

## **PRESIDENTIAL PERMIT**

### **INTERNATIONAL TRANSMISSION COMPANY**

#### **ORDER NO. PP-230-2**

On December 8, 1998, the Detroit Edison Company (Detroit) applied to the Office of Fossil Energy (FE) of the Department of Energy (DOE) to amend two of the Presidential permits then held by Detroit. The requested amendments were to allow the installation of an autotransformer on one of the existing international transmission lines and the installation of a phase-shifting transformer on a second line. On April 27, 2000, DOE issued Presidential Permit PP-221 to Detroit authorizing installation of the autotransformer but deferring a decision on installation of the phase-shifting transformer pending receipt of appropriate technical studies demonstrating the operation of the regional interconnected electric system with the phase-shifter in service. As discussed below, the international transmission facilities covered by Presidential Permit PP-221 were transferred to International Transmission Company (ITC) as a result of corporate restructuring and a new Presidential Permit PP-230 was issued to ITC.

This Presidential Permit addresses only the remaining issue from Detroit's original application regarding the installation of the phase-shifting transformer, an issue that was also deferred in ITC's Presidential Permit PP-230. Because of the complexities associated with the change in ownership of the subject transmission lines and the bifurcated proceeding, the Presidential permit granted in this Order is being issued in its entirety and provides the complete chronology of events in this proceeding in the interest of clarity.

#### **I. BACKGROUND**

The Office of Fossil Energy of DOE has the responsibility for implementing Executive Order (EO) 10485, as amended by EO 12038, which requires the issuance of Presidential permits for the construction, operation, maintenance, and connection of electric transmission facilities at the United States international border.

There are four international electric transmission lines that interconnect electrical systems of Detroit and Hydro One<sup>1</sup>. Presidential permits previously granted by the Federal Power Commission<sup>2</sup> (FPC) authorized Detroit to construct, operate, maintain, and connect the following facilities:

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<sup>1</sup> On April 1, 1999, Ontario Hydro, the provincial utility of Canada's Province of Ontario, by operation of Canadian law, transferred all of its ownership and management interests in the interconnection facilities at the Michigan-Ontario border to a successor corporation, the Ontario Hydro Services Company ("OHSC"). OHSC is now known as "Hydro One".

<sup>2</sup> The authority to grant Presidential permits for the construction, operation, maintenance, or connection of electric transmission facilities at the U.S. international border was transferred from the Federal Power Commission to the Department of Energy by Executive Order 12038, dated February 3, 1978, and made effective as of October 1, 1977.

(1) a 230,000-volt (230-kV) transmission line connecting the Bunce Creek Station, located in Marysville, Michigan, with Hydro One's Scott Transformer Station located in Sarnia, Ontario (identified as the B3N facility). (FPC Docket No. E-6516, October 12, 1953, amended September 15, 1972) (DOE Presidential Permit PP-21)

(2) a 230-kV transmission line connecting the Waterman Station, located in Detroit, Michigan, with Hydro One's J. Clark Keith Generating Station, located in Windsor, Ontario (identified as the J5D facility). (FPC Docket No. E-6516, October 12, 1953, amended September 15, 1972) (DOE Presidential Permit PP-21)

(3) a 345-kV transmission line connecting the St. Clair Generating Station, located in East China Township, Michigan, with Hydro One's Lambton Generating Station, located in Moore Township, Ontario (identified as the L4D facility). (FPC Docket No. E-7202, March 1, 1966) (DOE Presidential Permit PP-38)

(4) a 345-kV transmission line connecting the St. Clair Generating Station, located in East China Township, Michigan, with Hydro One's Lambton Generating Station, located in Moore Township, Ontario (identified as the L51D facility). (FPC Docket No. E-8308, July 25, 1975) (DOE Presidential Permit PP-58)

On December 8, 1998, Detroit applied to FE to amend Presidential Permits PP-21 and PP-58. In its application, Detroit proposed to change the manner in which the existing international transmission facilities are operated by installing a new 345/230-kV 1,000 MVA (million volt ampere) voltage-regulating autotransformer<sup>3</sup> in the L51D facility (PP-58) and a 675-MVA phase-shifting transformer<sup>4</sup> in the B3N facility (PP-21). Detroit proposed these actions as a result of, and in conjunction with, modifications made by Hydro One on the Canadian end of the interconnections. In its application, Detroit claimed that the combined effect of these two proposals would be to provide enhanced control over the inadvertent power flow between Michigan and Ontario and, by extension, around Lake Erie.

