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July 30, 2015

VIA E-FILING
Mr. Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

RE: 2015 Safety, Reliability and Service Quality Standards Report
Docket No. E015/M-15-323

Dear Mr. Wolf:

Minnesota Power hereby submits, via electronic filing, its Comments concerning the Company's service center consolidation plans. These comments are provided as a supplement to our 2015 Safety, Reliability and Service Quality Report. The Comments address operational efficiencies and reliability considerations resulting from the consolidations.

Please contact me at the number above if you have any questions regarding this filing.

Yours truly,

Lori Hoyum

VH:sr
Attach.
cc: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's 2015 Annual Report Concerning Safety, Reliability, Service Quality, And Proposed Annual Reliability Standards	Docket No. E015/M-15-323 **COMMENTS**

I. OVERVIEW

Minnesota Power (or "the Company") submits these Comments to the Minnesota Public Utilities Commission ("Commission") in response to the Department of Commerce – Division of Energy Resources' inquiry regarding service center closures.

On June 02, 2015 Minnesota Power publicly announced its plan to implement service center consolidations in its service territory. As a result of the Company's continuing effort to identify operational efficiencies, deploy advanced energy infrastructure technologies to help serve customers and provide competitive electric service, Minnesota Power is closing service centers in Nisswa, Aurora, and Chisholm, Minnesota effective October 1, 2015. The eleven employees who work at the three service centers will be relocated to the Eveleth and Pine River offices. In addition, the remaining service centers, Cloquet, Coleraine, Crosby, Eveleth, the Herbert Service Center in Duluth, International Falls, Little Falls, Long Prairie, Park Rapids, Pine River, and Sandstone, will continue to operate.

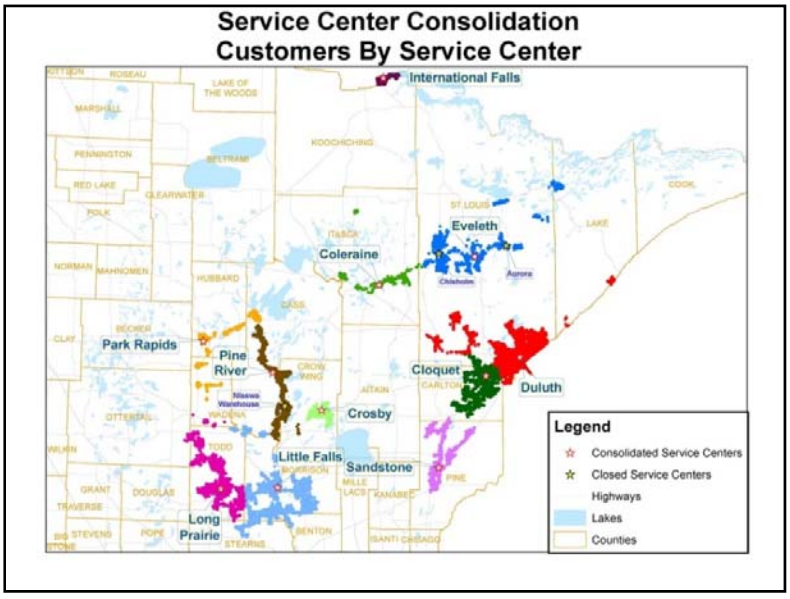

Figure 1 – Customer concentration by service center.

The service center consolidations will not result in any workforce reductions and will ensure continued reliable delivery of electric service to customers while improving efficiencies and promoting cost effective business processes.

II. EFFICIENCIES AND RELIABILITY

Closure of the service centers will lower operating expenses in part because field crews will have fewer reporting locations, therefore allowing for more cost effective maintenance of service center locations. The callout process and subsequent response time will also be improved due to the larger pool of workers being called on for each incident. The Company estimates 99.1 percent of its Northern service area customers will see no impact in response time due to the closures of the Aurora and Chisholm service centers. Some customers may see improved response times and most customers will see no change at all. A small number of customers may experience an increase in outage response times but this outcome is questionable due to the previously mentioned advantage of larger field crew units.

Advanced energy infrastructure technologies are being deployed throughout the communities Minnesota Power serves. The technologies allow for improved service by increased awareness of power outage events through remote monitoring of the system and maintenance performance. Technology advancements such as the outage mobile app, smart meters and the Outage Management System ("OMS") help the company rapidly diagnose and pinpoint outage locations and more quickly dispatch line crews to customer outages.

Minnesota Power routinely implements technology solutions where appropriate and feasible to assist with and enhance outage detection and response time. Beginning on Page 3 are examples of projects already completed and future upgrades that could be executed should the Company experience a negative trend in reliability.

A. Completed Projects[1]:

Outage Management System

The Company installed a General Electric PowerOn OMS in late 2006. The OMS predicts device failure locations based on data received from customer calls and integration with Supervisory Control and Data Acquisition ("SCADA"), Advanced Metering Infrastructure ("AMI"), and storm center systems. This aids in dispatching crews to a targeted device failure location. It also lessens troubleshooting timeframes for field crews and improves restoration time for customers.

