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VIA E-FILING

July 1, 2008

Ms. Patty Van Gerpen Executive Director South Dakota Public Utilities Commission State Capitol Building Pierre, SD 57501

Subject: Otter Tail Power Company's Ten Year Biennial Plan - 2008

Dear Ms. Van Gerpen:

Pursuant to the rules of the South Dakota Public Utilities Commission Energy Facility Plans ARSD 20:10:21 and Guidelines issued October 1977, Otter Tail Corporation d/b/a Otter Tail Power Company hereby files its Biennial Ten Year Plan with the Commission.

Notice of Filing of the plan is being sent to each of the state agencies and officers designated in Section 23 of the Energy Facility Plans. If additional copies of the plan are required, please contact me at bhdraxten@otpco.com or 218-739-8417.

Very truly yours,

/s/ BRIAN DRAXTEN Brian Draxten Manager, Resource Planning

Enclosures

 c: Mr. Bruce Imsdahl, MDU Mr. Michael Hanson, NWPS Ms. Debra Paulson, XCEL Mr. David Emery, Black Hills Corp. Otter Tail Power Co. Officers et. al South Dakota Division Managers South Dakota Division Engineers



July 1, 2008

NOTICE OF FILING

Subject: Otter Tail Power Company's Ten Year Biennial Plan - 2008

Please take notice that on July 1, 2008, Otter Tail Corporation d/b/a/ Otter Tail Power Company filed its Ten Year Plan with the South Dakota Public Utilities Commission in accordance with ARSD 20:10:21. Pursuant to Section 20:10:21:23 of the South Dakota Public Utilities Commission's Rules Governing Energy Facility Plans, notice of the filing of this plan is given to the following state agencies and officers as designated:

- 1. Aeronautics Commission
- 2. Agriculture Department
- 3. Attorney General
- 4. Commerce and Regulation Department
- 5. Education and Cultural Affairs Department
- 6. Engineer, State
- 7. Game, Fish and Parks Department
- 8. Geologist, State
- 9. Governor
- 10. Health Department
- 11. Indian Affairs Commission
- 12. Labor Department
- 13. Legislative Research Council
- 14. School and Public Lands
- 15. South Dakota Energy Office
- 16. State Development Department
- 17. Transportation Department
- 18. Water and Natural Resources Department

Sincerely,

/s/ BRIAN DRAXTEN Brian Draxten Manager, Resource Planning

SOUTH DAKOTA

TEN YEAR

BIENNIAL PLAN

Report RP08-2

Resource Planning Department

Otter Tail Power Company

July 2008

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INTRODUCTION

In accordance with the rules and regulations of the South Dakota Public Utilities Commission Energy Facility Plans ARSD 20:10:21, Otter Tail Corporation, d/b/a Otter Tail Power Company ("Otter Tail"), hereby files its Biennial Ten Year Plan with enclosures. This filing is structured to coincide sequentially with the Commission rules as defined in the Form for Plans, ARSD 20:10:21:25. Section 4 through Section 18, therefore, coincide with ARSD 20:10:21:04 to ARSD 20:10:21:18, respectively.

Notice of Filing of the plan is being sent to each of the state agencies and officers designated in Section 23 of the Energy Facility Plans.

