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VIA ELECTRONIC FILING

June 30, 2008

Ms. Patricia Van Gerpen Executive Director South Dakota Public Utilities Commission Capitol Building, 1st floor 500 East Capitol Avenue Pierre, SD 57501-5070

RE: Otter Tail Power Company's Annual DSM and Renewables Programs Report pursuant to July 21, 2006, Order in Case No. EL05-022

Dear Ms. Van Gerpen:

Otter Tail Corporation d/b/a Otter Tail Power Company hereby submits its Annual Report on DSM and Renewables Programs. The requirement for this report was included in the Commission's Order dated July 21, 2006, in the Big Stone II Energy Conversion Facility Permitting case referenced above.

Please contact me at (218) 739-8838 or <u>rlspangler@otpco.com</u> if you have any questions regarding this filing.

Yours very truly,

/S/ RON L. SPANGLER JR.

Ron L Spangler Jr. Rate Case Manager Regulatory Services

Enclosure



OTTER TAIL POWER COMPANY

SECOND ANNUAL REPORT ON DSM AND RENEWABLE PROGRAMS

July 1, 2008

I. Introduction

Otter Tail Corporation d/b/a Otter Tail Power Company ("Otter Tail") submits its Second Annual Report on Demand-Side Management ("DSM") and Renewable Programs, pursuant to the Final Decision and Order dated July 21, 2006, in Case No. EL05-022. Ordering paragraph no. 4 set forth the following requirement:

4. Beginning on July 1, 2007, Otter Tail Power and Montana-Dakota Utilities shall file annually a detailed report of their ongoing DSM and renewable programs and a forecast of their near- and long-term initiatives to optimize benefits related to demand-side management and renewable energy programs.

The following is Otter Tail's report in compliance with that ordering provision.

II. Demand-Side Management Resources

Otter Tail uses a fully integrated capacity expansion model to conduct detailed computer modeling of Otter Tail's load, generation resources, DSM and conservation programs, regulatory requirements, and financial structure so that an optimal long-range plan is developed to meet customer needs. Otter Tail's current resource plan, developed in 2005 and updated in April 2006, October 2006, and January 2008, identifies the addition of up to 100 MW of DSM and conservation impacts over the 15-year planning period. Because of timing, the most recent resource plan update includes only an estimate of the consideration of the Company's recently approved South Dakota Energy Efficiency plan and includes consideration of new conservation initiatives recently passed by the latest Minnesota legislature.

Demand side management is a broad category that includes load management (direct load control and interruptible programs) as well as conservation and energy efficiency programs. We discuss these areas in two distinct categories for this filing.

A. Load Management

<u>Direct Load Control</u> - DSM program activities that can interrupt consumer load at the time of annual peak load by direct control of the utility system operator by interrupting power supply to individual appliances or equipment on consumer premises. This type of control usually involves residential consumers, but it can involve larger customers as well.

<u>Interruptible Load</u> - DSM program activities that, in accordance with contractual arrangements, can interrupt consumer load at times of seasonal peak load by direct control of the utility system operator or by action of the consumer at the direct request of the system operator. This type of control usually involves commercial and industrial consumers, but it can involve residential customers as well.

<u>Other Load Management</u> - DSM programs other than direct load control and interruptible load that limit or shift peak load from on-peak to off-peak time periods. It includes technologies that primarily shift all or part of a load from one time-of-day to another and secondarily may have an impact on energy consumption. Examples include space heating and water heating storage systems, cool storage systems, and load limiting devices in energy management systems. This category also includes programs that aggressively promote time-of-use (TOU) rates and other innovative rates such as real time pricing. These rates are intended to reduce consumer bills and shift hours of operation of equipment from on-peak to off-peak periods through the application of time-differentiated rates.

In all cases savings are typically reported as kilowatt or megawatt savings.

B. <u>Energy Efficiency and Conservation</u>

Energy conservation and efficient programs are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in kilowatt-hours (kWh) or megawatt-hours (MWh), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technologically more advanced equipment to produce the same level of end-use services (e.g., lighting, heating, motor drive) with less electricity. Examples include energy saving appliances and lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

C. Otter Tail's DSM Portfolio

Demand side management has been part of Otter Tail's energy plan since the 1940s when we encouraged customers to put timers on their water heaters. Today nearly 40 percent of our customers participate in some form of demand-side management program. Otter Tail operates a diverse DSM portfolio in all three states. In 2007 Otter Tail added 27.4 MW of new controlled load. From 1999 through 2007 we have added 187 MW of new controlled load capability system-wide. The following two parts of Table 1 summarize our achievements for the past nine years.

