



Date: November 9, 2015  
To: MISO Quarterly Update List  
From: Daniel P. Wolf  
Subject: MISO Quarterly Update Meeting

The Minnesota Public Utilities Commission has scheduled the Fourth Quarter 2015 MISO Utilities Quarterly Update Meeting for Friday, December 4, 2015 from 10:00 AM to Noon in the Commission's Large Hearing Room, 121 7<sup>th</sup> Place East, Suite 350, St. Paul, MN 55101-2147. The Commission invites participation from all Minnesota electric transmission utilities and other interested persons on the following topics:

### **Winter Peak Readiness**

- Are Minnesota MISO utilities ready to serve peak load reliably for the winter of 2015-2016?

### **Clean Power Plan (CPP)**

The CPP requires States to show they have considered reliability in developing their state plans, such as consultation with appropriate state reliability or planning agencies.

- What should the Commission consider, if asked, to provide an opinion on whether Minnesota's compliance plan would be reliable? (A utility specific reliability, state wide reliability, and/or regional market reliability.)
- What entities or organizations can assist the Commission in making that determination?

### **Transmission Line Dynamic Loading Ratings**

Exploring the viability of implementing real-time capacity line ratings of overhead transmission lines in Minnesota for optimizing the power flow across the transmission lines:

Power capacity or the rating of most overhead transmission lines is prescribed by the "static rating" based on conductor configuration and environmental conditions. Typically, conservative worst-case assumptions of environmental conditions are used when developing these static ratings. In most cases, significant additional transfer capacity exists beyond the design margin that could be used to make the bulk electric system more efficient. This would involve taking into account additional parameters, including ambient air temperature, the physical properties of

the line, such as conductor temperature, sag in real time; and employing real-time rating calculation methodologies, such as EPRI's Dynamic Thermal Circuit Rating (DTCR) software or similar products, to help identify and access this potential capacity.

- What are the most recent industry research and development initiatives to study the benefits of dynamic line ratings?
- Has MISO or any Minnesota utility undertaken their own initiatives to measure and evaluate the potential benefits of optimizing the transmission line ratings?
- What were the results?

We look forward to the opportunity to discuss these important issues. The meeting will begin at 10:00 AM and will be held in the Commission's Large Hearing Room on Friday, December 4, 2015.