SECTION 4 -- EXISTING ENERGY CONVERSION FACILITIES

- A. Big Stone Plant
 - 1. The Big Stone Plant is located in Grant County, South Dakota, approximately two miles west-northwest of Big Stone City, 1-3/4 miles from Big Stone Lake, and approximately two miles north of U.S. Highway 12. The site is in the central portion of Section 12, Township 121 N, Range 47 W.
 - 2. The turbine-generator was built by Westinghouse and has a nameplate capacity of 414,590 kW at the generator terminals with inlet steam conditions of 2,400 psig, 1000 degrees F, a condenser pressure of 3.25 inches HgA, and 0% makeup.
 - 3. Big Stone Unit #1 has a cruise rating of 460 MWs using the sub-bituminous coal. Net generation for the year 2006 was 3,160,836 MWh, and for 2007 was 2,467,184 MWh.
 - 4. The Big Stone Plant appropriates its entire supply of water from Big Stone Lake. During calendar year 2006, 3546 acre-feet of water was appropriated, and during 2007, 3735 acre-feet was appropriated.
 - 5. The Big Stone Plant continued to burn sub-bituminous coal in 2006 and 2007. The amount of sub-bituminous coal burned in 2006 was 1,934,324 tons and 1,567,146 tons in 2007. Big Stone also supplemented its coal supply by burning alternative fuels totaling about 3% of its annual fuel requirements. Tire-derived fuel (TDF) and renewable resource material (RRM) are burned at Big Stone Plant. TDF consumption for calendar year 2006 was 22,990 tons and for 2007 was 10,298 tons. In addition, 1,890 tons of RRM was burned in 2006 and 771 tons of RRM was burned in 2007.
 - 6. Otter Tail does not have a projected date of removal from service for the Big Stone unit.
- NOTE: Big Stone Plant is jointly owned by Otter Tail, Montana-Dakota Utilities Co., and Northwestern Public Service. Otter Tail serves as the operating agent for the unit.
- B. Lake Preston Peaking Plant
 - 1. The Lake Preston Peaking Plant is located in the city of Lake Preston, South Dakota, west of the intersection of 4th Street NW and Preston Street.
 - 2. The generating unit consists of a G.E. frame 5 fuel oil fired combustion turbine connected to an electrical generator with a rated capacity of 23.95 MW at 59 degrees F. ambient temperature.

- 3. In 2006 the unit had net generation of 502 MWh and 1,080 MWh in 2007.
- 4. Water source does not apply for this unit.
- 5. In 2006, 91,913 gallons of #2 fuel oil were consumed and in 2007, 169,301 gallons were consumed.
- 6. Otter Tail does not have a projected date of removal for this unit.

SECTION 5 -- PROPOSED ENERGY CONVERSION FACILITIES

An ethanol plant built adjacent to Big Stone Plant became operational in March 2003. Big Stone Plant provides steam, fire protection, and access to its rail line for transporting the ethanol.

Otter Tail is constantly evaluating generation resources as least-cost alternatives to meet customer needs. The Otter Tail resource plan includes the addition of 160 MW of wind generating facilities. Approximately 111.3 MW of this amount has already been constructed or is designated for construction. Some of the remaining new wind facilities may be located in South Dakota.

The possibility of a second unit at Big Stone Generation Station near Milbank in Grant County exists pending successful acquisition of all permits and approvals. The South Dakota Public Utilities Commission approved an Energy Conversion Facility Permit for the Construction of the Big Stone II Project on July 21, 2006 and Permit to Construct Transmission Facilities for the South Dakota portion of the Big Stone II Transmission on January 16, 2007.

SECTION 6 -- EXISTING TRANSMISSION FACILITIES

Otter Tail owns four high-voltage transmission line sections described as follows:

- 1. A section of the Canby-Toronto 115 kV line starting from a point on the South Dakota line in Section 34, Township 114, Range 47, to a substation one mile west of Toronto, a distance of 13.1 miles, all in Deuel County. This is a wood-pole, H-frame line. No date has been projected for the removal of this line.
- A section of the Big Stone-Gary 230 kV line starting from a point 0.76 miles north of County Road #18 in Section 4, Township 118, Range 47, to a 230 kV substation four miles north of Gary in Section 16, Township 116, Range 47, a distance of 14.96 miles, 5.76 miles in Grant County and 9.2 miles in Deuel County. This is a wood-pole, H-frame line. No date has been projected for the removal of this line.
- 3. A section of the Big Stone-Hankinson 230 kV line starting at a point on the South Dakota line in Section 26, Township 129, Range 50, to a point 0.3 miles north of the Roberts County Highway #23 in Section 11, Township 127, Range 50, a

distance of 22.62 miles, all in Roberts County. This is a wood-pole, H-frame line. No date has been projected for the removal of this line.

4. A 115 kV line from Toronto to Hetland starting at the Toronto Substation in Section 24, Township 113, Range 49 (approximately 1 mile west of Toronto) and continuing generally south and west terminating at the Hetland Substation in Section 28, Township 111, Range 53 (approximately 1 mile east and 1 mile north of Hetland), a total distance of 38.8 miles, with about 3 miles in Deuel County, 32 miles in Brookings County, and 4 miles in Kingsbury County. This is a single pole line composed of both wood and steel structures. No date has been projected for the removal of this line.