Additional Controlled Load -- System Wide Otter Tail Power Company 1999 – 2007

Additional Controlled Load (kw) by Customer Class	1999	2000	2001	2002	2003	2004	2005	2006	2007
Residential	4,792	6,750	9,017	7,975	10,290	11,689	13,268	18,633	12,914
Commercial	4,932	6,183	11,457	9,666	12,560	6,838	9,838	15,476	14,495
Total kW	9,724	12,933	20,474	17,641	22,850	18,527	23,106	34,109	27,409

Additional Controlled Load (kw)									
by Load Type	1999	2000	2001	2002	2003	2004	2005	2006	2007
Dual Fuel	5,370	6,571	15,087	11,939	13,795	9,898	14,482	21,533	18,037
Heat Storage	1,156	2,845	1,922	2,891	4,658	3,992	3,776	7,120	6,169
Demand Control	1,789	2,023	2,616	2,008	2,556	2,356	2,525	2,240	974
Water Heating	1,409	1,494	850	802	1,841	2,281	2,323	3,217	2,229
Total kW	9,724	12,933	20,474	17,641	22,850	18,527	23,106	34,109	27,409
	-	-	Tabl	e 1			-		

Keep in mind that these numbers represent potential peak reduction, which is different than actual peak reduction. These charts reflect the installed load reduction capability, as opposed to the actual peak reduction achieved by participants, during the time of annual system peak load.

In March of 2007, Otter Tail filed with the South Dakota Public Utilities Commission ("SDPUC") a portfolio of ten conservation and energy efficiency programs covering the majority of the same end uses as our Minnesota portfolio. On May 20, 2008 the SDPUC approved Otter Tail's plan with minor modifications. The budget is less than one percent of annual South Dakota retail revenues. Among other things, the pilot project includes incentives for installing energy efficient heat pumps, lighting and motors. The Company is enthusiastic about working with the SDPUC and staff on this first-of-its-kind program in South Dakota. Otter Tail representatives and SDPUC staff members are working together on implementation details and expect the program to launch September 1, 2008.

Conservation and energy efficiency have been a part of our portfolio since the 1980s to some extent. The conservation improvement program in Minnesota became much more aggressive in the early 1990s. Today in Minnesota we are required to spend a minimum of 1 ¹/₂ percent of our Minnesota retail gross operating revenues on programs for customers. The Minnesota Omnibus Energy Bill recently passed also includes a requirement to achieve energy savings of 1 ¹/₂ percent of annual retail kilowatt-hour sales by 2010, based on a rolling three-year weather-normalized average. On June 1, 2008, Otter Tail filed its Minnesota Conservation Improvement Program for 2009 and 2010 which includes 19,111 MWh savings goal in 2009 and 22,331 MWh savings goal in 2010. As part of its filing, Otter Tail requested the Commissioner of the Minnesota Office of Energy Security to adjust its energy savings goal from 1.5 percent to 1.0 percent due to our most recent DSM potential study, historical investment and performance, customer makeup, service territory economic conditions, and load growth factors. Our Minnesota portfolio has approximately 25 programs to improve efficiency of lighting, motors, water heating, refrigeration, cooking, heating, cooling, and process improvements. Final approvals are expected later this year.

Since 1992 we have helped Minnesota customers conserve more than one million cumulative megawatt-hours of electricity. That's roughly equivalent to the amount of electricity that 90,000 average homes would have used in a year. Minnesota customers have conserved on average approximately 0.60 percent of the annual Minnesota kilowatt-hour sales.

North Dakota has a limited number of conservation and efficiency programs, primarily educational in nature. We have begun discussions with policy makers and regulators about a more comprehensive approach to energy efficiency in North Dakota.

	CIP Savings and Expenditures Minnesota Only Otter Tail Power Company 1992 - 2007							
CIP Year	Annual KWH Saved	Aggregate KWH Saved (based on measure lifetime)	Annual KW Saved	Aggregate KW Saved (based on measure lifetime)	Annual CIP Spending	Aggregate CIP Spending		
1992	4,284,548	4,284,548	1,010	1,010	\$793,002	\$793,002		
1993	7,371,451	11,655,999	1,903	2,913	\$1,419,873	\$2,212,875		
1994	9,177,166	20,833,165	2,943	5,856	\$1,067,207	\$3,280,082		
1995	11,970,185	32,803,350	3,434	9,290	\$1,603,473	\$4,883,555		
1996	13,470,907	46,274,257	2,513	11,803	\$1,585,598	\$6,469,153		
1997	17,957,861	63,307,100	2,760	14,442	\$1,591,258	\$8,060,411		
1998	10,175,545	72,558,174	2,373	16,691	\$1,521,266	\$9,581,677		
1999	10,258,589	81,915,611	2,180	18,679	\$1,579,010	\$11,160,687		
2000	13,302,713	94,963,467	2,075	20,711	\$1,843,790	\$13,004,477		
2001	10,533,420	105,316,910	2,244	22,922	\$1,918,475	\$14,922,952		
2002	10,131,511	113,444,953	1,935	24,459	\$1,545,358	\$16,468,310		
2003	13,681,770	122,528,207	2,984	26,354	\$1,703,663	\$18,171,973		
2004	10,991,151	131,082,743	3,555	28,878	\$1,783,288	\$19,955,261		
2005	18,099,987	146,401,910	2,874	30,589	\$1,590,411	\$21,545,672		
2006	13,983,526	157,344,321	3,198	33,050	\$1,938,812	\$23,484,484		
2007	11,617,820	164,490,626	3,017	34,795	\$1,862,697	\$25,347,181		
Total	187,008,150	1,369,205,341			\$25,347,181			

