:00 TLR Level 3A	ONT	200	25.46979	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 5:00 TLR Level 3A	ONT	100	25.37391	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/27/2009 5:00 TLR Level 3A	ONT	200	25.37391	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	11/29/2009 0:00 TLR Level 3A	ONT	100	25.46829	100	Curtailed	Next Hour	CA

[illegible]

ONT	MISO-IMP (ONT)	7004	4/10/2011 7:00	TLR Level 3A	NYIS	100	12.85282	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 7:00	TLR Level 3A	NYIS	100	12.85282	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 8:00	TLR Level 3A	NYIS	100	13.06532	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 8:00	TLR Level 3A	NYIS	100	13.06532	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 8:00	TLR Level 3A	NYIS	200	13.06532	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 9:00	TLR Level 3A	NYIS	100	12.85761	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 9:00	TLR Level 3A	NYIS	100	12.85761	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 9:00	TLR Level 3A	NYIS	200	12.85761	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 10:00	TLR Level 3A	NYIS	100	13.05513	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 10:00	TLR Level 3A	NYIS	100	13.05513	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/10/2011 10:00	TLR Level 3A	NYIS	200	13.05513	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/11/2011 13:00	TLR Level 3A	NYIS	100	11.38172	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/11/2011 13:00	TLR Level 3A	NYIS	200	11.38172	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/11/2011 14:00	TLR Level 3A	NYIS	100	11.36254	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/11/2011 14:00	TLR Level 3A	NYIS	200	11.36254	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/11/2011 22:00	TLR Level 3A	ONT	100	29.3592	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/11/2011 22:00	TLR Level 3A	ONT	200	29.3592	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/11/2011 23:00	TLR Level 3A	ONT	100	29.37195	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 0:00	TLR Level 3A	ONT	100	29.6383	70	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 0:00	TLR Level 3A	ONT	170	29.6383	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 1:00	TLR Level 3A	ONT	250	29.52879	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 1:00	TLR Level 3A	ONT	50	29.52879	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 1:00	TLR Level 3A	ONT	50	29.52879	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 1:00	TLR Level 3A	ONT	100	29.52879	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 1:00	TLR Level 3A	ONT	170	29.52879	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 2:00	TLR Level 3A	ONT	50	29.55354	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 2:00	TLR Level 3A	ONT	100	29.55354	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 2:00	TLR Level 3A	ONT	170	29.55354	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 3:00	TLR Level 3A	ONT	50	29.52543	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 3:00	TLR Level 3A	ONT	100	29.52543	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 3:00	TLR Level 3A	ONT	50	29.52543	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 3:00	TLR Level 3A	ONT	170	29.52543	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 4:00	TLR Level 3A	ONT	100	29.53917	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 4:00	TLR Level 3A	ONT	50	29.53917	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 4:00	TLR Level 3A	ONT	170	29.53917	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 4:00	TLR Level 3A	ONT	170	29.53917	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 8:00	TLR Level 3A	NYIS	100	10.97603	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 8:00	TLR Level 3A	NYIS	100	10.97603	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 8:00	TLR Level 3A	NYIS	50	10.97603	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 8:00	TLR Level 3A	NYIS	170	10.97603	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 9:00	TLR Level 3A	NYIS	50	10.95854	8	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/12/2011 9:00	TLR Level 3A	NYIS	250	10.95854	36	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/12/2011 9:00	TLR Level 3A	NYIS	100	10.95854	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 9:00	TLR Level 3A	NYIS	170	10.95854	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 10:00	TLR Level 3A	NYIS	50	10.96676	21	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/12/2011 10:00	TLR Level 3A	NYIS	250	10.96676	101	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/12/2011 10:00	TLR Level 3A	NYIS	100	10.96676	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 10:00	TLR Level 3A	NYIS	170	10.96676	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 11:00	TLR Level 3A	NYIS	100	10.9241	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 11:00	TLR Level 3A	NYIS	170	10.9241	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 12:00	TLR Level 3A	NYIS	100	11.044	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 12:00	TLR Level 3A	NYIS	170	11.044	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 13:00	TLR Level 3A	NYIS	100	11.03554	100	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7004	4/12/2011 13:00	TLR Level 3A	NYIS	170	11.03554	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 14:00	TLR Level 3A	NYIS	100	11.23039	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 14:00	TLR Level 3A	NYIS	170	11.23039	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 15:00	TLR Level 3A	NYIS	100	11.26828	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 15:00	TLR Level 3A	NYIS	170	11.26828	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 16:00	TLR Level 3A	NYIS	100	11.28283	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 16:00	TLR Level 3A	NYIS	170	11.28283	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 17:00	TLR Level 3A	NYIS	100	11.24735	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 17:00	TLR Level 3A	NYIS	170	11.24735	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 18:00	TLR Level 3A	NYIS	21	11.37068	21	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 18:00	TLR Level 3A	NYIS	150	11.37068	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 18:00	TLR Level 3A	NYIS	100	11.37068	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 18:00	TLR Level 3A	NYIS	170	11.37068	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 18:00	TLR Level 3A	NYIS	100	11.28504	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 19:00	TLR Level 3A	NYIS	100	11.28504	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/12/2011 19:00	TLR Level 3A	NYIS	170	11.28504	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 21:00	TLR Level 3A	ONT	100	28.80161	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 21:00	TLR Level 3A	ONT	170	28.80161	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 22:00	TLR Level 3A	ONT	100	28.82444	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 22:00	TLR Level 3A	ONT	170	28.82444	170	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/12/2011 23:00	TLR Level 3A	ONT	100	28.82615	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 0:00	TLR Level 3A	ONT	100	28.82788	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 0:00	TLR Level 3A	ONT	200	28.82788	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 1:00	TLR Level 3A	ONT	100	28.84229	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 1:00	TLR Level 3A	ONT	200	28.84229	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 2:00	TLR Level 3A	ONT	100	28.68327	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 2:00	TLR Level 3A	ONT	200	28.68327	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 3:00	TLR Level 3A	ONT	100	28.82044	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 3:00	TLR Level 3A	ONT	200	28.82044	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 10:00	TLR Level 3A	NYIS	42	11.45475	12	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/13/2011 10:00	TLR Level 3A	NYIS	250	11.45475	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 10:00	TLR Level 3A	NYIS	150	11.45475	46	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/13/2011 10:00	TLR Level 3A	NYIS	100	11.45475	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 10:00	TLR Level 3A	NYIS	200	11.45475	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 11:00	TLR Level 3A	NYIS	250	11.48116	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 11:00	TLR Level 3A	NYIS	100	11.48116	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 11:00	TLR Level 3A	NYIS	200	11.48116	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 12:00	TLR Level 3A	NYIS	250	11.5044	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 12:00	TLR Level 3A	NYIS	150	11.5044	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 12:00	TLR Level 3A	NYIS	100	11.5044	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 12:00	TLR Level 3A	NYIS	200	11.5044	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 13:00	TLR Level 3A	NYIS	150	11.44139	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 13:00	TLR Level 3A	NYIS	100	11.44139	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 13:00	TLR Level 3A	NYIS	200	11.44139	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 14:00	TLR Level 3A	NYIS	150	11.39759	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 14:00	TLR Level 3A	NYIS	100	11.39759	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 14:00	TLR Level 3A	NYIS	200	11.39759	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 15:00	TLR Level 3A	NYIS	150	11.40241	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 15:00	TLR Level 3A	NYIS	100	11.40241	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 15:00	TLR Level 3A	NYIS	200	11.40241	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 16:00	TLR Level 3A	NYIS	100	11.40831	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 16:00	TLR Level 3A	NYIS	100	11.40831	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 16:00	TLR Level 3A	NYIS	200	11.40831	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7004	4/13/2011 16:00 TLR Level 3A	NYIS	200	11.40831	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 17:00 TLR Level 3A	NYIS	150	11.39189	113	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 17:00 TLR Level 3A	NYIS	100	11.39189	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 17:00 TLR Level 3A	NYIS	200	11.39189	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 18:00 TLR Level 3A	NYIS	100	11.46431	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 18:00 TLR Level 3A	NYIS	200	11.46431	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 19:00 TLR Level 3A	NYIS	100	11.42882	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/13/2011 19:00 TLR Level 3A	NYIS	200	11.42882	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 23:00 TLR Level 3A	ONT	100	28.97132	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/13/2011 23:00 TLR Level 3A	ONT	200	28.97132	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 0:00 TLR Level 3A	ONT	100	28.95517	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 0:00 TLR Level 3A	ONT	200	28.95517	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 1:00 TLR Level 3A	ONT	100	29.05469	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 1:00 TLR Level 3A	ONT	200	29.05469	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 2:00 TLR Level 3A	ONT	100	29.06412	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 2:00 TLR Level 3A	ONT	200	29.06412	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 3:00 TLR Level 3A	ONT	100	29.0876	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 3:00 TLR Level 3A	ONT	200	29.0876	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 10:00 TLR Level 3A	NYIS	50	11.19362	1	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/14/2011 10:00 TLR Level 3A	NYIS	250	11.19362	4	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/14/2011 10:00 TLR Level 3A	NYIS	150	11.19362	6	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/14/2011 10:00 TLR Level 3A	NYIS	100	11.19362	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 10:00 TLR Level 3A	NYIS	200	11.19362	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 11:00 TLR Level 3A	NYIS	100	11.18846	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 11:00 TLR Level 3A	NYIS	200	11.18846	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 12:00 TLR Level 3A	NYIS	100	11.21427	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 12:00 TLR Level 3A	NYIS	200	11.21427	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 12:00 TLR Level 3A	ONT	100	28.4988	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 12:00 TLR Level 3A	ONT	200	28.4988	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 13:00 TLR Level 3A	NYIS	250	11.29124	174	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/14/2011 13:00 TLR Level 3A	NYIS	100	11.29124	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 13:00 TLR Level 3A	NYIS	200	11.29124	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 13:00 TLR Level 3A	ONT	250	28.80372	174	Curtailed	Next Hour	TLR on Flowgate 7004
ONT	MISO-IMP (ONT)	7009	4/14/2011 13:00 TLR Level 3A	ONT	100	28.80372	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 13:00 TLR Level 3A	ONT	200	28.80372	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 14:00 TLR Level 3A	NYIS	100	11.49616	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/14/2011 14:00 TLR Level 3A	NYIS	200	11.49616	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 14:00 TLR Level 3A	ONT	100	28.83196	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 14:00 TLR Level 3A	ONT	200	28.83196	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 23:00 TLR Level 3A	ONT	100	29.02827	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/14/2011 23:00 TLR Level 3A	ONT	200	29.02827	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 0:00 TLR Level 3A	ONT	100	29.00727	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 0:00 TLR Level 3A	ONT	200	29.00727	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 1:00 TLR Level 3A	ONT	100	29.09228	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 1:00 TLR Level 3A	ONT	200	29.09228	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 2:00 TLR Level 3A	ONT	100	29.04409	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 2:00 TLR Level 3A	ONT	200	29.04409	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 3:00 TLR Level 3A	ONT	100	29.02197	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 3:00 TLR Level 3A	ONT	200	29.02197	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 9:00 TLR Level 3A	ONT	100	28.9358	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 9:00 TLR Level 3A	ONT	100	28.9358	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/15/2011 9:00 TLR Level 3A	ONT	100	28.9358	100	Curtailed	Next Hour	CA - ONT