SECTION 7 -- PROPOSED TRANSMISSION FACILITIES

The proposed Big Stone II generation project (600 MW near Big Stone city) is currently within the permitting process with an expected in-service date of 2013. New 230 kV transmission has been identified to interconnect this generation to the transmission system. Some of this new 230 kV transmission will be within South Dakota. The current transmission plan for Big Stone II includes the following new transmission lines:

- 1. A new Big Stone Ortonville 230 kV line of which a small portion (approximately 5 miles) would be within Grant County
- 2. Rebuilding the existing 24-mile Ortonville Johnson Jct. 115 kV line to 230 kV none of which will be within South Dakota
- 3. Rebuilding the existing 15-mile Johnson Jct. Morris 115 kV line to 230 kV none of which will be within South Dakota
- 4. A new Big Stone Canby 230 kV line of which 46 of the 51 miles of line is expected to be running north-south through Grant and the majority of Deuel counties.
- 5. Rebuilding the existing 39-mile Canby Granite Falls 115 kV line to 230 kV none of which will be within South Dakota.
- 6. Expansion of the existing Big Stone 230/115 kV substation to allow for the addition of new 230 kV circuit breakers and line terminations at the Big Stone site.

The Big Stone II project developers are planning to build the Big Stone – Canby – Granite Falls line at 345 kV, but initially operate it at 230 kV until other regional transmission plans are developed near Granite Falls, MN.

In addition to these new facilities, the Big Stone II project will require line clearance improvements along the existing Big Stone – Browns Valley – Hankinson 230 kV line. These line clearance improvements will allow for higher line loadings without causing safety hazards. This 230 kV line runs generally due north of the plant within Grant and Roberts counties.

Otter Tail is a participant in the CapX 2020 effort that intends to permit and construct major transmission facilities in the region. A small portion of one of the initial projects, a proposed 345 kV transmission line from the White, SD area (Brookings County Substation) to the

southern Twin Cities area is located in South Dakota and shown in Figure 1. The current schedule for this facility indicates an in-service date is expected sometime between 2013-2014. Work has begun on the permitting of this project and the CapX utilities filed a Certificate of Need for the Minnesota portion of the project in August of 2007. The CapX utilities will be requesting a Route Permit for the South Dakota portion of the project sometime during the next year. Negotiations among the CapX utilities are still underway, but at this time it appears that Otter Tail will own a portion of this project.



Figure 1 Proposed 345 kV line from White, SD Area to the Twin Cities Area

Otter Tail continues to see a lot of activity within South Dakota related to increased interests in new wind generation development, large load expansions related to the ag-processing industry and energy transport industry. As these projects are further developed, it is possible that additional transmission will be required. Further study will be required to determine the optimum transmission plan and will be coordinated through local and regional transmission planning processes in place at the Midwest ISO and MAPP.

SECTION 8 -- COORDINATION OF PLANS

Otter Tail conducts transmission planning in a coordinated environment, involving neighboring utilities, load serving entities, state regulatory commissions and members of the public to collaborate in the planning process.

Regional Coordination through the MISO Process

As a transmission-owning member of the Midwest ISO, Otter Tail participates in various transmission planning efforts, the most significant of which is the annual Midwest ISO Transmission Expansion Planning ("MTEP") process.

Planning analyses performed through the MTEP process tests the transmission system under a wide variety of conditions by using standard industry applications to model steady state power flow, angular and voltage stability, short-circuit, and economic parameters, as determined appropriate by the stakeholders involved in the study effort.

The Midwest ISO, with input from various stakeholders, evaluates the system for both reliability and economic needs. Projects included in the MTEP process may be based upon any applicable planning criteria, including accepted NERC reliability standards, Midwest Reliability Organization (MRO) reliability standards, local reliability or economic planning criteria, and any economic or other planning criteria.