Notice of Detroit's application to amend Presidential Permits PP-21 and PP-58 was published in the *Federal Register* on December 17, 1998, (63 FR 69619) requesting that comments, protests, and petitions to intervene be submitted to DOE by January 19, 1999. A timely Petition to Intervene was received from the City of Detroit and comments were also received from the North American Electric Reliability Council (NERC). Petitions to Intervene Out of Time were received on January 25, 1999, from the New York Power Pool (NYPP) and on October 21, 1999, from the American Electric Power System (AEP); late comments were received from the Pennsylvania-New Jersey-Maryland Interconnection (PJM) on January 22, 1999. On

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<sup>3</sup>In its original application, Detroit indicated that the rating of this transformer would be 950 MVA. In its March 30, 2000 amendment, Detroit indicated that the autotransformer would have a nominal rating of 1000 MVA.

<sup>4</sup>In its original application, Detroit indicated that the rating of this phase-shifting transformer would be 850 MVE. In its March 30, 2000 amendment, Detroit indicated that the phase-shifting transformer would have a 675 MVA rating.

January 27, 2000, Detroit submitted a Request for Leave to Answer AEP's late intervention request in which it opposed granting AEP's intervention. On April 24, 2000, Detroit withdrew its opposition to AEP's intervention. Comments also were received from Ontario Power Generation on April 4, 2001.

On March 30, 2000, Detroit amended its application by requesting authority to connect and operate the 345/230-kV autotransformer on the L51D facilities immediately and, thereby, change the operating voltage of the L51D facility from 345-kV to 230-kV. Detroit asserted in this amendment that the connection of the autotransformer, together with modifications to the L4D facility that had already been completed by Hydro One in Canada, would relieve expected high electrical loadings during the summer of 2000. On April 14, 2000, AEP submitted comments supporting the immediate installation of the 345/230-kV autotransformer on the L51D facilities.

In response to Detroit's request to place the autotransformer on the L51D facility in service immediately, in the absence of opposition by interveners, in light of the endorsement of this action by AEP, and considering the potential positive impacts this action was expected to have on the Michigan-Ontario interconnection facilities, on April 27, 2000, DOE issued Presidential Permit PP-221 to Detroit granting its request to connect the 345/230-kV autotransformer on the L51D facility and to change the operating voltage of that facility from 345-kV to 230-kV. That Order superseded and replaced Presidential Permits PP-21, PP-38, and PP-58, issued by the former FPC, but did not authorize the requested change to facility B3N. Rather, DOE noted in Order PP-221 that it was awaiting completion and submission of additional regional coordination studies before rendering the final decision on that portion of Detroit's application.

In the interim, and as a result of corporate restructuring, on August 21, 2000, Detroit and ITC (collectively the "Applicants") jointly applied to DOE to rescind Presidential Permit PP-221 and, coincidentally, to issue a new Presidential permit to ITC for the same international transmission facilities then authorized by PP-221. Detroit and ITC, each wholly owned subsidiaries of DTE Energy, proposed a voluntary transfer from Detroit to ITC of the four international transmission facilities authorized by Presidential Permit PP-221.<sup>5</sup>

Notice of the joint application to DOE was published in the *Federal Register* on September 6, 2000, (65 FR 53994) requesting that comments, protests, and petitions to intervene be submitted to DOE by September 21, 2000. None were received. Accordingly, on September 26, 2000, DOE issued Order No. PP-230 granting a Presidential permit to ITC for the existing four international transmission lines connecting Michigan and Ontario and rescinding Presidential Permit PP-221 previously issued to Detroit. Again, DOE continued the proceeding to install a phase-shifting transformer on the B3N facility until after submission and evaluation by DOE of additional regional coordination studies and noted that interveners or parties in the previous PP-221 proceeding would be considered interveners or parties in the continuation of the proceeding in the PP-230 docket.

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<sup>5</sup>On June 29, 2000, in an Order issued by FERC in Docket No. EC00-86-000, DTE Energy and the Applicants were authorized to engage in a series of intra-corporate transactions. One result of these transactions was the transfer from Detroit to ITC of ownership, operation, and control of its integrated high-voltage transmission facilities, including the international transmission lines previously authorized to Detroit by DOE in Presidential Permit PP-221.

On October 3, 2000, in response to a request by ITC, DOE issued a brief administrative order in Presidential Permit PP-230-1, clarifying that the authority granted in Order No. PP-230 to ITC does not take effect until the financial closing of the transfer of the international transmission facilities of Detroit to ITC. The effective date of the transfer of the subject facilities was January 1, 2001.

The Department of State and the Department of Defense have concurred in the granting of Presidential Permit PP-230-2.