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ONT	MISO-IMP (ONT)	7004	4/16/2011 18:00 TLR Level 3A	NYIS	200	13.10725	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 19:00 TLR Level 3A	NYIS	100	13.10056	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 19:00 TLR Level 3A	NYIS	200	13.10056	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 20:00 TLR Level 3A	NYIS	100	13.14966	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 20:00 TLR Level 3A	NYIS	200	13.14966	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 21:00 TLR Level 3A	NYIS	100	13.20724	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 21:00 TLR Level 3A	NYIS	200	13.20724	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/16/2011 21:00 TLR Level 3A	ONT	100	29.19275	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/16/2011 21:00 TLR Level 3A	ONT	200	29.19275	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 22:00 TLR Level 3A	NYIS	100	13.09351	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/16/2011 22:00 TLR Level 3A	NYIS	200	13.09351	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/16/2011 22:00 TLR Level 3A	ONT	100	29.05198	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/16/2011 22:00 TLR Level 3A	ONT	200	29.05198	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/16/2011 23:00 TLR Level 3A	ONT	100	29.10563	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/16/2011 23:00 TLR Level 3A	ONT	200	29.10563	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 0:00 TLR Level 3A	ONT	100	28.99095	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 0:00 TLR Level 3A	ONT	200	28.99095	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 1:00 TLR Level 3A	ONT	100	28.98862	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 1:00 TLR Level 3A	ONT	200	28.98862	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 2:00 TLR Level 3A	ONT	100	28.93328	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 2:00 TLR Level 3A	ONT	200	28.93328	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 3:00 TLR Level 3A	ONT	100	29.07599	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 3:00 TLR Level 3A	ONT	200	29.07599	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 4:00 TLR Level 3A	ONT	100	29.01701	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 4:00 TLR Level 3A	ONT	200	29.01701	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 5:00 TLR Level 3A	ONT	100	29.08695	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 5:00 TLR Level 3A	ONT	200	29.08695	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 8:00 TLR Level 3A	NYIS	100	12.75396	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 8:00 TLR Level 3A	NYIS	200	12.75396	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 9:00 TLR Level 3A	NYIS	50	12.83401	12	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 9:00 TLR Level 3A	NYIS	100	12.83401	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 9:00 TLR Level 3A	NYIS	200	12.83401	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 10:00 TLR Level 3A	NYIS	50	12.75916	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 10:00 TLR Level 3A	NYIS	100	12.75916	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 10:00 TLR Level 3A	NYIS	200	12.75916	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 11:00 TLR Level 3A	NYIS	50	12.83367	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 11:00 TLR Level 3A	NYIS	100	12.83367	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 11:00 TLR Level 3A	NYIS	200	12.83367	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 12:00 TLR Level 3A	NYIS	50	12.75789	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 12:00 TLR Level 3A	NYIS	100	12.75789	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 12:00 TLR Level 3A	NYIS	200	12.75789	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 12:00 TLR Level 3A	ONT	100	28.94267	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 12:00 TLR Level 3A	ONT	200	28.94267	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 13:00 TLR Level 3A	NYIS	50	12.84319	30	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 13:00 TLR Level 3A	NYIS	100	12.84319	80	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 13:00 TLR Level 3A	NYIS	30	12.84319	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 13:00 TLR Level 3A	NYIS	200	12.84319	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 13:00 TLR Level 3A	ONT	100	29.0513	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 13:00 TLR Level 3A	ONT	30	29.0513	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 13:00 TLR Level 3A	ONT	200	29.0513	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 14:00 TLR Level 3A	NYIS	50	12.77519	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 14:00 TLR Level 3A	NYIS	100	12.77519	100	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7004	4/17/2011 14:00 TLR Level 3A	NYIS	30	12.77519	30	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 14:00 TLR Level 3A	NYIS	200	12.77519	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 14:00 TLR Level 3A	ONT	100	28.98868	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 14:00 TLR Level 3A	ONT	200	28.98868	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 15:00 TLR Level 3A	NYIS	50	12.82531	14	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 15:00 TLR Level 3A	NYIS	100	12.82531	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 15:00 TLR Level 3A	NYIS	30	12.82531	9	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 15:00 TLR Level 3A	NYIS	200	12.82531	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 15:00 TLR Level 3A	ONT	100	29.01572	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 15:00 TLR Level 3A	ONT	200	29.01572	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 16:00 TLR Level 3A	NYIS	50	12.76782	6	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 16:00 TLR Level 3A	NYIS	100	12.76782	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 16:00 TLR Level 3A	NYIS	30	12.76782	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 16:00 TLR Level 3A	NYIS	200	12.76782	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 16:00 TLR Level 3A	ONT	100	28.99997	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 16:00 TLR Level 3A	ONT	30	28.99997	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 16:00 TLR Level 3A	ONT	200	28.99997	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 17:00 TLR Level 3A	NYIS	50	12.8303	3	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 17:00 TLR Level 3A	NYIS	100	12.8303	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 17:00 TLR Level 3A	NYIS	30	12.8303	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 17:00 TLR Level 3A	NYIS	200	12.8303	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 17:00 TLR Level 3A	ONT	100	29.05506	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 17:00 TLR Level 3A	ONT	30	29.05506	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 17:00 TLR Level 3A	ONT	200	29.05506	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 18:00 TLR Level 3A	NYIS	50	12.70019	28	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 18:00 TLR Level 3A	NYIS	100	12.70019	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 18:00 TLR Level 3A	NYIS	30	12.70019	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 18:00 TLR Level 3A	NYIS	200	12.70019	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 18:00 TLR Level 3A	ONT	100	28.98792	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 18:00 TLR Level 3A	ONT	30	28.98792	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 18:00 TLR Level 3A	ONT	200	28.98792	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 19:00 TLR Level 3A	NYIS	50	12.76149	11	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/17/2011 19:00 TLR Level 3A	NYIS	100	12.76149	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 19:00 TLR Level 3A	NYIS	30	12.76149	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 19:00 TLR Level 3A	NYIS	200	12.76149	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 19:00 TLR Level 3A	ONT	100	29.04623	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 19:00 TLR Level 3A	ONT	30	29.04623	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 19:00 TLR Level 3A	ONT	200	29.04623	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 20:00 TLR Level 3A	NYIS	100	12.7022	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 20:00 TLR Level 3A	NYIS	30	12.7022	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 20:00 TLR Level 3A	NYIS	200	12.7022	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 20:00 TLR Level 3A	ONT	100	28.98655	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 20:00 TLR Level 3A	ONT	30	28.98655	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 20:00 TLR Level 3A	ONT	200	28.98655	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 21:00 TLR Level 3A	NYIS	100	12.76173	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/17/2011 21:00 TLR Level 3A	NYIS	200	12.76173	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 21:00 TLR Level 3A	ONT	100	29.06959	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 21:00 TLR Level 3A	ONT	200	29.06959	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 22:00 TLR Level 3A	ONT	100	28.88111	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 22:00 TLR Level 3A	ONT	200	28.88111	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/17/2011 23:00 TLR Level 3A	ONT	100	28.97404	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 0:00 TLR Level 3A	ONT	100	28.88057	100	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	4/18/2011 1:00	TLR Level 3A	ONT	100	28.96378	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 2:00	TLR Level 3A	ONT	100	28.46201	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 3:00	TLR Level 3A	ONT	100	29.00001	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 4:00	TLR Level 3A	ONT	100	29.00162	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 4:00	TLR Level 3A	ONT	200	29.00162	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 21:00	TLR Level 3A	ONT	100	28.38534	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 21:00	TLR Level 3A	ONT	200	28.38534	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 22:00	TLR Level 3A	ONT	100	28.3434	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 22:00	TLR Level 3A	ONT	200	28.3434	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 23:00	TLR Level 3A	ONT	100	28.27726	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/18/2011 23:00	TLR Level 3A	ONT	200	28.27726	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 0:00	TLR Level 3A	ONT	100	28.34435	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 0:00	TLR Level 3A	ONT	200	28.34435	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 1:00	TLR Level 3A	ONT	100	28.29924	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 2:00	TLR Level 3A	ONT	100	28.34353	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 2:00	TLR Level 3A	ONT	200	28.34353	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 3:00	TLR Level 3A	ONT	100	28.29153	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 3:00	TLR Level 3A	ONT	200	28.29153	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 4:00	TLR Level 3A	ONT	100	28.36603	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/19/2011 4:00	TLR Level 3A	ONT	200	28.36603	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/21/2011 23:00	TLR Level 3A	ONT	100	28.56487	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/21/2011 23:00	TLR Level 3A	ONT	200	28.56487	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 0:00	TLR Level 3A	ONT	100	28.73803	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 0:00	TLR Level 3A	ONT	200	28.73803	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 1:00	TLR Level 3A	ONT	100	28.69544	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 1:00	TLR Level 3A	ONT	200	28.69544	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 2:00	TLR Level 3A	ONT	100	