



**FILED WITH  
Executive Secretary  
August 23, 2012  
IOWA UTILITIES BOARD  
NOI-2011-0002**

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August 23, 2012

*Filed Electronically*

Ms. Joan Conrad  
Executive Secretary  
Iowa Utilities Board  
1375 East Court Avenue, Room 69  
Des Moines, IA 50319-0069

**Re: High Voltage Transmission Projects**  
Docket No. NOI-2011-0002

Dear Ms. Conrad:

Enclosed please find American Transmission Company's Comments to the Iowa Utilities Board Notice of Inquiry into High-Voltage Transmission Projects.

Sincerely,

*/s/ Christopher W. Zibart*

Christopher W. Zibart  
Deputy General Counsel  
ATC Management Inc.  
Corporate manager for  
American Transmission Company LLC

**STATE OF IOWA**  
**DEPARTMENT OF COMMERCE**  
**UTILITIES BOARD**

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**In Re:**

**High-Voltage Transmission Projects**

**Docket No. NOI-2011-0002**

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**COMMENTS OF AMERICAN TRANSMISSION COMPANY LLC**

American Transmission Company, LLC, by its corporate manager, ATC Management Inc. (Collectively “ATC”), and pursuant to the Board’s Order of August 16, 2011, provides the following in response:

**Background**

On August 16, 2011, the Board opened this inquiry to gather information concerning major transmission line projects that potentially would impact the state of Iowa. The Board solicited information concerning the proposed transmission line projects, and specifically requested interested parties to provide information to the Board to better inform the Board concerning those projects, and the impact that such projects would have on Iowa, including:

- the impact on Iowa rates;
- the impact on transmissions system congestion in Iowa;
- the impact on the delivery of low-cost generation (particularly wind generation);
- the inter-relationship of the projects to each other (whether proposed transmission line projects overlap or serve the same purpose or purposes).

The Board posed specific questions for which it sought as much detail as would be available give the nature of the stage of development of each project. The Board identified 11 specific questions the answers to which would provide the Board with additional information concerning specific projects.<sup>1</sup>

### **American Transmission Company LLC**

ATC is a standalone transmission company that provides transmission service over the facilities that it owns and operates under the provisions of the Open Access Transmission, Energy and Operating Reserves Markets Tariff (Tariff) of the Midwest Independent Transmission System Operator, Inc. (Midwest ISO), the Federal Energy Regulatory Commission (FERC) authorized regional transmission organization (RTO). ATC is a transmission-owning member of the Midwest ISO.

ATC was formed in 2000 when a number of investor-owned, municipal and cooperative utilities contributed their respective transmission facilities to ATC to be operated as a single transmission system. ATC's original transmission facilities had a net book value of approximately \$534 Million. ATC has constructed more than \$2.8 Billion in new transmission facilities for the benefit of its transmission and interconnected customers since its formation and those facilities currently have a net book value of approximately \$3.1 Billion. ATC is owned by 29 entities, including investor-owned utilities, municipal utilities and cooperative associations.

ATC currently owns and operates more than 9,500 miles of transmission lines and more than 510 substations in the states of Wisconsin, Michigan, Minnesota and Illinois. ATC's transmission facilities are operated at voltages ranging from 69 kV to 345 kV, and are

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<sup>1</sup> The Board requested comments by October 3, 2011. ATC appreciates that these Comments are not timely. However, ATC files these comments at this time to assist the Board's inquiry by providing information concerning the Cardinal Bluffs Transmission Line Project that will be constructed, in part, in Iowa

interconnected with more than 60 distribution systems and more than 80 electric generating facilities. ATC does not own any distribution or generating facilities, and is prohibited under Wisconsin law from owning generating capacity except in very limited circumstances.

Under the Midwest ISO Tariff, regional transmission planning is accomplished pursuant to Attachment FF. As part of the responsibility of the Midwest ISO under the Tariff, the Midwest ISO, through its Attachment FF planning process, develops the Midwest ISO transmission expansion plan (MTEP) which, when approved by the Midwest ISO Board, establishes the transmission projects to be constructed by participating members of the Midwest ISO. In December, 2011, as part of a portfolio of transmission line projects referred to as multi-value projects (MVP), the Midwest ISO Board approved the construction of a project generally referred to by ATC as the Cardinal Bluffs transmission project. The Cardinal Bluffs project will interconnect existing transmission facilities in Iowa with existing transmission facilities in Wisconsin. As such, the Cardinal Bluffs project will have impacts in the state of Iowa for which the Board has requested information. As set forth below, ATC provides responses, to the extent that information is available, in response to each of the Board's questions set forth in its August 16, 2011, Order establishing this proceeding.