Table 2

Table 2 above table shows the Minnesota Conservation Improvement Program achieved savings and costs since 1992.

D. Near-term Objectives

As mentioned previously, the Company's long-term objective in our current resource plan identifies the addition of up to 100 MW of DSM and conservation within the next few years. This goal is defined as the Actual Peak Reduction (measured in kilowatts) achieved by consumers that participate in a utility DSM program. It reflects the changes in the demand for electricity resulting from a utility DSM program that is in effect at the same time the utility experiences its annual peak load, as opposed to the installed peak load reduction capability (i.e., Potential Peak Reduction). The DSM program should account for the regular cycling of energy efficient units during the period of annual peak load.

The Company has found that aggressive marketing tactics and goals are required to achieve the actual peak reduction defined in our integrated resource plan. Table 3 below defines our DSM goals for the next two years.

Future DSM and CIP Savings & Budgets Otter Tail Power Company 2008-2010

Additional Controlled Load (kW) by Customer Class – All 3 States	2008	2009*	2010*
Residential	12,309	14,770	14,770
Commercial	9,225	10,281	10,281
Total kW	21,534	25,051	25,051

*estimate at this time

Additional Conservation Savings by State	2008	2009	2010
MN - CIP – kWh	12,553,929	19,111,063	22,331,471
SD - EEP – kWh	1,143	3,446	1,143,446
Total Proposed kWh Savings	13,697,375	20,254,509	23,474,917
MN - CIP – kW	3,443	5,515	6,226
SD - EEP – kW	4	16	416
Total Proposed KW Savings	3,859	5,515	6,642

Additional Conservation Spending by State	2008	2009	2010
MN - CIP	\$1,747,000	\$3,398,200	\$3,992,300
SD - EEP	\$157	7,100	\$157,100
Total Proposed Spending	\$1,904,100	\$3,398,200	\$4,149,400

Table 3

III. Renewable Resources

Otter Tail uses a fully integrated capacity expansion model to conduct detailed computer modeling of Otter Tail's load, generation resources, conservation programs, regulatory requirements, and financial structure so that an optimal long-range plan is developed to meet customer needs. Otter Tail's current resource plan identifies the addition of up to 160 MW of new wind generation within the next few years.

In March 2006 Otter Tail issued a Request for Proposal (RFP) for up to 75 MW of renewable generation as the first step to develop the wind generation identified in the

resource plan. After analyzing approximately 45 proposals that were received, final negotiations commenced with some of the developers. In March 2007, Otter Tail announced participation in 60 MW of wind generation in the Langdon Wind Project. Construction commenced in June 2007 and commercial operation occurred in December 2007 and January 2008. In early 2008 Otter Tail announced its intention to own another 48 MW of wind generation identified as part of the Ashtabula project in North Dakota. This project is expected to be operational by the end of 2008 and will bring total wind generation resources to approximately 133 MW.

Additional discussions are underway with other potential wind projects, mostly small developer owned installations consisting of one or two wind turbines. Otter Tail is also involved in discussions on other potential projects including a biomass-fired facility, a municipal solid waste-fired facility, a heat recovery installation, and anaerobic digestion of agricultural waste. At this time it is too early to know whether any of these projects will reach operation.

Historically approximately 9 to 11 percent of the energy delivered to retail customers is derived from renewable resources. This percentage is expected to grow in a few years to comply with various state renewable portfolio standards and objectives.

Otter Tail serves customers in three states: Minnesota, North Dakota, and South Dakota. Each state has varying policies regarding renewable energy and Otter Tail strives to meet regulatory requirements while maintaining economical and reliable electricity service to customers in all three states. The states' mandates, policies, and/or objectives regarding renewable generation in Otter Tail's service territory are summarized in the following bulleted list.

<u>Minnesota:</u> A renewable energy objective has been established to have 7 percent of retail electric sales come from qualifying renewable resources by 2010, and a new renewable energy standard requires 12 percent by 2012, 17 percent by 2016, 20 percent by 2020, and 25 percent by 2025.