28.76865	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 2:00	TLR Level 3A	ONT	200	28.76865	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 3:00	TLR Level 3A	ONT	100	28.68782	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 3:00	TLR Level 3A	ONT	200	28.68782	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 4:00	TLR Level 3A	ONT	100	28.79232	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 4:00	TLR Level 3A	ONT	200	28.79232	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 13:00	TLR Level 3A	ONT	100	28.9342	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 13:00	TLR Level 3A	ONT	200	28.9342	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 14:00	TLR Level 3A	ONT	100	29.47012	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 14:00	TLR Level 3A	ONT	200	29.47012	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 15:00	TLR Level 3A	ONT	100	29.38765	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 15:00	TLR Level 3A	ONT	200	29.38765	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 16:00	TLR Level 3A	ONT	100	29.44878	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 16:00	TLR Level 3A	ONT	200	29.44878	156	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 17:00	TLR Level 3A	ONT	100	29.38896	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 17:00	TLR Level 3A	ONT	200	29.38896	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 18:00	TLR Level 3A	NYIS	50	11.75918	3	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/22/2011 18:00	TLR Level 3A	NYIS	100	11.75918	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 18:00	TLR Level 3A	NYIS	50	11.75918	3	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/22/2011 18:00	TLR Level 3A	NYIS	200	11.75918	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 18:00	TLR Level 3A	ONT	100	29.45157	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 18:00	TLR Level 3A	ONT	200	29.45157	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 19:00	TLR Level 3A	NYIS	100	11.69469	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 19:00	TLR Level 3A	NYIS	200	11.69469	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 19:00	TLR Level 3A	ONT	100	29.38738	100	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	4/22/2011 19:00 TLR Level 3A	ONT	200	29.38738	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 20:00 TLR Level 3A	NYIS	100	13.3374	90	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 20:00 TLR Level 3A	ONT	100	29.38524	90	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 21:00 TLR Level 3A	NYIS	100	13.27409	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/22/2011 21:00 TLR Level 3A	NYIS	50	13.27409	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 21:00 TLR Level 3A	ONT	50	29.32806	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 22:00 TLR Level 3A	ONT	100	29.44051	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 22:00 TLR Level 3A	ONT	200	29.44051	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 23:00 TLR Level 3A	ONT	100	29.35992	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/22/2011 23:00 TLR Level 3A	ONT	200	29.35992	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 0:00 TLR Level 3A	ONT	100	29.43826	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 0:00 TLR Level 3A	ONT	200	29.43826	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 1:00 TLR Level 3A	ONT	100	29.34958	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 1:00 TLR Level 3A	ONT	200	29.34958	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 2:00 TLR Level 3A	ONT	100	29.43827	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 2:00 TLR Level 3A	ONT	200	29.43827	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 3:00 TLR Level 3A	ONT	100	29.34927	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 3:00 TLR Level 3A	ONT	200	29.34927	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 4:00 TLR Level 3A	ONT	100	29.43694	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 4:00 TLR Level 3A	ONT	200	29.43694	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 8:00 TLR Level 3A	NYIS	100	13.25174	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 8:00 TLR Level 3A	NYIS	200	13.25174	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 9:00 TLR Level 3A	NYIS	50	13.14453	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/23/2011 9:00 TLR Level 3A	NYIS	100	13.14453	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 9:00 TLR Level 3A	NYIS	200	13.14453	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 10:00 TLR Level 3A	NYIS	50	13.22453	23	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/23/2011 10:00 TLR Level 3A	NYIS	100	13.22453	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 10:00 TLR Level 3A	NYIS	200	13.22453	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 11:00 TLR Level 3A	NYIS	50	13.2295	7	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/23/2011 11:00 TLR Level 3A	NYIS	100	13.2295	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 11:00 TLR Level 3A	NYIS	200	13.2295	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 12:00 TLR Level 3A	NYIS	100	13.18746	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 12:00 TLR Level 3A	NYIS	200	13.18746	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 13:00 TLR Level 3A	NYIS	50	13.19187	23	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	4/23/2011 13:00 TLR Level 3A	NYIS	100	13.19187	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 13:00 TLR Level 3A	NYIS	200	13.19187	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 13:00 TLR Level 3A	ONT	100	29.19601	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 13:00 TLR Level 3A	ONT	200	29.19601	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 14:00 TLR Level 3A	NYIS	100	13.19086	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 14:00 TLR Level 3A	NYIS	200	13.19086	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 14:00 TLR Level 3A	ONT	100	29.20233	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 14:00 TLR Level 3A	ONT	200	29.20233	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 15:00 TLR Level 3A	NYIS	100	13.19799	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	4/23/2011 15:00 TLR Level 3A	NYIS	200	13.19799	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 15:00 TLR Level 3A	ONT	100	29.1974	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 15:00 TLR Level 3A	ONT	200	29.1974	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 16:00 TLR Level 3A	ONT	100	29.09279	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 16:00 TLR Level 3A	ONT	200	29.09279	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 17:00 TLR Level 3A	ONT	100	29.2022	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 17:00 TLR Level 3A	ONT	200	29.2022	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 18:00 TLR Level 3A	ONT	100	29.0961	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 18:00 TLR Level 3A	ONT	200	29.0961	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	4/23/2011 19:00	TLR Level 3A	ONT	100	29.30094	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 19:00	TLR Level 3A	ONT	200	29.30094	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 20:00	TLR Level 3A	ONT	100	29.19456	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 20:00	TLR Level 3A	ONT	200	29.19456	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 21:00	TLR Level 3A	ONT	100	29.30705	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 22:00	TLR Level 3A	ONT	100	29.22994	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 22:00	TLR Level 3A	ONT	190	29.22994	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 23:00	TLR Level 3A	ONT	100	29.34992	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/23/2011 23:00	TLR Level 3A	ONT	190	29.34992	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 0:00	TLR Level 3A	ONT	100	29.28201	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 0:00	TLR Level 3A	ONT	190	29.28201	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 1:00	TLR Level 3A	ONT	100	29.38354	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 1:00	TLR Level 3A	ONT	190	29.38354	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 2:00	TLR Level 3A	ONT	100	29.27737	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 2:00	TLR Level 3A	ONT	190	29.27737	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 3:00	TLR Level 3A	ONT	100	29.39585	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 3:00	TLR Level 3A	ONT	190	29.39585	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 4:00	TLR Level 3A	ONT	100	29.288	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 4:00	TLR Level 3A	ONT	190	29.288	190	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 21:00	TLR Level 3A	ONT	100	29.2581	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 22:00	TLR Level 3A	ONT	100	29.26948	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 22:00	TLR Level 3A	ONT	200	29.26948	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 23:00	TLR Level 3A	ONT	100	29.34807	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/24/2011 23:00	TLR Level 3A	ONT	200	29.34807	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 0:00	TLR Level 3A	ONT	100	29.36884	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 0:00	TLR Level 3A	ONT	200	29.36884	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 1:00	TLR Level 3A	ONT	100	29.10901	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 1:00	TLR Level 3A	ONT	200	29.10901	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 2:00	TLR Level 3A	ONT	100	29.12027	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 2:00	TLR Level 3A	ONT	200	29.12027	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 9:00	TLR Level 3A	ONT	100	28.23675	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 9:00	TLR Level 3A	ONT	200	28.23675	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 10:00	TLR Level 3A	ONT	100	28.07869	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 10:00	TLR Level 3A	ONT	200	28.07869	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 11:00	TLR Level 3A	ONT	100	28.03264	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 11:00	TLR Level 3A	ONT	200	28.03264	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 12:00	TLR Level 3A	ONT	100	27.99665	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 12:00	TLR Level 3A	ONT	200	27.99665	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 13:00	TLR Level 3A	ONT	100	27.9522	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 13:00	TLR Level 3A	ONT	200	27.9522	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 14:00	TLR Level 3A	ONT	100	28.10103	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 14:00	TLR Level 3A	ONT	200	28.10103	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 15:00	TLR Level 3A	ONT	100	28.07259	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 15:00	TLR Level 3A	ONT	200	28.07259	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 16:00	TLR Level 3A	ONT	100	28.25013	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 16:00	TLR Level 3A	ONT	200	28.25013	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 17:00	TLR Level 3A	ONT	100	28.23639	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 17:00	TLR Level 3A	ONT	200	28.23639	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 18:00	TLR Level 3A	ONT	100	28.2507	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 18:00	TLR Level 3A	ONT	200	28.2507	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 19:00	TLR Level 3A	ONT	100	28.06823	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 19:00	TLR Level 3A	ONT	200	28.06823	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7009	4/25/2011 20:00	TLR Level 3A	ONT	100	28.12918	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 20:00	TLR Level 3A	ONT	200	28.12918	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 21:00	TLR Level 3A	ONT	100	28.27285	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 