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August 15, 2012

Dr. Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7th Place East, Suite 350  
St. Paul, MN 55101

**Re: In the Matter of ITC Midwest LLC's Application for Approval of a Minor Alteration to Rebuild the Heron Lake to Lakefield Junction 161 kV Transmission Line in Jackson County, Minnesota  
Docket No. ET6675/MC-12-\_\_\_\_\_**

Dear Dr. Haar:

ITC Midwest LLC ("ITCM") requests that the Minnesota Public Utilities Commission ("Commission") approve the enclosed application for a minor alteration made pursuant to Minnesota Rules, part 7850.4800. Specifically, ITCM is seeking approval to rebuild the existing 17-mile 161 kV transmission line from the Heron Lake Substation to the Lakefield Junction Substation in Jackson County, Minnesota.

ITCM proposes to:

- Reconstruct 11 miles of 161 kV H-frame transmission line at the same voltage with a single-pole design along the current alignment and within existing right-of-way; and
- Reconstruct and relocate six miles of the 161 kV transmission line, including one mile of 161 kV line that bisects the Timber Lake Waterfowl Production Area ("WPA"), and co-locate it with a nearby 69 kV transmission line using a single pole design to consolidate facilities in the area.

ITCM originally sought local review of this project in accordance with Minnesota Statutes Section 216E.05 and filed a Conditional Use Permit ("CUP") application with Jackson County. ITCM provided notice of the application to the Commission and general service list on July 3, 2012 (ET6675/LR-12-746). Subsequently, Jackson County requested that ITCM withdraw its CUP application due to recent staff changes within the Jackson County Planning and Environmental Services department. ITCM complied with Jackson County's request and withdrew its CUP application on July 9, 2012.

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ITCM now files this application for a minor alteration seeking Commission approval. ITCM has efiled the application and will also provide three paper copies to the Commission and the Minnesota Department of Commerce, Energy Facility Permitting Staff, via U.S. mail.

**Enclosed Documents**

In support of this minor alteration application, ITCM provides the following documents:

- Application describing the project;
- Maps depicting the current and proposed route for the project (Figures 1 and 2);
- A figure showing the dimensions and designs of the existing and proposed structures (Figure 3);
- A table itemizing the impacts of the proposed route (Addendum 1);
- An addendum summarizing the reduction in electric and magnetic fields resulting from the project (Addendum 2);
- An addendum describing the bird diverters ITCM plans to use for the project (Addendum 3); and
- An addendum including the names and addresses of property owners along the route (Addendum 4).

Please call me at (651) 222-1000 ext. 2308 with any questions regarding this filing. Thank you for your attention to this matter.

Sincerely,

*/s/ David Grover*

David Grover  
Manager, Regulatory Strategy

Enclosure

cc: Deborah Pile, Department of Commerce – w/encl. (3)  
Janice Fransen, Coordinator, Jackson County – w/encl.

**STATE OF MINNESOTA  
BEFORE THE  
MINNESOTA PUBLIC UTILITIES COMMISSION**

Beverly Jones Heydinger  
David C. Boyd  
J. Dennis O'Brien  
Phyllis A. Reha  
Betsy Wergin

Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

**In the Matter of ITC Midwest LLC's  
Application for Approval of a Minor  
Alteration to Rebuild the Heron Lake to  
Lakefield Junction 161kV Transmission  
Line in Jackson County, Minnesota**

**APPLICATION FOR A  
MINOR ALTERATION**

Docket No. ET6675/MC-12-\_\_\_\_\_

**INTRODUCTION**

ITC Midwest LLC ("ITCM") submits this application for approval of a minor alteration pursuant to Minnesota Rules, part 7850.4800, to rebuild the existing 17-mile 161 kV transmission line from the Heron Lake Substation to Lakefield Junction Substation in Jackson County, Minnesota (the "Project"). This line is approximately 60 years old and needs to be rebuilt for safety and reliability reasons. The rebuild will also increase the line rating which will help relieve congestion on the 161 kV transmission system.

Figure 1 (attached) shows the existing transmission lines and proposed alignment for the Project. The Project should be approved as a minor alteration because it does not result in significant changes in the human or environmental impact of the facility. Rather, the Project, as designed, reduces overall impacts. Eleven miles of the Project are to be rebuilt on, and entirely within, existing right-of-way. The remaining six miles will be rebuilt one half mile north of its existing location so that it can be co-located with an existing 69 kV ITCM transmission line along the road right-of-way, thereby eliminating more than 250 poles and approximately six miles of existing transmission line right-of-way. Rerouting the line will allow ITCM to remove one mile of 161 kV line from the center of the U.S. Fish and Wildlife Service ("USFWS") Timber Lake Waterfowl Production Area ("WPA").