### **The Cardinal Bluffs Project**

The Cardinal Bluffs transmission line project is a 345 kV transmission line that will interconnect existing 345 kV transmission facilities in Wisconsin with existing 345 kV transmission facilities in Iowa. The exact location of the point of interconnection in Iowa is to be determined during the routing and siting process. The specific questions posed by the Board, together with ATC's responses, are set forth below:

1. **Describe the proposed project, including beginning terminus and end terminus (at least by county, with a more detailed description if possible), MW size, DC-Classic or DC-VSC or AC configuration, location of interconnects with existing facilities and other major facilities such as converter stations or substations, and proposed construction commencement and in-service dates.**

**ATC response:** The Cardinal Bluffs AC transmission line consists of approximately 110 miles of 345 kV transmission facilities originating at a point of interconnection in Dubuque County and terminating at the Cardinal substation in Wisconsin. The project also includes interconnection at a new intermediate substation located in Wisconsin. Depending on the location at which the line traverses the Mississippi River and the Dubuque County interconnection point, the amount of 345 kV line in Iowa ranges from 12 to 16 miles. One substation associated with the line will be located in Iowa, the location of which is yet to be determined.

2. **The project's current status in the regulatory process. Please indicate when filings were made or are anticipated to be made with:**

**Agency Date Purpose**  
**IUB Board Sanctioned Information**  
**Meeting**  
**Franchise Application**  
**FERC Rate Treatment**

**ATC Response:** There are no pending regulatory proceedings at the present time. ATC has had initial discussions with the IUB Staff, the IDNR, the City of Dubuque staff, the staff of the Public Service Commission of Wisconsin (PSCW), the U.S. Fish and Wildlife Service, and the Army Corps of Engineers. The PSCW which designates project dockets in advance of the initial filing, has assigned the project Docket No. 137-CE-164. The initial routing and siting began in January 2012. It is anticipated that a Franchise Application, consistent with the Board's regulations and Iowa law will be made in 2014 in coordination with approval applications required under Wisconsin law. ATC anticipates that all approvals will be received by 2015 and that construction may begin at that time with construction completed, and the line placed in service by December 2018.

The rate treatment to be afforded the project is the MVP cost allocation methodology that allocates the cost of the Cardinal Bluffs line to the Midwest ISO region as a whole. Based on currently available information, approximately 8-11% of the annual costs will be collected from Iowa Transmission Customers receiving service under the Midwest ISO Tariff.

3. **What is the status of the project in the regional transmission planning process?**

**ATC response:** The Cardinal Bluffs transmission line project was approved by the Midwest ISO Board of Directors in December 2011 as one of the portfolio of MVPs

developed by the Midwest ISO to address regional transmission planning needs, including reliability, congestion relief, and the fulfillment of public policy requirements.

**4. Whether the project has financing, with an explanation of the answer.**

**ATC response:** The costs that ATC incurs will be financed with internally-generated funds from ATC's operations and debt acquired by ATC in the normal course of business consistent with ATC's existing debt/equity ratio requirements. No project financing or special financing is anticipated in connection with the Cardinal Bluffs line.

**5. Whether the project has a transmission contract, whether it is firm or non-firm and the scale of the contract, along with any other details that may be available.**

**ATC response:** No specific contract for transmission service is required for the Cardinal Bluffs line. The benefits of the Cardinal Bluffs line are regional and, in accordance with the regional costs sharing methods of the Midwest ISO Tariff, the charges for the use of the facilities when constructed will be collected regionally by the Midwest ISO under Schedule 26-A of the Midwest ISO Tariff pursuant to authorization from the FERC.

**6. The current projected impacts of the proposed project:**

**On Ratepayers:**

**ATC response:** The revenue requirement associated with the Cardinal Bluffs line will be collected under the Midwest ISO Tariff and will not have a direct impact on the rates and charges incurred by retail rate customers the rates and charges for which are subject to the Board's jurisdiction. As noted in response to the Board's question No. 8, the revenue requirement for the Cardinal Bluffs line will be collected under Schedule 26-A of the Midwest ISO Tariff. Based on the manner under which such amounts are fashioned into rates and collected, approximately 8-11% of the revenue requirement will be collected from transmission customers receiving wholesale transmission service that are located in Iowa.

**Congestion and constraint relief, comment on MISO's analysis.**

**ATC's response:** Based on ATC's participation in the Midwest ISO regional planning process and ATC's analysis of its own system, the Midwest ISO has appropriately determined that the MVP portfolio, of which the Cardinal Bluffs line forms a part, reduces congestion on the Midwest ISO regional transmission system and in the absence of the construction of the Cardinal Bluffs line, congestion in the western portion of the Midwest ISO region would either not be reduced or would increase as a result of the increased number of wind-generated sources of energy seeking to interconnection facilities governed by the Midwest ISO Tariff.