21:00	TLR Level 3A	ONT	200	28.27285	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 22:00	TLR Level 3A	ONT	100	28.29361	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 22:00	TLR Level 3A	ONT	200	28.29361	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 23:00	TLR Level 3A	ONT	100	27.62228	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/25/2011 23:00	TLR Level 3A	ONT	200	27.62228	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 0:00	TLR Level 3A	ONT	100	27.44851	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 0:00	TLR Level 3A	ONT	200	27.44851	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 1:00	TLR Level 3A	ONT	100	27.23866	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 1:00	TLR Level 3A	ONT	200	27.23866	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 2:00	TLR Level 3A	ONT	100	27.25364	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 2:00	TLR Level 3A	ONT	200	27.25364	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 3:00	TLR Level 3A	ONT	100	26.70397	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 3:00	TLR Level 3A	ONT	200	26.70397	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 4:00	TLR Level 3A	ONT	100	26.6625	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7009	4/26/2011 4:00	TLR Level 3A	ONT	200	26.6625	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 9:00	TLR Level 3A	ONT	100	40.03541	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 9:00	TLR Level 3A	ONT	200	40.03541	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 10:00	TLR Level 3A	ONT	100	39.78842	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 10:00	TLR Level 3A	ONT	200	39.78842	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 11:00	TLR Level 3A	ONT	100	39.8393	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 11:00	TLR Level 3A	ONT	200	39.8393	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 12:00	TLR Level 3A	ONT	100	39.72687	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 12:00	TLR Level 3A	ONT	200	39.72687	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 13:00	TLR Level 3A	ONT	100	40.28527	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 13:00	TLR Level 3A	ONT	200	40.28527	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 14:00	TLR Level 3A	ONT	100	40.27889	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 14:00	TLR Level 3A	ONT	200	40.27889	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 15:00	TLR Level 3A	ONT	100	40.29427	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 15:00	TLR Level 3A	ONT	200	40.29427	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 16:00	TLR Level 3A	ONT	100	40.40425	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 16:00	TLR Level 3A	ONT	200	40.40425	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 17:00	TLR Level 3A	ONT	100	40.43704	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 17:00	TLR Level 3A	ONT	200	40.43704	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 18:00	TLR Level 3A	ONT	100	40.35057	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 18:00	TLR Level 3A	ONT	200	40.35057	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 19:00	TLR Level 3A	ONT	100	40.29441	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 19:00	TLR Level 3A	ONT	200	40.29441	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 20:00	TLR Level 3A	ONT	100	40.39521	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 20:00	TLR Level 3A	ONT	200	40.39521	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 21:00	TLR Level 3A	ONT	100	40.27461	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/26/2011 21:00	TLR Level 3A	ONT	200	40.27461	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 1:00	TLR Level 3A	ONT	100	40.21284	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 1:00	TLR Level 3A	ONT	200	40.21284	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 2:00	TLR Level 3A	ONT	100	40.21662	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 2:00	TLR Level 3A	ONT	200	40.21662	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 3:00	TLR Level 3A	ONT	100	40.14581	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 3:00	TLR Level 3A	ONT	200	40.14581	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 4:00	TLR Level 3A	ONT	100	39.73035	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 4:00	TLR Level 3A	ONT	200	39.73035	200	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7018	4/27/2011 14:00 TLR Level 3A	NYIS	4	5.553406	4	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7018	4/27/2011 14:00 TLR Level 3A	NYIS	50	5.553406	2	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7018	4/27/2011 14:00 TLR Level 3A	NYIS	100	5.553406	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7018	4/27/2011 15:00 TLR Level 3A	NYIS	100	5.607026	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7018	4/27/2011 16:00 TLR Level 3A	NYIS	100	5.633646	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7018	4/27/2011 17:00 TLR Level 3A	NYIS	100	5.697379	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7018	4/27/2011 18:00 TLR Level 3A	NYIS	100	5.679923	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 18:00 TLR Level 3A	ONT	100	41.14488	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7018	4/27/2011 19:00 TLR Level 3A	NYIS	100	5.679698	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 19:00 TLR Level 3A	ONT	100	40.94092	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7018	4/27/2011 20:00 TLR Level 3A	NYIS	100	5.631083	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 20:00 TLR Level 3A	ONT	100	40.89135	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 21:00 TLR Level 3A	ONT	100	40.9037	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 22:00 TLR Level 3A	ONT	100	41.06571	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/27/2011 23:00 TLR Level 3A	ONT	100	41.03763	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 0:00 TLR Level 3A	ONT	100	41.03218	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 1:00 TLR Level 3A	ONT	100	41.37399	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 2:00 TLR Level 3A	ONT	100	41.1045	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 3:00 TLR Level 3A	ONT	100	41.12179	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 4:00 TLR Level 3A	ONT	100	41.09892	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 5:00 TLR Level 3A	ONT	100	41.12384	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 6:00 TLR Level 3A	ONT	100	40.65854	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 7:00 TLR Level 3A	ONT	100	40.87824	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 8:00 TLR Level 3A	ONT	100	41.53912	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 9:00 TLR Level 3A	ONT	100	40.9934	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 10:00 TLR Level 3A	ONT	100	40.71194	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 11:05 TLR Level 3A	ONT	100	40.61175	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 12:00 TLR Level 3A	ONT	100	40.6517	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 13:00 TLR Level 3A	ONT	15	40.73118	15	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 13:00 TLR Level 3A	ONT	100	40.73118	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 14:00 TLR Level 3A	ONT	15	41.01572	15	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 14:00 TLR Level 3A	ONT	100	41.01572	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 15:00 TLR Level 3A	ONT	15	41.02967	15	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	4/28/2011 15:00 TLR Level 3A	ONT	100	41.02967	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 7:00 TLR Level 3A	NYIS	50	13.51423	2	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 7:00 TLR Level 3A	NYIS	41	13.51423	41	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 7:00 TLR Level 3A	NYIS	250	13.51423	6	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 7:00 TLR Level 3A	NYIS	20	13.51423	20	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 8:00 TLR Level 3A	NYIS	50	13.53854	1	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 8:00 TLR Level 3A	NYIS	50	13.53854	30	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 8:00 TLR Level 3A	NYIS	250	13.53854	3	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 9:00 TLR Level 3A	NYIS	50	13.59204	14	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 9:00 TLR Level 3A	NYIS	50	13.59204	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 9:00 TLR Level 3A	NYIS	250	13.59204	66	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 10:00 TLR Level 3A	NYIS	50	13.52541	5	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 10:00 TLR Level 3A	NYIS	50	13.52541	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 10:00 TLR Level 3A	NYIS	250	13.52541	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 10:00 TLR Level 3A	NYIS	50	13.52541	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 11:00 TLR Level 3A	NYIS	50	13.50978	11	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 11:00 TLR Level 3A	NYIS	50	13.50978	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 11:00 TLR Level 3A	NYIS	250	13.50978	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 11:00 TLR Level 3A	NYIS	50	13.50978	50	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7000	5/2/2011 12:00 TLR Level 3A	NYIS	50	13.52047	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 12:00 TLR Level 3A	NYIS	250	13.52047	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 13:00 TLR Level 3A	NYIS	50	13.35236	1	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 13:00 TLR Level 3A	NYIS	50	13.35236	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 13:00 TLR Level 3A	NYIS	250	13.35236	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 14:00 TLR Level 3A	NYIS	50	13.52296	1	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 14:00 TLR Level 3A	NYIS	14	13.52296	14	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 14:00 TLR Level 3A	NYIS	250	13.52296	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 15:00 TLR Level 3A	NYIS	50	13.64648	4	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 15:00 TLR Level 3A	NYIS	50	13.64648	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 15:00 TLR Level 3A	NYIS	250	13.64648	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 16:00 TLR Level 3A	NYIS	50	13.65215	4	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 16:00 TLR Level 3A	NYIS	250	13.65215	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 18:00 TLR Level 3A	NYIS	50	13.65428	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 19:00 TLR Level 3A	NYIS	50	13.63356	19	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 19:00 TLR Level 3A	NYIS	50	13.63356	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/2/2011 19:00 TLR Level 3A	NYIS	250	13.63356	92	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/2/2011 20:00 TLR Level 3A	NYIS	25	13.65303	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 6:00 TLR Level 3A	NYIS	50	12.34013	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 6:00 TLR Level 3A	NYIS	300	12.34013	274	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 6:00 TLR Level 3A	NYIS	50	12.34013	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 6:00 TLR Level 3A	NYIS	250	12.34013	31	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 6:00 TLR Level 3A	NYIS	150	12.34013	19	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 7:00 TLR Level 3A	NYIS	17	12.36771	17	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 7:00 TLR Level 3A	NYIS	105	12.36771	85	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 7:00 TLR Level 3A	NYIS	250	12.36771	80	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 7:00 TLR Level 3A	NYIS	150	12.36771	48	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 8:00 TLR Level 3A	NYIS	50	12.33473	42	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 8:00 TLR Level 3A	NYIS	50	12.33473	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 8:00 TLR Level 