

APPENDIX F

Table of Contents

Potential for DSM/CIP to Reduce Project Need

Potential for DSM/CIP to Reduce Project Need

In its Data Exemption Order (see Appendix B), the MPUC directed the Applicants to provide information on DSM and CIP efforts, including system-wide efforts, that could reduce the use of energy, and thus the need for the Project, in the Bemidji area and North Zone. An overview of the Applicants historical energy savings demonstrates that that no reasonable level of DSM and CIP can reduce use so as to obviate the need for the Project.

The Applicants and Great River Energy serve the Bemidji area, and their estimated shares of the Bemidji load center are provided below.

- Otter Tail Power- 27%
- Minnkota Power- 64%
- Minnesota Power- 5%
- Great River Energy 4%

As discussed in subsection 5.2.1 of this Application, DSM and CIP would have to reduce the Bemidji load center's forecasted winter peak demand of 296 MW by 76 MW to be feasible alternatives to the Project. Minnesota Power and Great River Energy together have less than 10% of the Bemidji load and their DSM and CIP programs have only a minimal impact in the area. For example, the table below shows that Minnesota Power's cumulative energy savings in the Bemidji area over the last six years is less than one-half MW.

Table 1 Minnesota Power Energy Use Savings in the Bemidji Area

Year	kW Saved	kWh Saved
2002	231.4	544,063
2003	83.4	489,974
2004	22.8	96,606
2005	96.9	585,130
2006	18.9	75,942
2007	4.4	11,368
Total	457.7	1,803,083

With over 90% of the load in the Bemidji area, virtually all of the 76 MW of energy savings would have to be achieved by Otter Tail Power and Minnkota Power.

Table 1 below presents recent historical energy savings by Otter Tail Power and Minnkota Power.

Table 1 Historical Energy Savings from DSM/CIP
(kWh Saved)

Year	Otter Tail Power (Minnesota only)	Minnkota Power (System Wide)
2004	8,319,000	1,247,000
2005	10,581,000	8,015,000
2006	13,984,000	7,429,000
2007	11,618,000	7,416,000

Assuming going forward that the two utilities save a combined total of 18,500,000 kWh annually, that level of energy savings translates to approximately 4 MW in avoided capacity per year. Given that this level of MW savings is achieved by Otter Tail Power in Minnesota and Minnkota Power across its entire system, it is not feasible to consider that a savings of 76 MW can be achieved in by these two utilities in the Bemidji area alone.