Local planning of the Otter Tail facilities less than 100 kV is primarily coordinated on a subregional and state level. Otter Tail's locally planned projects are then reviewed by the Midwest ISO and may become part of the MTEP. Developing local transmission plans at a subregional level and rolling them up to the Midwest ISO provides for regional coordination of local transmission plans, which leads to transmission projects being built in a coordinated manner to address the transmission needs of the larger region. This coordination for identifying new transmission projects also augments the larger region by providing for a transmission plan that maximizes the benefits of the new projects and in many cases reduces the number of new transmission projects that are needed than if transmission plans also results in study efficiencies by keeping a broader group of utilities, states, and stakeholders informed through the transmission planning process.

The regional planning process is performed through a continuous series of planning cycles (12 to 24 months in duration), with each cycle typically addressing system needs through a rolling planning horizon. Each cycle commences with regional model development, identification of potential expansions from the local planning processes of the Transmission Owners, and concludes with recommended solutions to system needs.

During the course of the MTEP process, the Midwest ISO seeks opportunities to coordinate or consolidate, where possible, individually defined transmission projects into more comprehensive cost-effective developments. The Midwest ISO coordinates with Transmission Owners, and

considers the input from various stakeholder groups (through Subregional Planning Meetings, Planning Subcommittee Meetings, and Planning Advisory Committee Meetings) to develop expansion plans to meet the needs of the transmission system. This multi-party collaborative process allows for all projects with regional and inter-regional impacts to be analyzed for their combined effects on the transmission system. Moreover, this collaborative process is designed to ensure the most efficient and cost-effective transmission expansion plan that will meet reliability needs and expand trading opportunities, in addition to better integrating the grid, and alleviating congestion, while giving consideration to the inputs from all stakeholders.

The Midwest ISO also collaborates with representatives from adjacent regions to develop longterm inter-regional transmission plans for the benefit of the combined regions.

Additionally, subregional, state, and non-Midwest ISO coordination is necessary because the Otter Tail transmission system is highly interconnected with neighboring non-Midwest ISO/Mid-Continent Area Power Pool ("MAPP") transmission owners. The Otter Tail Balancing Authority Area is the farthest, most western border of the Midwest ISO footprint; therefore, it is interconnected with several transmission-owning utilities that are not members of the Midwest ISO, but instead remain members of MAPP.

Regional Coordination through the MAPP Process

Otter Tail is still a party to the MAPP Restated Agreement and therefore continues to participate in the MAPP Regional Transmission Committee (RTC). Similar to the Midwest ISO, the MAPP RTC plans for the future transmission needs of the region and publishes the results of its coordinated system assessments for the ensuing 10-Year horizon within a biennial regional transmission plan ("Regional Plan"). The Regional Plan integrates the transmission plans developed by individual members and Subregional Planning Groups ("SPGs") and documents all system deficiencies and planned projects of the participating utilities necessary to address any noted system deficiencies. The Regional Plan ensures that transmission needs of the MAPP region members and non-members will be met on a consistent, reliable, environmentally acceptable and economic basis and to avoid unnecessary duplication of facilities.

In addition to the RTC, MAPP has several Sub-regional Planning Groups ("SPGs") throughout the MAPP/Midwest ISO footprint. Otter Tail actively participates in the Missouri Basin SPG ("MB SPG") and the Northern MAPP SPG ("NM SPG"). These SPGs meet every other month to discuss members' planned projects (including the identification of member-system enhancements that could relieve congestion or integrate new resources), share study results, and establish ad-hoc study groups for regional and local concerns at all voltage levels. The SPGs provide forums for the coordination of individual utility transmission plans, coordination with other SPGs, and coordination with neighboring non-MAPP utility systems.

SPG meetings are open to all MAPP members, non-members and regulatory participants that have an interest in the transmission facilities of the subregion. Representatives from each participating utility use these meetings to discuss planning studies and solicit comments and participation from attendees. Non-MAPP neighboring transmission owning utilities and RTOs

are encouraged to join the SPGs and participate in the process to promote joint planning between MAPP and its neighboring regions. For example, the Midwest ISO staff actively participate in the MAPP SPG process.