3A	NYIS	58	12.33473	58	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 8:00 TLR Level 3A	NYIS	250	12.33473	39	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 8:00 TLR Level 3A	NYIS	150	12.33473	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 9:00 TLR Level 3A	NYIS	50	12.37182	40	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 9:00 TLR Level 3A	NYIS	50	12.37182	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 9:00 TLR Level 3A	NYIS	250	12.37182	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 9:00 TLR Level 3A	NYIS	150	12.37182	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 10:00 TLR Level 3A	NYIS	50	12.32559	44	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 10:00 TLR Level 3A	NYIS	50	12.32559	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 10:00 TLR Level 3A	NYIS	250	12.32559	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 10:00 TLR Level 3A	NYIS	150	12.32559	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 11:00 TLR Level 3A	NYIS	50	12.40396	31	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 11:00 TLR Level 3A	NYIS	10	12.40396	7	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 11:00 TLR Level 3A	NYIS	250	12.40396	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 11:00 TLR Level 3A	NYIS	150	12.40396	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 12:00 TLR Level 3A	NYIS	50	12.3533	30	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 12:00 TLR Level 3A	NYIS	300	12.3533	300	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 12:00 TLR Level 3A	NYIS	250	12.3533	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 12:00 TLR Level 3A	NYIS	150	12.3533	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 13:00 TLR Level 3A	NYIS	90	12.37896	90	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 13:00 TLR Level 3A	NYIS	250	12.37896	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 13:00 TLR Level 3A	NYIS	150	12.37896	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 14:00 TLR Level 3A	NYIS	50	11.13573	50	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7000	5/3/2011 14:00 TLR Level 3A	NYIS	250	11.13573	195	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 14:00 TLR Level 3A	NYIS	150	11.13573	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 15:00 TLR Level 3A	NYIS	35	11.20057	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 15:00 TLR Level 3A	NYIS	250	11.20057	153	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 15:00 TLR Level 3A	NYIS	150	11.20057	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 16:00 TLR Level 3A	NYIS	250	11.17209	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 16:00 TLR Level 3A	NYIS	150	11.17209	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 17:00 TLR Level 3A	NYIS	250	11.19502	250	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 17:00 TLR Level 3A	NYIS	50	11.19502	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 17:00 TLR Level 3A	NYIS	150	11.19502	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/3/2011 18:00 TLR Level 3A	NYIS	50	11.2038	34	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 18:00 TLR Level 3A	NYIS	1	11.2038	1	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/3/2011 18:00 TLR Level 3A	NYIS	150	11.2038	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/5/2011 8:00 TLR Level 3A	NYIS	100	14.07006	15	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/5/2011 8:00 TLR Level 3A	NYIS	50	14.07006	8	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7101	5/11/2011 11:00 TLR Level 3A	ONT	300	30.69514	300	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7101	5/11/2011 12:00 TLR Level 3A	ONT	300	30.66527	270	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7101	5/11/2011 13:00 TLR Level 3A	ONT	300	30.60943	172	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7101	5/11/2011 17:00 TLR Level 3A	ONT	24	28.78351	24	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7101	5/11/2011 18:00 TLR Level 3A	ONT	300	28.80502	300	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 9:00 TLR Level 3A	NYIS	50	10.35534	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 10:00 TLR Level 3A	NYIS	50	10.40899	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 10:00 TLR Level 3A	NYIS	100	10.40899	82	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 11:00 TLR Level 3A	NYIS	50	10.37216	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 11:00 TLR Level 3A	NYIS	100	10.37216	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 12:00 TLR Level 3A	NYIS	50	10.39566	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 12:00 TLR Level 3A	NYIS	100	10.39566	69	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 13:00 TLR Level 3A	NYIS	100	10.36742	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 14:00 TLR Level 3A	NYIS	100	10.36839	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 15:00 TLR Level 3A	NYIS	100	10.34311	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 16:00 TLR Level 3A	NYIS	100	10.34459	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 17:00 TLR Level 3A	NYIS	100	10.30063	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 18:00 TLR Level 3A	NYIS	100	10.28774	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/16/2011 19:00 TLR Level 3A	NYIS	100	10.2691	39	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/17/2011 10:00 TLR Level 3A	NYIS	100	9.948272	33	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/17/2011 11:00 TLR Level 3A	NYIS	69	10.26324	69	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/17/2011 11:00 TLR Level 3A	NYIS	50	10.26324	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/17/2011 13:00 TLR Level 3A	NYIS	100	10.11876	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 11:00 TLR Level 3A	NYIS	150	10.0141	59	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 12:00 TLR Level 3A	NYIS	150	10.05347	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 12:00 TLR Level 3A	NYIS	100	10.05347	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 13:00 TLR Level 3A	NYIS	150	10.05809	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 13:00 TLR Level 3A	NYIS	100	10.05809	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 14:00 TLR Level 3A	NYIS	150	9.927649	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 14:00 TLR Level 3A	NYIS	100	9.927649	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/19/2011 15:00 TLR Level 3A	NYIS	150	10.03987	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9160	5/20/2011 2:00 TLR Level 3A	ONT	25	33.74813	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 9:00 TLR Level 3A	NYIS	200	10.52821	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 9:00 TLR Level 3A	NYIS	150	10.52821	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 10:00 TLR Level 3A	NYIS	200	10.43845	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 10:00 TLR Level 3A	NYIS	50	10.43845	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 10:00 TLR Level 3A	NYIS	150	10.43845	119	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7000	5/20/2011 11:00 TLR Level 3A	NYIS	200	10.47574	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 11:00 TLR Level 3A	NYIS	150	10.47574	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 13:00 TLR Level 3A	NYIS	200	10.38275	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 13:00 TLR Level 3A	NYIS	35	10.38275	35	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 13:00 TLR Level 3A	NYIS	150	10.38275	96	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 13:00 TLR Level 3A	NYIS	50	10.38275	2	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/20/2011 14:00 TLR Level 3A	NYIS	200	10.34571	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 14:00 TLR Level 3A	NYIS	150	10.34571	150	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 15:00 TLR Level 3A	NYIS	200	10.66826	194	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/20/2011 15:00 TLR Level 3A	NYIS	150	10.66826	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 10:00 TLR Level 3A	NYIS	100	6.039969	10	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	17180	5/21/2011 10:00 TLR Level 3A	NYIS	50	6.039969	5	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	17180	5/21/2011 11:00 TLR Level 3A	NYIS	30	6.047068	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 11:00 TLR Level 3A	NYIS	100	6.047068	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 12:00 TLR Level 3A	NYIS	30	6.025865	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 12:00 TLR Level 3A	NYIS	100	6.025865	98	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 13:00 TLR Level 3A	NYIS	30	6.060905	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 14:00 TLR Level 3A	NYIS	30	6.114578	11	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	17180	5/21/2011 14:00 TLR Level 3A	NYIS	50	6.114578	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	17180	5/21/2011 14:00 TLR Level 3A	NYIS	100	6.114578	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 15:00 TLR Level 3A	NYIS	30	6.131311	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 15:00 TLR Level 3A	NYIS	40	6.131311	40	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 15:00 TLR Level 3A	NYIS	100	6.131311	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 16:00 TLR Level 3A	NYIS	30	6.135155	30	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	17180	5/21/2011 16:00 TLR Level 3A	NYIS	100	6.135155	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 8:00 TLR Level 3A	NYIS	50	8.990036	35	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/23/2011 9:00 TLR Level 3A	NYIS	50	9.008683	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 10:00 TLR Level 3A	NYIS	75	8.998552	67	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/23/2011 11:00 TLR Level 3A	NYIS	50	9.044615	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 11:00 TLR Level 3A	NYIS	75	9.044615	75	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 12:00 TLR Level 3A	NYIS	50	9.024133	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 12:00 TLR Level 3A	NYIS	75	9.024133	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 13:00 TLR Level 3A	NYIS	50	9.04579	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 13:00 TLR Level 3A	NYIS	75	9.04579	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 14:00 TLR Level 3A	NYIS	50	9.003196	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 14:00 TLR Level 3A	NYIS	75	9.003196	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 15:00 TLR Level 3A	NYIS	75	9.033491	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 16:00 TLR Level 3A	NYIS	50	8.993167	23	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 16:00 TLR Level 3A	NYIS	75	8.993167	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 17:00 TLR Level 3A	NYIS	50	9.028572	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 17:00 TLR Level 3A	NYIS	75	9.028572	25	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 18:00 TLR Level 3A	NYIS	50	9.006484	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 19:00 TLR Level 3A	NYIS	50	9.030334	1	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 19:00 TLR Level 3A	NYIS	50	9.030334	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/23/2011 19:00 TLR Level 3A	NYIS	116	9.030334	116	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9159	5/24/2011 8:00 TLR Level 3A	ONT	100	55.02074	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9159	5/24/2011 10:00 TLR Level 3A	ONT	100	54.88008	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9159	5/24/2011 11:00 TLR Level 3A	ONT	100	55.00424	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	9159	5/24/2011 16:00 TLR Level 3A	ONT	100	54.31631	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/26/2011 11:00 TLR Level 3A	NYIS	50	10.74268	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/26/2011 13:00 TLR Level 3A	NYIS	50	10.84989	50	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	5/26/2011 14:00 TLR Level 3A	NYIS	50	10.63579	50	Curtailed	Next Hour	CA - ONT