**BACKGROUND**

The existing 17-mile 161 kV transmission line between the Heron Lake Substation and the Lakefield Junction Substation was built by Interstate Power and Light in the 1950s. The existing line uses H-frame structures. As shown on Figures 1 and 2, the existing line begins at the Heron Lake Substation and runs east-west along a half section line for approximately seven and a half miles before turning south and continuing approximately nine miles to the Lakefield Junction Substation.

ITCM identified a need to rebuild the line for safety and reliability purposes because of the age and condition of the existing structures. ITCM also identified this rebuild as one of several projects that will mitigate congestion in the southeast Minnesota, northern Iowa and southwest Wisconsin Narrowly Constrained Area (“NCA”). The Project was approved by the Midwest Independent Transmission System Operator, Inc. (“MISO”) in the MISO Transmission Expansion Plan 2008 (“MTEP 08”) with an expected in-service date of June 1, 2013.

During the design and engineering process, ITCM met with representatives of the USFWS Timber Lake WPA to discuss rebuilding the line along the existing 161 kV easement located along the half section line in middle of the WPA in Section 19 of Delafield Township and Section 24 of Weimer Township. (See Figure 2, Sheets 24-26.) USFWS expressed a desire for the 161 kV line to be relocated out of the middle of the WPA. ITCM then developed an alignment on the north side of the WPA where ITCM maintains an easement and 69 kV transmission line along the road right-of-way. By consolidating the 161 kV and 69 kV transmission lines, the 161 kV line can be removed entirely from the half section line. (See Figure 2, Sheets 8-10.)

ITCM originally filed a Conditional Use Permit (“CUP”) application with Jackson County, under Minnesota Statutes Section 216E.05. ITCM provided notice of the local review application to the Commission and general service list on July 3, 2012 (ET6675/LR-12-746). Subsequently, Jackson County experienced staff changes and requested that ITCM withdraw its application and seek approval from the Minnesota Public Utilities Commission. This application for a minor alteration replaces the request for a CUP.

## **PROJECT DESCRIPTION**

ITCM seeks approval of a minor alteration to rebuild approximately 17 miles of 161 kV transmission lines located on primarily agricultural land in Weimer, Delafield, Heron Lake and Hunter Townships in Jackson County, Minnesota. ITCM proposes to reroute approximately six miles of the east-west portion of the 161 kV transmission line one half mile north and to double circuit this six mile stretch with the existing ITCM 69 kV line that runs along County State Aid Highway (“CSAH”) 24/County Road 82 road right-of-way. The remaining approximately eleven miles of the line will be rebuilt along the current alignment and within the existing right-of-way. Figures 1 and 2 show the existing and proposed routes.

As proposed, the 161/69 kV route will begin at the Heron Lake substation and parallel CSAH 24/County Road 82 for approximately six miles. At MN Trunk Highway (“MNTH”) No. 86, the route will turn south along the east side of MNTH 86 for approximately one-half mile. There, the 161 kV single circuit route will turn east 1.5 miles along the quarter line of S21/T104N/R36W. The Project will then turn south and follow the north-south quarter lines along the existing alignment for approximately 8.8 miles to the Lakefield Junction Substation.

A right-of-way width of 75 feet will be required for the construction of the line (i.e., 37.5 feet on each side of the centerline of the transmission line route). ITCM will replace the existing 161 kV H-frame structures and the single pole wooden 69 kV structures with a single-pole, braced-post and davit arm designs. Figure 3 includes renderings and dimensions of the typical existing and proposed structures that will be used for the Project. Tree removal and vegetation clearing will

occur within the right-of-way along the transmission line route prior to construction, and vegetation will be maintained following construction as necessary to meet operational and safety standards.

**Table 1 – Proposed structure specifications**

Line Type	Typical Structure Type	Structure Material	Right-of-way Width (feet)	Structure Height (feet)	Foundation	Foundation Diameter (feet)	Span between Structures (feet)
161/69 kV Double Circuit	Single pole, davit arm design	Galvanized or Weathering Steel	75'	85' to 115'	Direct embedded for tangent structures; and self-supporting for angle/dead-end structures	5-8	400' to 700'
161 kV Single Circuit	Single pole, braced post design	Galvanized or Weathering Steel	75'	75' to 100'	Direct embedded for tangent structures; and self-supporting for angle/dead-end structures	5-8	400' to 700'

**PROJECT SCHEDULE**

ITCM plans to meet the June 1, 2013 in-service date identified in the MTEP 08. Construction of the Project is anticipated to take approximately 20 weeks, with additional time for restoration activities as needed based on weather conditions. ITCM will utilize its best efforts to complete construction of the Project during the winter months to minimize impacts on agricultural operations, wildlife and wetlands, particularly in the WPA. ITCM will continue to coordinate with USFWS to ensure that construction and removal of the existing 161 kV structures are completed in a manner that avoids and minimizes impacts within the WPA.