Regional Coordination Through the Local Process

Otter Tail also participates in CapX 2020 (Capacity Expansion by 2020), which is a joint initiative of transmission-owning electric utilities in Minnesota and the surrounding region created on the basis of expanding the electric transmission grid to ensure electric reliability for several years into the future. The CapX 2020 utilities (including cooperatives, municipal utilities and investor-owned utilities) collaboratively assess the current transmission system and plan for the necessary future transmission infrastructure investments. This collaborative process and the planning studies performed as part of this effort are coordinated with the Midwest ISO.

In addition to the CapX 2020 effort, Otter Tail also has Integrated Transmission Agreements (ITA) with Central Power Electric Cooperative, Missouri River Energy Services, Minnkota Power Cooperative, and Great River Energy (GRE). These agreements provide for joint use of transmission facilities in common areas of service and require that the utilities jointly plan and coordinate additional facilities required for the common service area. Furthermore, Otter Tail has agreements for joint use of transmission and interconnection with Xcel Energy (formerly Northern States Power), East River Electric Cooperative, Montana-Dakota Utilities Co., Manitoba Hydro (MHEB), Northwestern Energy, and Western Area Power Administration (WAPA). These agreements were all precipitated through joint studies and coordination of facilities required to provide high reliability of service at the minimum cost. Facilities proposed and committed through this local process become part of the MISO Transmission Expansion Plan (MTEP) and are also coordinated with the Mid-Continent Area Power Pool (MAPP).

Summary of Regional Coordination

As discussed above, Otter Tail coordinates extensively with its neighboring interconnected systems to share system plans and identify system enhancements through the Midwest ISO regional MTEP process, the MAPP Regional Plan, and through local participation in coordinated transmission planning (such as CapX 2020 and the ITAs). The Midwest ISO MTEP provides coordinated planning for the entire 15-state Midwest ISO footprint. The MAPP Regional Plan provides coordinated planning for the historic 7-state MAPP region, which includes both utilities that are Midwest ISO members and utilities that are not Midwest ISO members.

SECTION 9 -- SINGLE REGIONAL PLANS

The proposed facilities mentioned in Sections 5 and 7 comprise a part of the Mid-Continent Area Power Pool (MAPP) Regional Plan and the Midwest ISO Transmission Expansion Plan.

SECTION 10 -- SUBMISSION OF REGIONAL PLAN

The Mid-Continent Area Power Pool Regional Transmission Committee (RTC), through the Transmission Planning Subcommittee (TPSC), publishes a Regional Plan every even-numbered year with updates to the Regional Plan in the odd-numbered years. The Regional Plan for 2008 is expected to be released in November. MAPP staff classifies the Regional Plan as Critical Energy Infrastructure Information (CEII) and therefore requires a MAPP CEII Non-Disclosure Agreement to obtain the document.

Likewise, the Midwest ISO compiles a transmission plan (MTEP) on a regular basis. The regional planning process within the Midwest ISO concludes with a final report that is ultimately approved by the Midwest ISO Board of Directors. Currently, MTEP-08 and MTEP-09 are underway with MTEP-07 being the last approved report available on the Midwest ISO website for public viewing at:

http://www.midwestiso.org/publish/Folder/5d42c1_1165e2e15f2_-7bc30a48324a?rev=1

SECTION 11 -- UTILITY RELATIONSHIPS

Refer to Section 8 for a listing of the organizations, coordinated efforts and power pools in which Otter Tail is involved.

As mentioned previously, Otter Tail has Integrated Transmission Agreements (ITA) with several utilities. These agreements provide for joint use of transmission facilities in common areas of service. These agreements require joint studies and coordination of facility additions to provide high reliability of service at the minimum cost. Otter Tail has interconnections and transmission agreements in South Dakota with the following utilities: Northwestern Energy, Montana-Dakota Utilities Co., East River Electric Cooperative, Missouri River Energy Services, and Western Area Power Administration.