ONT	MISO-IMP (ONT)	7000	5/27/2011 9:00 TLR Level 3A	NYIS	100	10.73835	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/27/2011 10:00 TLR Level 3A	NYIS	100	10.67939	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/29/2011 13:00 TLR Level 3A	NYIS	100	11.42962	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/29/2011 14:00 TLR Level 3A	NYIS	100	11.41392	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/29/2011 15:00 TLR Level 3A	NYIS	100	11.41925	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/29/2011 16:00 TLR Level 3A	NYIS	100	11.41438	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	5/29/2011 17:00 TLR Level 3A	NYIS	100	11.4421	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7004	12/26/2011 17:00 TLR Level 3A	NYIS	200	10.52064	27	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7004	12/26/2011 18:00 TLR Level 3A	NYIS	200	10.34156	28	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	12/27/2011 15:00 TLR Level 3A	NYIS	100	11.76025	44	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 16:00 TLR Level 3A	NYIS	50	11.66513	47	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 16:00 TLR Level 3A	NYIS	200	11.66513	177	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	12/27/2011 17:00 TLR Level 3A	NYIS	50	11.89786	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 17:00 TLR Level 3A	NYIS	100	11.89786	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 17:00 TLR Level 3A	NYIS	200	11.89786	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 17:00 TLR Level 3A	NYIS	100	11.89786	100	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	12/27/2011 18:00 TLR Level 3A	NYIS	50	11.6642	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 18:00 TLR Level 3A	NYIS	100	11.6642	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 19:00 TLR Level 3A	NYIS	50	11.76513	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/27/2011 19:00 TLR Level 3A	NYIS	100	11.76513	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 13:00 TLR Level 3A	NYIS	100	11.40677	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 14:00 TLR Level 3A	NYIS	100	11.29827	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 15:00 TLR Level 3A	NYIS	100	11.36879	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 16:00 TLR Level 3A	NYIS	200	11.3096	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 17:00 TLR Level 3A	NYIS	200	11.38586	200	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 17:00 TLR Level 3A	NYIS	100	11.38586	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 18:00 TLR Level 3A	NYIS	100	11.35259	100	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 18:00 TLR Level 3A	NYIS	100	11.35259	2	Curtailed	Next Hour	NO
ONT	MISO-IMP (ONT)	7000	12/29/2011 19:00 TLR Level 3A	NYIS	100	11.43627	50	Curtailed	Next Hour	CA - ONT
ONT	MISO-IMP (ONT)	7000	12/29/2011 20:00 TLR Level 3A	NYIS	100	11.34828	100	Curtailed	Next Hour	CA - ONT