**LANDOWNER DISCUSSIONS**

ITCM minimized the need to acquire new right-of-way by utilizing or paralleling existing right-of-way along the entire route. ITCM land agents negotiated voluntary easement amendments with each of the private landowners along the proposed 161/69 kV route. ITCM is not aware of any landowner objections to the Project.

ITCM has also submitted an easement application to the USFWS to acquire the necessary easement amendment to enable the 161 kV line to be co-located with the 69 kV line along the northern edge of the WPA. ITCM has closely coordinated with USFWS regarding this Project, and ITCM does not anticipate any delay in acquiring the necessary approvals for construction.

## **ANALYSIS OF HUMAN AND ENVIRONMENTAL IMPACTS**

Minnesota Rules, part 7850.4800, subpart 1, defines a minor alteration as “a change in a ... high voltage transmission line that does not result in significant changes in the human or environmental impact of the facility.” Minnesota Rules, part 7850.4800, subpart 2, requires applicants for a minor alteration to provide an explanation why the alteration is minor. The information in this application demonstrates that the Project is minor because it does not result in significant changes to the human or environmental impact of the facility. By consolidating existing parallel transmission corridors, the Project results in fewer environmental impacts than would occur if the existing facilities were rebuilt in their current locations.

ITCM examined the human and environmental impacts of the Project. An impacts table is included as Addendum 1. As shown in Addendum 1, the Project decreases the total miles of transmission lines from 24.2 to 17.3, removes approximately 250 poles, removes pole locations within National Wetlands Inventory (“NWI”) and Public Waters Inventory (“PWI”) wetlands and eliminates two stream crossings. ITCM also conducted a review of the Project’s electric and magnetic fields. The results of that analysis are provided in Addendum 2. Notably, because the Project follows existing right-of-way for the entire route, there are no changes in the number of residences or the distance from residences impacted by the Project.

In response to early coordination efforts with USFWS and Minnesota Department of Natural Resource (“MDNR”), ITCM will be installing bird diverters near the WPA. Addendum 3 discusses the equipment and installation specifications ITCM plans to use.

ITCM believes that the Project meets the definition of a minor alternation. Importantly, this Project represents an opportunity to consolidate parallel transmission lines in a manner that reduces impacts on the environment, including impacts to the USFWS Timber Lake WPA.

## **NOTICE AND COMMENT REQUIREMENTS**

Minnesota Rules, part 7850.4800, subpart 2, states that the Commission shall mail notice of receipt of the application to those persons on the general list and to those persons on the project contact list if such a list exists. The Commission shall provide at least a ten-day period for interested persons to submit comments on the application or to request the matter be brought to the Commission for consideration.

Pursuant to Minnesota Rules, part 7829.0700, ITCM requests that the following persons be placed on the Commission’s official list for this matter:

<b>Utility Employees Responsible for Filing</b>	David Grover Manager, Regulatory Strategy ITC Midwest 444 Cedar Street, Suite 1020 St. Paul, MN 55101 <a href="mailto:dgrover@itctransco.com">dgrover@itctransco.com</a> Office: (651) 222-1000 ext. 2308 Cell: (612) 581-7832 Fax: (651) 222-5544	David Gross Associate Community Relations Rep. ITC Midwest 20789 780th Avenue Albert Lea, MN 56007 <a href="mailto:dgross@itctransco.com">dgross@itctransco.com</a> Office: (507) 377-6000 ext. 2004 Cell: (507) 320-2422 Fax: (507) 377-1190
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**Utility Attorneys  
Responsible for Filing**

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In addition, to facilitate the Commission's notice efforts, Addendum 4 includes a list of all property owners along the proposed route.

**CONCLUSION**

ITCM respectfully requests the Commission authorize the Heron Lake to Lakefield Junction 161 kV transmission line rebuild as a minor alteration, as provided in Minnesota Rules, part 7850.4800.

Dated: August 15, 2012

ITC Midwest LLC

By:       /s/ David Grover        
David Grover  
Manager, Regulatory Strategy