SECTION 12 -- EFFORTS TO MINIMIZE ADVERSE EFFECTS

Otter Tail has taken several positive steps in an effort to identify, minimize or avoid adverse environmental, social, economic, health, public safety, and historic or aesthetic preservation effects. One way of identifying, minimizing, and avoiding adverse environmental effects is using information gained through research. Otter Tail financially contributes to and actively participates in environmentally oriented research projects through organizations, such as the University of North Dakota Energy and Environment Research Center. Otter Tail was involved for a year and a half with an Advanced Hybrid Particulate Collector (AHPC) pilot unit developed at the University of North Dakota that showed that the new system is highly effective. The AHPC's cutting-edge technology would have enabled the new emissioncontrol system to remove 99.99 percent of fine particulates from the flue gas stream at Big Stone Plant. In 2001 the US Department of Energy granted 49 percent funding for the \$13.4 million project. The AHPC became operational in October 2002. Initial test data demonstrated the emissions design parameters were met. However, the technology encountered operational problems during its testing phase, which resulted in decreased fabric filter life, decreased particulate removal efficiencies, and limited plant operations. The Department of Energy's National Energy Technology Laboratory, consultants, equipment vendors and the Utility (Otter Tail) assessed the operational performance of the unit and its balance-of-plant impacts without success. Consequently, the Advanced Hybrid[™] system was deemed unacceptable for particulate emissions control. It was replaced with a conventional pulse-jet fabric filter in 2007. The Big Stone Plant is currently operating within all presently applicable federal and state air quality and emission standards.

By monitoring programs, Otter Tail is able to identify any adverse environmental effects at Big Stone Plant. Although not required to do so by any federal, state, or local governmental bodies, Otter Tail engaged in pre-operational and post-operational air, water, and soil monitoring programs at Big Stone Plant. The purpose of these programs is to provide information to determine any effects of Big Stone Plant on the surrounding environment and to provide an "early warning" system should any of the effects of the plant be adverse.

Condenser cooling at Big Stone is accomplished by using a 340-acre closed-cycle cooling pond. Use of such a pond eliminates any potential problems created by plant thermal discharges to public bodies of water.

In 1980, construction was completed on the \$13.5 million Big Stone Plant wastewater management project, including a brine concentrator. The purpose of the brine concentrator is to remove the accumulated dissolved solids from water recycled in the closed-cycle cooling pond by a process similar to that employed in a distillery. Benefits of the brine concentrator include reduced disposal volume of plant wastewater and improved cooling pond water quality.

Dikes surround oil storage tanks and larger chemical storage facilities to prevent contamination of large areas of soil or water should rupture of a storage tank occur. All underground petroleum storage tanks have been removed and replaced where necessary with above ground storage tanks. All above ground tanks are in compliance with existing requirements of the Department of Environment and Natural Resources.

Otter Tail will continue to cooperate with the South Dakota Pubic Utilities Commission and the Department of Environment and Natural Resources in an effort to site and operate future power plants and transmission lines in an environmentally acceptable manner, contingent with the needs of a reliable supply of electrical energy.

Social and Economic Effects

Social and economic effects are very closely related. In fact, they are often referred to as "socioeconomic" effects. Because of their close relationship, the socioeconomic effects will be discussed jointly.

From experience gained in past construction projects, such as Big Stone Plant, and Coyote Station located near Beulah, North Dakota, Otter Tail has been made aware of the socioeconomic effects of large construction projects. Pre-construction and post-construction socioeconomic monitoring was conducted in the vicinity of Big Stone in order to evaluate the effect of a large construction force on such things as the business community, housing, and essential services such as hospital and dental care. This type of monitoring was employed in conjunction with the construction of Coyote Station. Socioeconomic effects were evaluated as part of the Big Stone II Energy Conversion Facility Site Permit application process. Otter Tail has agreed to implement the recommendations of the Local Review Committee should construction of Big Stone II proceed as proposed.

In order to aid the economy in the area of construction, it has been Otter Tail's policy to utilize the local labor force and local contractors as much as possible. Local contractors also provide essential services during plant operations.

Health Effects

Various governmental regulations, including, for example, primary and secondary ambient air quality standards and water quality standards, have been promulgated to protect the public health and welfare. Otter Tail will comply with these regulations. In addition, Otter Tail contributes to research organizations, such as the Edison Electric Institute, which work to identify potential health and environmental problems as they relate to the electric utility industry.