## **II. DISCUSSION**

In interventions and comments submitted in this continued proceeding, NERC, PJM, NYPP and AEP did not oppose Detroit's (now ITC's) proposed installation of phase-shifting and voltage regulating transformers or other modifications to the Detroit/Hydro One interconnection. Rather, each expressed concern and/or encouraged diligent interregional coordination of the power systems around Lake Erie and development of operating agreements within the region to insure that negative impacts on other interconnected systems will not occur. The late comments filed by Ontario Power Generation also endorsed granting the amendment as originally requested by Detroit.

Detroit did not oppose the late intervention by NYPP and ultimately withdrew its opposition to AEP's late intervention.

## **III. FINDING AND DECISION**

DOE has evaluated the impact on the reliability of the U.S. electric power supply system of the installation of a 675-MVA phase-shifting transformer in the B3N<sup>6</sup> facility and the resulting change in the operation of the authorized international transmission facilities. As a result of this review, DOE has determined that this action would not adversely impact the reliability of the U.S. electric power supply system. An analysis in support of this finding has been made a part of the record in this Docket.

DOE has also determined that this action is among those classes of actions not normally requiring preparation of an environmental assessment or an environmental impact statement and, therefore, is eligible for categorical exclusion under Appendix B to Subpart D, paragraph B4.11 of the revised DOE Regulations implementing the National Environmental Policy Act of 1969. Specifically, this categorical exclusion is for construction of electric power substations (including switching stations and support facilities) with power delivery at 230-kV or below, or modification (other than voltage

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<sup>6</sup> DOE evaluated the impact on the reliability of the U.S. electric power supply system of the installation of the 345/230-kV 1,000 MVA (million volt ampere) voltage-regulating autotransformer on the L51D facility in the PP-221 proceeding and issued an Order authorizing its installation on April 27, 2000.

increases) of existing substations and support facilities, that could involve the construction of electric powerlines approximately 10 miles in length or less, or relocation of existing electric powerlines approximately 20 miles in length or less, but not the integration of major new generation resources into a main transmission system. Documentation of the use of this categorical exclusion has been placed in this Docket.

In the instances of the Motions to Intervene Out of Time filed by NYPP and AEP, DOE notes that these systems are integral members of the Eastern Interconnection and, therefore, each could potentially be impacted by the actions proposed by Detroit (now ITC). DOE considers each to have a unique and direct interest in the outcome of this proceeding. Furthermore, on April 24, 2000, Detroit withdrew its opposition to AEP's Petition to Intervene Out of Time and requested that AEP be permitted to intervene in this proceeding. DOE further finds that granting NYPP and AEP leave to intervene out of time does not prejudice the outcome of this proceeding. Accordingly, the Motions to Intervene Out of Time filed by NYPP and AEP are hereby granted. There was no opposition to the City of Detroit's timely Petition to Intervene and that petition was thereby granted.

#### **IV. ORDER**

Pursuant to the provision of EO 10485, as amended by EO 12038, and the Rules and Regulations issued thereunder (Title 10, Code of Federal Regulations, section 205.320 et. seq.), permission is granted to the International Transmission Company (ITC) to operate and maintain electric transmission facilities at the international border of the United States and Canada as further described in Article 2 below, upon the following conditions:

Article 1. The facilities herein described shall be subject to all conditions, provisions and requirements of this permit. This permit may be modified or revoked by the President of the United States without notice, or by DOE after public notice, and may be amended by DOE after proper application thereto.

Article 2. The facilities covered by and subject to this permit shall include the following facilities and all supporting structures within the right-of-way occupied by such facilities:

- (a) One 230,000-volt (230-kV) transmission line, including one 675-MVA phase-shifting transformer, connecting the Bunce Creek Station, located in Marysville, Michigan, with Hydro One's Scott Transformer Station located in Sarnia, Ontario (identified as the B3N facility).
  
- (b) One 230-kV transmission line connecting the Waterman Station, located in Detroit, Michigan, with Hydro One's J. Clark Keith Generating Station, located in Windsor, Ontario (identified as the J5D facility).
  
- (c) One 345-kV transmission line connecting the St. Clair Generating Station, located in East China Township, Michigan, with Hydro One's Lambton Generating Station, located in Moore Township, Ontario (identified as the L4D facility).

(d) One 230-kV transmission line connecting the St. Clair Generating Station, located in East China Township, Michigan, with Hydro One's Lambton Generating Station, located in Moore Township, Ontario (identified as the L51D facility).

These facilities are more specifically described in the application filed in this docket.