Automation of Reports and Consolidated Orders System

In 2013, a new system was installed to mobilize crews for unscheduled work. The Automation of Reports and Consolidated Orders System ("ARCOS") system is programmed with the Company's callout lists for outage response. When there is an unscheduled outage event, ARCOS is used to simultaneously call multiple field unit employees and continues calling until it has enough employees to respond to the event. It begins by calling field unit employees from the outage's assigned service center. If the required number of employees do not accept the assignment, within ten minutes a second attempt is made at calling the specific service center employees. If the system does not have the required number of employees after the second round of calls, the system expands its calls to the next service center until the job is filled. The ARCOS system, along with the consolidation of service centers, can reduce the time it takes for field crew members to respond to an outage by creating a larger pool of available workers in the callout list.

B. Projects in Progress:

Advanced Metering Infrastructure ("AMI")

AMI meters communicate with the Company's OMS to detect and verify power outages. The meters utilize an internal temporary power source to provide notification of customer outages. When a notification is received, a dispatcher verifies the outage and dispatches a crew. Additionally, the meters stream "power on" messages when service is restored. Approximately 25 percent of Minnesota Power's customers have AMI meter technology

[1] Further information on these projects can be found in the annual SRSQ Report document in the docket.

at this time. However, Minnesota Power continues the process of implementing its AMI meter installation throughout its service territory.

Telemetric Devices

Telemetric Voltage Monitor ("TVM") devices are currently installed at various locations on Minnesota Power's system. These devices are typically installed in remote distribution areas, substations, and critical infrastructure or on large power meters. Sensus Distribution Automation TVM voltage monitors measure line voltage and provide real-time notifications of steady state values, outages and under or over voltage conditions to dispatchers and select Minnesota Power employees. The TVM devices provide outage information more rapidly than relying on customer calls. The TVM devices also confirm when service is restored. When dispatchers get crews to accurate locations more quickly, outage restoration times can be reduced. Improved monitoring of voltages also helps the Company determine the overall condition of the system

Supervisory Control and Data Acquisition

Supervisory Control and Data Acquisition is a system of remote control and telemetry[2] used to monitor and control the electrical system. SCADA indicates device status and activity and assists in dispatching crews to reported operation locations.

C. Prospective Future Projects:

The following projects are potential investments that could be made if the Company's reliability statistics indicate underperformance in reliability indices. The cost/benefit ratio will also need to be evaluated when considering implementation of new technology on the system. Some of these prospective projects are costly and may only benefit a relatively small number of customers if implemented in certain service areas.

- Place additional fault indicators and voltage monitors in remote areas to help with early detection of outages.
- Purchase additional line profilers to help measure current for fuse coordination studies. Line profilers are used to record line loading over a set period of time. The recordings are used to make better engineering decisions. Line loading reports help the

[2] An automated communications process by which measurements are made and other is data collected at remote or inaccessible points and transmitted to receiving equipment for monitoring.

Company to determine where to invest in capacity, transfer customers to alternate feeders, or design protection systems. A fuse coordination study is done to optimize the performance of the system in a faulted circuit condition. This could be the result of storm or wind damage or failed line equipment. Properly coordinated fuses and relays will ensure the least number of customers experience a longer duration outage by opening the most advantageous device. Fault current studies (software models) and time-current device curves are used to make sure the timing of the substation relay allows a downstream device to operate and clear the fault without interrupting service to a larger number of customers. Primarily, the studies are done with software applications.

- Install additional reclosers[3] on lengthier feeders to improve reliability.
- Install additional auto-transfer and smart switches to automatically restore areas during outages.

III. CONCLUSION

Minnesota Power appreciates the opportunity to further address the changes to its service center structure which have been enabled by technology advances and which help to enable improved service for customers while gaining cost efficiencies. The service center consolidations are consistent with the Company's commitment to providing the region with safe, reliable and affordable electricity.

Date: July 30, 2015

Respectfully submitted,

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[3] A recloser is a device installed on electrical distribution networks. It contains a circuit breaker that opens when a fault is detected on the system. The recloser has a function that automatically restores power to the affected line if the fault clears itself quickly.

STATE OF MINNESOTA	)	AFFIDAVIT OF SERVICE VIA
	) ss	E-FILING AND
COUNTY OF ST. LOUIS	)	FIRST CLASS MAIL

Susan Romans, of the City of Duluth, County of St. Louis, State of Minnesota, says that on the **30th** day of **July**, **2015**, she e-filed Minnesota Power's Comments in Docket No. E015/M-15-323 to the Minnesota Public Utilities Commission ("MPUC") and Minnesota Department of Commerce ("DoC") via electronic filing. The remaining parties on the attached service list were served as indicated.

Susan Romans

Susan Romans

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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