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-60

REDACTED
PROTECTED MATERIAL

DOCKET NO. ER11-1844
EXHIBIT NO. NYI-61



10 Krey Boulevard ♦ Rensselaer, NY 12144

July 21, 2008

BY HAND DELIVERY

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: New York Independent System Operator, Inc.'s Exigent Circumstances Filing Requesting Authority to Amend its Tariffs to Preclude the Scheduling of Certain External Transactions, Requesting Prospective Limited Tariff Waivers, Seeking Expedited Commission Action, Requesting Shortened Notice and Comment Periods, and Contingent Request for Consideration Under Section 206 of the Federal Power Act; Docket No. ER08-____-____.

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act,¹ the Federal Energy Regulatory Commission's ("Commission's") *Guidance Order on Expedited Tariff Revisions for Regional Transmission Organizations and Independent System Operators* ("Guidance Order"),² and Section 19.01 of the Independent System Operator Agreement ("ISO Agreement"), the New York Independent System Operator, Inc. ("NYISO"), at the direction of its Board of Directors ("Board"), hereby submits its *Exigent Circumstances Filing Requesting Authority to Amend its Tariffs to Preclude the Scheduling of Certain External Transactions, Requesting Prospective Limited Tariff Waivers, Seeking Expedited Commission Action, Requesting Shortened Notice and Comment Periods, and Contingent Request for Consideration Under Section 206 of the Federal Power Act*, and respectfully requests that the Commission accept the proposed amendments to its Open Access Transmission Tariff ("OATT"), to Attachment J to its OATT, and to Attachment B to its Market Administration and Control Area Services Tariff ("Services Tariff") that are included as attachments to this filing letter.

¹ 16 U.S.C. § 824d (2007).

² *Guidance Order on Expedited Tariff Revisions for Regional Transmission Organizations and Independent System Operators*, 111 FERC ¶ 61,009 (2005).

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constraints. In 2008 Lake Erie circulation has predominantly flowed in a “clockwise” direction, which means that from the NYISO’s perspective it enters the NYCA at the border with the IESO Control Area, flows through the NYCA and exits the NYCA over various paths into the PJM Control Area. For the reasons explained in Section V.B. of this filing letter, clockwise circulation exacerbates internal NYCA transmission constraints. This determination, along with the NYISO’s identification of a significant statistical correlation between the scheduling of External Transactions over a circuitous Scheduling Path from the NYISO’s IESO Proxy Generator Bus for delivery to the PJM control area and clockwise Lake Erie circulation, supports the NYISO’s proposal to prohibit scheduling external transactions over the eight circuitous scheduling paths identified in this filing and in the proposed Tariff revisions.

Studies prepared by the NYISO’s Operations Department indicate that on May 26 2008, a day when Market Participants were scheduling more transactions over circuitous Scheduling Path No. 1 than the Available Transfer Capability on the NYISO – IESO interface,²³ more than half of the real-time congestion costs that the NYISO was experiencing were caused by Lake Erie circulation.²⁴ A study prepared by the NYISO’s Independent Market Advisor explains that the cost of redispatch to address Lake Erie circulation causes costs to the market that may either be reflected in market clearing prices, or charged to the market as uplift.²⁵

The NYISO does not expect that Commission acceptance of its proposed Tariff revision will control or eliminate all Lake Erie circulation. Rather, NYISO expects that precluding scheduling over the eight identified Scheduling Paths will reduce Lake Erie circulation. Until there are adequate operational controls in place to ensure that actual and scheduled flows around Lake Erie are reasonably closely aligned,²⁶ the NYISO proposes to limit potential Lake Erie circulation by precluding the scheduling of External Transactions over the eight identified Scheduling Paths.

²³ Again, it is possible to exceed the Control Area interchange limit in one direction when there are “counterflow” External Transactions scheduled in the opposite direction.

²⁴ A description of the study that the NYISO’s Operations Department prepared is set forth in Section V.B. of this filing letter.

²⁵ A description of the Study that the NYISO’s Market Advisor prepared is set forth in Section V.C. of this filing letter.

²⁶ The NYISO will revisit the need for the attached Tariff revisions once all four of the Ontario – Michigan PARs are operating and the NYISO determines that the PARs are effective in controlling Lake Erie circulation.

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identify in its best efforts review of Real-Time Market Bids. In order to address these possible, minor, temporary implementation difficulties, the NYISO requests that if and when the Commission accepts the NYISO's proposed Tariff revisions for filing, it also grant the NYISO a Tariff waiver until September 16, 2008, to excuse its possible imperfect implementation of the proposed new prohibitions on the scheduling of External Transactions over circuitous Scheduling Paths, and permit the NYISO to continue to require any prohibited Day-Ahead Transactions that are scheduled to balance in the Real-Time Market.

