

COUNCIL ACTION FORM

**SUBJECT: NETWORK INTEGRATION TRANSMISSION SERVICE AND
TRANSMISSION OWNER CONTRACT**

BACKGROUND:

In September of 2009, the City of Ames Electric Services joined the Midcontinent Independent System Operator (MISO). MISO provides an independent platform to serve and coordinate the transmission of energy within our regional energy market. MISO fosters wholesale electric competition in the region, creates greater system reliability, and helps establish coordinated planning for the interconnected regional transmission network. A map depicting the MISO region can be viewed at <https://www.misoenergy.org/AboutUs/Locations/Pages/Locations.aspx>

When the City first joined MISO, it did so as an energy “market participant”. Through this organization, the City is able to purchase lower cost energy at times. During FY 2013/14 the utility purchased over 34% of its energy needs from this market.

To deliver energy purchases from the market to local electric loads, utilities purchase transmission service. In 2009 there were two general types of transmission service – network service and point-to-point service.

Network service charges are based on the utility’s entire load. This is 130 MegaWatt (MW) in the case of Ames, but contains credits for transmission investment for power lines greater than 100 kiloVolt (kV).

Point-to-point service allowed for tailoring of service, but includes no credit offsets for transmission investments.

With the City generating most of its electricity needs locally and little qualifying transmission investment, the City chose point-to-point service as a more cost effective option. In FY 2012/13, the City paid \$1,345,567 for point-to-point transmission service. This year to date, the City has paid \$1,106,926.

In September 2013, changes were made to MISO’s network service program which caused the City to re-evaluate its options. Qualified 69kV transmission facilities could now be included in the credit calculation. Other benefits were also created, including additional wind-generated capacity and decreased staff time to meet transmission scheduling demands. The amount of credits received are based on electric load and transmission investments of the City together with those of MidAmerican Energy and several other municipal utilities already using network service. This includes Cedar Falls, Pella, Atlantic, and Waverly. Based on staff’s calculations, network service is now

the lowest cost option for transmission service, falling below \$500,000 per year in cost. As the City's new 161kV transmission facilities are placed in service and included in the investment calculation, the City's net transmission cost will continue to fall each year. Depending on several factors, the City could reach a point where its investments fully offset its costs, and the utility begins to receive monthly payments for these investments.

Staff has made application to MISO for network integration transmission service. To be granted network transmission service and receive transmission credits, the utility must become a Transmission Owner in MISO. As a Transmission Owner, the City would turn over "functional control" of its transmission system to MISO. Functional Control means that MISO would oversee and direct transmission operations for the common good of the region. In fact, the City indirectly follows this today, since our transmission lines connected to the City's energy grid tie to MidAmerican Electric and the International Transmission Company (ITC). Both of those utilities are already Transmission Owners in MISO and receive direction from MISO on how to operate their facilities.

Transmission Owner status is accomplished through the execution of the following agreements:

- TRANSMISSION MEMBERSHIP APPLICATION – This document is the application to become a Transmission Owner. It outlines who we are and identifies authorized City Representatives and additional contacts at the City.
- TRANSMISSION OWNERS AGREEMENT – This agreement is the document that initially formed the MISO and is signed by all MISO member utilities. Once fully executed, MISO will report this to the Federal Energy Regulatory Commission. Due to the size of the full agreement, included is a link to the latest version of the Transmission Owners Agreement:
<https://www.misoenergy.org/Library/Repository/Tariff/Rate%20Schedules/Rate%20Schedule%2001%20-%20Transmission%20Owners%20Agreement.pdf>
- APPENDIX G AGENCY AGREEMENT - If the new Transmission Owner owns transmission facilities below 100 kV, it will be required to execute Appendix G (Agency Agreement) of the Transmission Owners Agreement. Such an Agency Agreement provides for its Non-transferred Transmission Facilities (i.e., the City's 69 kV facilities) to be used by MISO to provide Transmission Service under MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff. For Ames, this will allow the City to bring in qualifying 69kV facilities for transmission credit.
- APPENDIX I SUPPLEMENTAL AGREEMENT – This is a multi-party contract between MISO, ITC and each of the MISO Transmission Owners. Appendix I of the Transmission Owners Agreement allows an Independent Transmission Company to assume certain rights and responsibilities (e.g., revenue distribution,

losses, tariff administration, billing, planning and security coordination) that otherwise belong to MISO.

- SETTLEMENT AGREEMENT BETWEEN TRANSMISSION OWNERS AND MISO ON FILING RIGHTS – This prevents MISO from making filings to the Federal Energy Regulatory Commission that could affect rates without stakeholder process.
- FUNDS TRUST AGREEMENT – To the extent the Transmission Owner will receive revenues from MISO, the Transmission Owner is required to submit a signature page to the Trust Agreement which provides that all funds collected by MISO on behalf of the Transmission Owners must be held in a “formal trust” with JPMorgan as Trustee.

All of these agreements have been reviewed by the City Attorney’s Office and are ready for Council approval. The agreements are also available to the public through the City Clerk’s Office. It is customary for staff to bring agreements to Council for approval after the other party has signed. In this case, the MISO Board is scheduled to take action on Ames’ membership at its April 24 meeting. If successfully approved by the Ames City Council and the MISO Board of Directors, Ames will become a Transmission Owner and begin to use network integration transmission service on June 1, 2014.

If City Council approves becoming a Transmission Owner in MISO, our membership in the Midcontinent Area Power Pool (MAPP) will be terminated, since the City cannot maintain our transmission in both organizations. City staff has given notice to MAPP of the City’s intention to become a Transmission Customer in MISO. The exit fee to leave MAPP is equal to 3 years of membership dues discounted for the dues paid between the notice date and June 1, 2014. That cost is estimated to be \$400,000. The amount of money saved in the first year by moving to network service is more than enough to offset the exit fee. This \$400,000 expense will be added to the 2013/14 Final Adjusted Budget amounts that will be presented to Council next month.

On March 26, 2014, staff met with the Electric Utility Operations Review and Advisory Board (EUORAB) and presented an overview of how the utility currently purchases transmission service, as well as the changes that would take place if we were to become a transmission owner in MISO. The EUORAB accepted staff’s recommendation to move from point to point transmission service and become a transmission owner in MISO, to enter into a network transmission agreement, and to forward this recommendation to the City Council.

ALTERNATIVES:

1. Approve the transmission membership application and the specified agreements with the Midcontinent Independent System Operator, authorize the MISO membership fee payment of \$15,000, and authorize termination of the City’s membership in the Midcontinent Area Power Pool.

2. Do not approve these agreements and remain a member of MAPP.

MANAGER'S RECOMMENDED ACTION:

Transmission service is necessary to purchase low cost energy and wind energy from the regional electric grid. Having network service arrangements eliminates the need for staff to constantly monitor and purchase incremental transmission on an as needed basis.

Point-to-Point transmission service served the City well when we first entered the MISO energy market. Today, with the inclusion of transmission credits for 69kV facilities and the addition of the City's new 161kV line, network service becomes the low cost option for transmission service.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.