Article 3. The facilities described in Article 2 above, including the phase-shifting transformer in the B3N circuit, shall be designed and operated in compliance with all policies and standards of NERC or its successor, Regional Councils, or independent system operators, as appropriate, on such terms as expressed therein, and as such criteria, standards, and guides may be amended from time to time. ITC shall operate the phase-shifting transformer in the B3N circuit consistent with the principles and practices contained in: (1) *Utility Practices in Phase Angle Regulator Operation* developed by the Lake Erie Security Process Working Group and dated May 2000; and (2) the Northeast Power Coordinating Council Emergency Operation Criteria (Document 3-A). Furthermore, under normal system conditions, ITC shall operate the phase-shifting transformer in the B3N facility such that the electrical flow on the Michigan-Ontario interface will match the Michigan-Ontario scheduled transactions across the interface. However, under emergency conditions, the phase-shifting transformer on the B3N facility shall be operated in a manner that will help alleviate such emergencies consistent with the provisions described in the "Basic Principles of Ontario-Michigan Phase Shifter Operation," contained in Appendix E of the report entitled *Michigan-Ontario Phase Angle Regulator Study, An Interregional Perspective*, dated November 1999 and submitted in support of this amendment application.

Article 4. No change shall be made in the facilities covered by this permit or in the authorized operation of these facilities unless such change has been approved by DOE.

Article 5. ITC shall at all times maintain the facilities covered by this permit in a satisfactory condition so that all requirements of the National Electric Safety Code in effect at the time of construction are fully met.

Article 6. The operation and maintenance of the facilities covered by this permit shall be subject to the inspection and approval of a properly designated representative of DOE, who shall be an authorized representative of the United States for such purposes. ITC shall allow officers or employees of the United States, with written authorization, free and unrestricted access into, through, and across any lands occupied by these facilities in the performance of their duties.

Article 7. ITC shall investigate any complaints from nearby residents of radio or television interference identifiably caused by the operation of the facilities covered by this permit. ITC shall take appropriate action as necessary to mitigate such situations. Complaints from individuals residing within one-half mile of the center of the transmission circuit are the only ones which must be resolved. ITC shall maintain written records of all complaints received and of the corrective actions taken.

Article 8. The United States shall not be responsible or liable: for damages to or loss of the property of, or injuries to, persons; for damages to, or loss of the facilities covered by this permit; or for damages to, or loss of the property of, or injuries to the person of ITC officers, agents, servants or employees or of others who may be on said premises; any of which may arise

from or be incident to the exercise of the privileges granted herein; and ITC shall hold the United States harmless from any and all such claims.

Article 9. ITC shall arrange for the installation and maintenance of appropriate metering equipment to record permanently the hourly flow of all electric energy transmitted between the United States and Canada over the facilities authorized herein. ITC shall make and preserve full and complete records with respect to the electric energy imported from Canada. ITC shall furnish annual reports to DOE, by the 15th of February each year, detailing for each month of the previous calendar year: (1) the gross amount of electricity received, in kilowatt hours; (2) the consideration paid for such energy; and (3) the maximum hourly rate of transmission, in kilowatts. Annual reports must be filed regardless of whether or not electric energy was received during the previous year. If no transactions were made, a one-sentence report indicating “no activity” for the previous year is sufficient.

Reports shall be submitted to the U.S. Department of Energy, Office of Fossil Energy, FE-27, 1000 Independence Avenue, SW, Washington, D.C. 20585-0305. Properly identified reports will also be accepted via facsimile at (202) 287-5736 to meet time requirements, but original copies should still be filed at the above address.

Article 10. Neither this permit nor the facilities covered by this permit, or any part thereof, shall be transferable or assignable, except in the event of the involuntary transfer of the facilities by the operation of law. In the case of such an involuntary transfer, this permit shall continue in effect for a period of 60 days and then shall terminate unless an application for a new permit pursuant to Title 10, Code of Federal Regulations, section 205.323, has been received by DOE. Upon receipt by DOE of such an application, this existing permit shall continue in effect pending a decision on the new application. During this decision period, the facilities authorized herein shall remain substantially the same as before the transfer.

Article 11. Upon the termination, revocation or surrender of this permit, the transmission facilities subject to this permit, which are owned, connected, operated, and maintained by ITC and described in Article 2 of this permit, shall be removed and the land restored to its original condition within such time as DOE may specify and at the expense of Edison. If ITC fails to remove such facilities and/or any portion thereof authorized by this permit, DOE may direct that such actions be taken for the removal of the facilities or the restoration of the land associated with the facilities at the expense of ITC. ITC shall have no claim for damages by reason of such possession, removal or repair. However, if certain facilities authorized herein are useful for other utility operations within the bounds of

the United States, DOE will not require that those facilities be removed and the land restored to its original condition upon termination of the international interconnection.

Article 12. The Presidential permits granted in Order Nos. PP-230 and PP-230-1 are hereby rescinded.

Issued in Washington, D.C. on April 19, 2001.

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