United States Department of Energy

Office of Fossil Energy
Washington, D.C.

FE Docket No. PP-221

Detroit Edison Company

Presidential Permit

Order No. PP-221

April 27, 2000
I. BACKGROUND

The Office of Fossil Energy (FE) of the Department of Energy (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, connection, operation, and maintenance of electric transmission facilities at the United States international border.

There are four international electric transmission lines that interconnect electrical systems of the Detroit Edison Company (Detroit) and Ontario Hydro, the provincial utility of Canada’s Province of Ontario. The Presidential permits previously granted by the Federal Power Commission\(^1\) (FPC) authorized Detroit to construct, connect, operate, and maintain the following facilities:

(1) a 230,000-volt (230-kV) transmission line connecting Detroit’s Bunce Creek Station, located in Marysville, Michigan, with Ontario Hydro’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 Detroit’s Waterman Station, located in Detroit, Michigan, with Ontario Hydro’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 Detroit’s St. Clair Generating Station, located in East China Township, Michigan, with Ontario Hydro’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 Detroit’s St. Clair Generating Station, located in East China Township, Michigan, with Ontario Hydro’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.)

\(^1\)The authority to grant Presidential permits for the construction, operation, maintenance, or connection of electric transmission lines 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.
On December 8, 1998, Detroit applied to FE to amend Presidential Permits PP-21 and PP-58. In its application, Detroit proposes to change the manner in which the existing international facilities will be operated by installing a new 345/230-kV 950 MVA (million volt ampere) voltage-regulating autotransformer\(^2\) in the L51D facility (PP-58) and an 850 MVA phase-shifting transformer\(^3\) in the B3N facility (PP-21). Detroit is proposing these actions as a result of, and in conjunction with, modifications made by Ontario Hydro on the Canadian end of the interconnections. Detroit claims 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 the Great Lakes.

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 PJM Interconnection on January 22, 1999. On 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.

On March 30, 2000, Detroit amended its original 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 asserts in this amendment that the connection of the autotransformer, together with modifications to the L4D facility that have already been completed by Ontario Hydro in Canada, will 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.

As a result of Detroit’s request to place the autotransformer on the L51D facility in service immediately, the absence of opposition by interveners, the endorsement of this action by AEP and the potential positive impacts this action may have on the Michigan-Ontario interconnection facilities, DOE is acting on Detroit’s March 30, 2000 request to connect the 345/230-kV autotransformer on the L51D facility and to change the operating voltage of this facility from 345-kV to 230-kV. DOE will address Detroit’s request to install a phase-shifting transformer on the B3N facility (amendment of Presidential Permit PP-58) in a subsequent Order after submission and evaluation of additional regional coordination studies.

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\(^2\) In its March 30, 2000 amendment, Detroit indicated that the autotransformer would have a nominal rating of 1000 MVA.

\(^3\) In its March 30, 2000 amendment, Detroit indicated that the phase-shifting transformer would have a 675 MVA rating.
Also, DOE is using this opportunity to update the Presidential permits originally issued to Detroit by the FPC and assigned DOE Presidential Permit Numbers PP-21, PP-38, and PP-58. Accordingly, the Presidential permit granted herein will supersede and replace those Presidential permits. If, after proper evaluation, DOE grants Detroit's outstanding request to install a phase-shifting transformer on the B3N facility, DOE will amend the Presidential permit issued today.

The Secretary of State and the Secretary of Defense have concurred in the issuance of the requested Presidential permit to Detroit.

II. DISCUSSION

In interventions and comments submitted, NERC, PJM, NYPP and AEP did not oppose Detroit's proposed installation of phase-shifting and voltage regulating transformers or other modifications to the Detroit/Ontario Hydro 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 systems will not occur.

On December 22, 1998, and on January 27, 2000, Detroit submitted technical studies demonstrating the operation of the regional interconnected systems with the proposed modifications in place. In its March 30, 2000 filing, Detroit submitted additional technical studies demonstrating the impact of installing only the voltage-regulating autotransformer on the L51D facility. DOE is awaiting completion and submission of additional regional coordination studies before rendering a final decision on the issues still outstanding in this proceeding.

III. FINDING AND DECISION

DOE has evaluated the impact on the reliability of the U.S. electric power supply system of the installation of the voltage-regulating transformer on the L51D facilities and the change in the operating voltage of this circuit from 345-kV to 230-kV. 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 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.
There being no opposition to the timely Petition to Intervene filed by the City of Detroit, the City is hereby a party to this proceeding.

In the instances of the Motions to Intervene Out of Time filed by NYPP and AEP, DOE notes that these system are integral members of the Eastern Interconnection and, therefore, each could potentially be impacted by the actions proposed by Detroit. 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. Accordingly, the Motions to Intervene Out of Time filed by NYPP and AEP are hereby 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 Detroit Edison Company (Detroit) 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 connecting Detroit’s Bunce Creek Station, located in Marysville, Michigan, with Ontario Hydro’s Scott Transformer Station located in Sarnia, Ontario (identified by Detroit as the B3N facility).

(b) One 230-kV transmission line connecting Detroit’s Waterman Station, located in Detroit, Michigan, with Ontario Hydro’s J. Clark Keith Generating Station, located in Windsor, Ontario (identified by Detroit as the J5D facility).

(c) One 345-kV transmission line connecting Detroit’s St. Clair Generating Station, located in East China Township, Michigan, with Ontario Hydro’s Lambton Generating Station, located in Moore Township, Ontario (identified by Detroit as the L4D facility).

(d) One 230-kV transmission line connecting Detroit’s St. Clair Generating Station, located in East China Township, Michigan, with Ontario Hydro’s Lambton Generating Station, located in Moore Township, Ontario (identified by Detroit 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 shall be designed and operated in accordance with the applicable criteria established by and consistent with that of the North American Electric Reliability Council 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.

**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.** Detroit 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. Detroit 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.** Detroit shall investigate any complaints from nearby residents of radio or television interference identifiably caused by the operation of the facilities covered by this permit. Detroit 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. Detroit 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 Detroit 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 Detroit shall hold the United States harmless from any and all such claims.

**Article 9.** Detroit 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. Detroit shall make and preserve full and complete records with respect to the electric energy imported from Canada. Detroit 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 Detroit 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 Detroit 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 Detroit. Detroit 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.


[Signature]
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Office of Coal & Power Import & Export
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