**Effect on reliability (for example, reduced loop flows). Explain.**

**ATC's response:** ATC's analysis of its system and neighboring systems shows that Cardinal Bluffs will reduce the potential for overloads on historically constrained system elements in northeastern Iowa. Further, flows from northeastern Iowa into southwestern Wisconsin are expected to increase in the future due to expected regional generation changes. The Cardinal Bluffs line will provide a transmission backbone to allow for these increased flows without overloading underlying system elements. In addition to these flow-based reliability benefits, the Cardinal Bluffs project is also expected to provide support to area system voltages, reducing the possibility of a voltage collapse that could lead to widespread outages.

**For Landowners:  
Projected easement revenues, if available.**

**ATC's response:** At this time, ATC is not able to estimate the revenues associated with the Cardinal Bluffs line for Landowners.

**For State or County Residents:      Income taxes                  Property taxes**

**ATC's response:** ATC is unable to estimate the income or property taxes that would be attributable to the construction and operation of the Cardinal Bluffs line.

**For Generation Developers and Other Shippers:  
Wind generation that could be served.      How many MW?**

**ATC's response:** The Midwest ISO Candidate MVP analysis dated July 13, 2011, provided that an additional 12,095 MWs of wind-generated capacity could be received into the Midwest ISO regional transmission system

**Anticipated rate stated in dollars per MW and/or dollars per MWh?**

**ATC's response:** ATC is unable at this time to estimate the transmission charge to be developed under Schedule 26-A of the Midwest ISO Tariff that would recover the revenue requirement for all of the MVPs.

**Other generation that could be served. (Please list)  
How many MW?**

**ATC response:** No other generation sources have been specifically studied in connection with the MVP portfolio

**The impacts here and costs below should be provided by year. The net present value of the project to Iowa parties in 2011 dollars should be calculated, with all relevant assumptions, including key assumptions concerning interest rates and change in construction costs over time, readily transparent.**

**Anticipated rate stated in dollars per MW and/or dollars per MWh?**

**ATC Response:** ATC is not able at this time to provide information in response to this question.

7. **How much right of way will be required in Iowa? (Length (miles) and width, area for substations and converters, etc.)**

**ATC's response:** Presently, the amount of right-of-way in Iowa is not yet known. The length ranges from 12 to 16 miles and ATC would generally require, depending on the configuration, 120 to 150 feet (or 60 to 75 feet on either side of the center line of the transmission line). Required acreage for the substation in Iowa is not yet known.

8. **Other impacts? (Please specify)**

**ATC response:** The Midwest ISO evaluated a number of additional beneficial impacts of the MVP portfolio, including, greater support for a more diverse fuel mix; increase transmission system robustness providing a greater ability to respond to system disturbances; decreased fuel price risk; decreased carbon output and decreased wind-generation volatility. More specific information is set forth in the Midwest ISO Proposed Multi-value Project Portfolio- Technical Study Task Force and Business Case Workshop August 22, 1011.

**What are the currently projected costs of the project?**

**Capital Cost  
Annual Cost**

**ATC response:** The currently estimated capital cost of the entire Cardinal Bluffs line is \$372 Million in 2018 dollars. The currently estimated annual revenue requirement to recover the costs of the Cardinal Bluffs line is \$85 Million.

9. **Recovery of Capital Costs. What depreciation life is assumed and salvage cost?**

**ATC response:** ATC will use its generally applicable depreciation rates that were approved by the FERC in 2011. The composite depreciation rate is generally 2.86%

**Annual cost is to be borne by which entities?**

**ATC response:** The annual costs will be collected in accordance with the Midwest ISO Tariff under Schedule 26-A. The recovery of ATC's annual revenue requirement under Schedule 26-A of the Midwest ISO Tariff includes all costs associated with the Cardinal Bluff line, including operating and maintenance costs, as well as the recovery of and on the capital invested in the facilities. All costs therefore are borne by the Midwest ISO region as a whole, which includes those entities receiving service that are located in Iowa. Approximately 8-11% of all costs will be recovered from transmission customers receiving service under the Midwest ISO Tariff that are located in Iowa.

**10. Reliability and operational impacts Contingency Readiness Voltage, Frequency and Reactive Power support**

**ATC response:** The analysis conducted by the Midwest ISO included consideration of and compliance with the reliability standards of the North American Reliability Corporation (NERC) for steady state, dynamic stability, including thermal overloading, and high and low voltage conditions.

**11. Transmission Facility costs not recovered from transmission customers, stated in dollars per year, to be recovered from which entities?**

**ATC response:** ATC anticipates that all costs associated with the Cardinal Bluffs line will be collected pursuant to the Midwest ISO Tariff.

**Conclusion**

ATC provides the above and forgoing information in connection with the Board's interest in developing more information concerning high voltage transmission facilities to be constructed in Iowa and the impacts and benefits associated with the proposed lines.

Respectfully submitted this 23rd day of August, 2012.

American Transmission Company LLC  
By its corporate manager ATC Management Inc.

*/s/ Christopher W. Zibart*

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By: Christopher W. Zibart  
Deputy General Counsel