<u>North Dakota:</u> A state renewable and recycled energy objective has been established to have 10 percent of all electricity sold at retail within the state by the year 2015 be obtained from renewable energy and recycled energy sources.

South Dakota: A state renewable and recycled energy objective has been established to have 10 percent of all electricity sold at retail within the state by the year 2015 be obtained from renewable energy and recycled energy sources.

Through the Tail*Winds* program, Otter Tail offers retail customers in all three state jurisdictions the opportunity to purchase wind-generated energy in 100-kilowatt-hour blocks, giving them the flexibility to buy enough wind power for their entire home or business or just a few appliances.

With the existing renewable resources and plans for additional development, Otter Tail expects by 2012 or earlier to have at least 15 percent of its total energy requirements for the total three-state system being provided by renewable resources. Otter Tail expects to be fully in compliance with the renewable energy standards and objectives in the three-state service territory and should be in a position to sell surplus renewable energy credits.

Existing Renewable Resources

A summary of 2007 existing renewable resources is shown in Table 4. Otter Tail owns and purchases hydro, wind, and biomass energy. In 2007, Otter Tail utilized 474,390 MWh of hydroelectric power, 7,1792.5 MWh of wind power, and 1,164 MWh of biomass to serve retail customer loads in all three states. Some of the resources are fully dedicated to Otter Tail, and others are customer owned used to serve some or all of the customer's load, with Otter Tail only receiving the surplus. Resources used to either partially or fully serve the customer's own load are identified in the table.

Table 4: Existing Renewable Resources Number of the second secon						
Name	Technology	Location	Ownership	Rating (kW)	OTP	Self-Serve
Hendricks Wind	Wind	Hendricks, MN	Purchase	900	2,801	No
Borderline Wind	Wind	Hendricks, MN	Purchase	900	2,411	No
EMS Wind	Wind	Gary, SD	Purchase	90	199	No
Lac Qui Parle Valley School	Wind	Madison, MN	Purchase	225	19	Yes
Trautman Wind	Wind	Jamestown, ND	Purchase	50	0	Yes
University of Minnesota – Morris	Wind	Morris, MN	Purchase	1,650	1,454	Yes
Big Stone	Biomass	Big Stone, SD	Own	256,025	1,164	No
FPL Energy ND Wind II	Wind	Edgeley, ND	Purchase	21,000	62,760	No
Spirit Lake Casino	Wind	Devils Lake, ND	Purchase	100	0	Yes
OTP Hydros	Hydro	MN	Own	4,338	20,371	No
Manitoba Hydro Electric Board	Hydro	Manitoba	Purchase	50,000	407,226	No
Western Area Power Administration	Hydro	ND and SD	Purchase	5,566	46,793	No
ADM Enderlin	Biomass	Enderlin, ND	Purchase	9,000	0	Yes
Langdon Wind, LLC	Wind	Langdon, ND	Purchase	19,500	1,970	No
Langdon Wind	Wind	Langdon, ND	Own	40,500	167	No
NY Mills Residential Wind	Wind	NY Mills, MN	Purchase	1.8	0.5	Yes
Tuel Wind	Wind	Fergus Falls, MN	Purchase	39.5	11	Yes
Minnesota West Community and Technical College	Wind	Canby, MN	Purchase	35	0	Yes

Renewable Resource Projects Under Development

A number of renewable resource projects are in various stages of development or investigation. Table 5 identifies various projects that are under discussion and have moved beyond the initial contact phase. Some of these projects will be developed and some will not.

Table 5: Renewable Resource Projects Under Development						
Facility	Rating (kW)	Location	Status			
Wind	48,000	Ashtabula Lake, Barnes County, ND	Under Construction			
Wind	1,000	Pembina County, ND	PPAsigned – construction not started			
Wind	660	Rolette County, ND	PPA signed, waiting for turbine installation			
Wind	< 2,500	Stevens County, MN	PPA under development			
Wind	< 1,200	Cass County, ND	Under discussion			
Wind	250	Becker County, MN	Under discussion			
Small Hydro	Unknown	Norman County, MN	Very early discussion phase			
Biomass	< 4,500	Otter Tail County, MN	Under discussion			
Biomass	400	Stevens County, MN	Under construction			
Photovoltaic	Unknown	Stevens County, MN	Under discussion			
Wind	<2,000	Walsh County, ND	Under discussion			
Wind	<2,000	Norman County, MN	Under discussion			
Heat Recovery	6,000 - 8,000	Clearwater County, MN	Under discussion			
Biomass	11,500	Beltrami County, MN	Under discussion			
Anaerobic Digestion	10,000 – 12,000	Stevens County, MN	Under discussion			
Wind	50,000	ND	Contracts under negotiation			
Wind	20,000	SD	Early discussion			
Photovoltaic	Unknown	MN	Under discussion			
Wind	Unknown	McIntosh County, ND	Negotiations underway			