The Commission's evaluation of whether it should permit tariff waivers has focused on several key points, including whether: (1) the entity seeking the waiver acted in good faith; (2) the waiver is of a limited scope; (3) a concrete problem needs to be remedied; and (4) the waiver will not have undesirable consequences, such as harming third parties.⁴⁸ In this case, the NYISO is acting in good faith to ensure the integrity of its markets, both the duration and scope of the requested waiver are limited, the waiver is necessary to permit the NYISO to immediately implement its proposed remedy, and the waiver is expected to reduce Lake Erie circulation, which should, in the long term, benefit customers in all of the Control Areas around Lake Erie.

VIII. Other Actions the Commission Should Consider Taking to Address Lake Erie Circulation

A. The Commission Should Encourage the Commissioning and Effective Operation of the Ontario – Michigan Phase Angle Regulators to Address Lake Erie Circulation

Lake Erie circulation is unscheduled power flow that affects the NYCA, PJM, MISO and IESO Control Areas. The present inability of the Control Areas around Lake Erie to adequately contain/control Lake Erie circulation disrupts the scheduling of economically desirable inter-Control Area transactions, can exacerbate (or relieve) transmission congestion, disrupts market operation and settlements, and imposes other real costs on the affected Control Areas. In order to minimize Lake Erie circulation, the Control Areas around Lake Erie need to improve their ability to correlate actual interchange to their scheduled interchange.

For more than three years, the NYISO has anticipated the commissioning of four Phase Angle Regulators ("PARs") at the Ontario — Michigan boundary. The NYISO expects that the operation of these PARs will enable the MISO and IESO to better align their actual Control Area interchange power flows to their scheduled interchange, thereby reducing Lake Erie circulation.

⁴⁸ *ISO New England, Inc.*, 117 FERC ¶ 61,171 at P 21 (2006); *see also Wisvest-Connecticut*, 101 FERC at 62,551 (observing that error was "an inadvertent mishap"); *Great Lakes Gas Transmission Limited Partnership*, 102 FERC ¶ 61,331 (2003); *TransColorado Gas Transmission Co.*, 102 FERC ¶ 61,330 (2003); *Northern Border Pipeline Co.*, 76 FERC ¶ 61,141 (1996).

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Three of the four Michigan/Ontario PARs are already in place and capable of operation. However, they have been operated in "by-passed mode" since the beginning of 2006.⁴⁹ The fourth PAR failed and is in the process of being replaced. It is the NYISO's understanding that the fourth PAR is expected to be in place and operational by Summer of 2009.⁵⁰ However, an agreement addressing the operation of the Ontario/Michigan PARs still needs to be negotiated. One of the "Key Findings" of the NERC 2007 Long Term Reliability Assessment was that "[PARs] intended to resolve loop flow issues occurring through the Canadian system (Ontario) have been in place since the beginning of 2006, but they are still not being actively used to manage loop flows due to protracted negotiations among the parties.... The agreement for the operation of the Michigan – Ontario PARs should be finalized."⁵¹ Similarly, PJM and MISO discussed Lake Erie circulation in their *Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint* in May of 2007. PJM and MISO's recommendations included a recommendation in which IESO and NYISO joined, stating that the four ISOs/RTOs "recommend the commissioning of the Michigan-Ontario PARs as soon as possible to mitigate the loop flow around the Lake Erie Loop."⁵²

The NYISO encourages the Commission to take an active interest in the commissioning of the Michigan – Ontario PARs and in ensuring the timely negotiation of an operating agreement, so that the PARs are placed in operation and are operated to mitigate Lake Erie circulation as soon as possible.

B. The Commission Should Consider Granting Market Monitors Enhanced Access to NERC Tag Information and Permitting Market Monitors to Share Bidding and Scheduling Information Related to External Transactions

As explained in Section IV.A. of this filing letter, the NYISO, PJM, IESO and MISO Market Monitors worked together to determine why Market Participants were scheduling ever-increasing volumes of External Transactions over circuitous Scheduling Paths around Lake Erie. The Commission jurisdictional Market Monitors inability to share confidential information with each other impeded and slowed their efforts. The Commission should consider granting all of the Market Monitors⁵³ unrestricted access to NERC Tag data and should consider permitting the

⁴⁹ *NERC 2007 Long Term Reliability Assessment* at p. 160 (October 25, 2007).
Link: ftp://ftp.nerc.com/pub/sys/all_updl/docs/pubs/LTRA2007.pdf

⁵⁰ *Id.* at 173.

⁵¹ *NERC 2007 Long Term Reliability Assessment, Key Findings*, at p. 19.

⁵² *Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint* at pp. 41-42 (May 25, 2007). Link: <http://www.jointandcommon.com/working-groups/joint-and-common/downloads/20070525-loop-flow-investigation-report.pdf>

⁵³ The NYISO would also recommend including ISO-New England's Market Monitor should the Commission elect to broaden the Market Monitors access to NERC Tag data and ability to share confidential information related to External Transactions.

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EXHIBIT NO. NYI-62

NYISO/MISO 7-1. On March 26, 2012, the MISO distributed a notice to stakeholders via email (attached as a PDF to the e-mail serving this data request) with the subject line, “[MISO] Michigan-Ontario Interface Phase Angle Regulators,” (“Notice”). The Notice stated the following: “MISO, IESO, ITC and Hydro One have formally set **1000 hours EDT Thursday, April 5, 2012** as the target for starting coordinated operation of PARs on the Michigan-Ontario interface. The Hydro One L4D PAR at Lambton is not expected to be available by April 5th, 2012. As a result, MISO *does not* intend to change the methodology for pricing transactions scheduled across the Michigan-Ontario interface as originally planned. The existing pricing methodology will remain in place until further notice.” Please explain, in detail, and Provide copies of all Documents, and any additional information, Related To:

- a. The methodology for pricing transactions scheduled across the Michigan-Ontario interface that MISO intended to utilize as described in the Notice.
- b. The purpose of the intended change in methodology for pricing transactions scheduled across the Michigan-Ontario interface.
- c. The difference between the current methodology and the intended new methodology for pricing transactions scheduled across the Michigan-Ontario interface that MISO is not utilizing due to the unavailability of the Hydro One L4D PAR at Lambton.
- d. The reason MISO has decided not to change the methodology for pricing transactions scheduled across the Michigan-Ontario interface.

Response:

- a. The methodology for pricing transactions scheduled across the Michigan- Ontario interface that MISO intended to utilize as described in the Notice.

As described in MISO August 30, 2011 update to the Market Subcommittee, MISO intended to price transactions scheduled across the Michigan-Ontario interface at a nodal price that represents the Michigan-Ontario interface. This, in effect, prices such transaction at the interface, rather than the ultimate sink as is the current practice.

- b. The purpose of the intended change in methodology for pricing transactions scheduled across the Michigan-Ontario interface.

The intended change in the methodology for pricing transactions scheduled across the Michigan-Ontario interface was to align the pricing of such transactions with the actual power flows to the extent practical.

- c. The difference between the current methodology and the intended new methodology for pricing transactions scheduled across the Michigan- Ontario interface that MISO is not utilizing due to the unavailability of the Hydro One L4D PAR at Lambton.

The notice referenced above indicates only that MISO is not changing the current pricing methodology at this time. Inferring there is a “new” pricing methodology is incorrect. As of April 5th, MISO had not decided if any changes to the original intended methodology are appropriate or warranted.

- d. The reason MISO has decided not to change the methodology for pricing transactions scheduled across the Michigan-Ontario interface.

As explained in b., the intent is to align the pricing of transactions scheduled across the interface with actual power flows created by those transactions, to the extent practical. As of April 5th, actual power flow associated with transactions scheduled across the Michigan-Ontario interface was not expected to flow across the interface to a sufficient degree to warrant the pricing of such transactions at the interface price.

Sponsored by: Kevin Frankeny