Public Safety

Otter Tail is very concerned about public safety. All readily accessible substations and major plant sites are fenced to prevent unescorted access by the public who might be unfamiliar with electric energy or associated generation facilities.

In addition, Otter Tail complies with all applicable construction codes for the construction of electrical transmission lines and generation facilities.

Otter Tail also inspects its facilities periodically to help safeguard against failures of vital components and prevent any unnecessary exposure to the general public. Included in the inspections are electric transmission lines, circuit breakers, capacitors, and transformers.

Historic or Aesthetic Preservation Effects

A Programmatic Agreement (PA) has been developed for the proposed Big Stone II Project and

Big Stone Transmission in accordance with the stipulations of Section 106 of the National Historic Preservation Act. It was developed by Western Area power Administration and was completed after consultation with the Minnesota and South Dakota State Historic Preservation Officers (SHPO), the Big Stone II Co-owners, interested tribes, cooperating agencies, and other interested parties. Mitigation measures as well as stipulations outlined in the PA are intended to eliminate or minimize adverse affects to cultural resources.

The PA outlines the steps to be taken to identify cultural resources and to: evaluate them to determine eligibility for listing on the National Register of Historic Places (NRHP); identify potential adverse effects; to develop measures to avoid, reduce or mitigate adverse effects; and address inadvertent discoveries of cultural and paleontological resources. It also assigns roles and responsibilities for implementation of the PA, which ensures that all interested parties are involved in decisions regarding the treatment of historic and traditional cultural properties (TCPs) that may be affected by the proposed Project.

Aesthetic effects have been considered in the design of transmission lines and power plants and will be considered in the design of future facilities. Transmission line routing considerations include visual effect on surrounding terrain. The design of Big Stone Plant included the choice of a color scheme that would blend with the surrounding countryside.

SECTION 13 -- EFFORTS RELATING TO LOAD MANAGEMENT

Otter Tail began the development of a load management program and control system in September of 1975. The Company investigated and tested several control systems and, in 1980, started the installation of the FM Radio Load Management System. In 1992 the new PC Based Automated Control System was completed. In 2002, Otter Tail updated the long-range forecast capability of the Load Management System.

In 2003 Otter Tail started a multi-year process to replace our existing Load Management System with new hardware and software from Comverge, Inc. of Norcross, GA. This multi-year which extended from 2003 through 2007 was completed just last winter. We are still in the early stages of testing the software side of the system and working through various challenges and configurations associated with such a major undertaking.

In addition, we are evaluating various load control strategies that are now possibilities because of the new system. It will take a season or two to understand and capitalize on the full benefits of the new system.

The main objective of the control system is to turn off a variety of selected customer loads at times when Otter Tail's system is experiencing peak or near peak loads. This system has allowed Otter Tail to delay the need for the addition of new generating facilities and to permit the system to be more efficiently operated. The Otter Tail load forecast used in the MAPP Load and Capability Report reflects conservation efforts that are customer driven, as well as those that are initiated by Otter Tail as part of the Conservation Improvement Plan (CIP), and those that

develop as a result of load management strategy.

Some of the customer loads that are included in the Load Management Program are electric water heaters, the electric heating portion of dual fuel heating plants, electric process heating, irrigation, electric thermal storage and, on our Residential Demand Control (RDC) Program. Otter Tail is installing radio receivers in order to do short duration cycling control of air conditioners in the state of Minnesota and next year in South Dakota. We anticipating rolling the program into North Dakota in future years.

Total installations as of May 30, 2008 include 40,490 radio receivers on the Otter Tail system with 4,026 of these radio receivers located on customer premises in the state of South Dakota.

SECTION 14 -- LIST OF REPORTS

Table 1 provides a list of reports and permit applications that have been filed with respect to the proposed Big Stone II project during this reporting period.

Report/Permit Application	Agency	Date Filed
Transmission Facility Routing	South Dakota Public	January 12, 2006
Permit	Utilities Commission	
Draft Federal EIS	Western Area Power	May 19, 2006
	Administration	
PSD Air Quality Construction	South Dakota Department of	July 20, 2005 and updated
Permit Application	Environment and Natural	on June 19, 2006
	Resources	
Section 404 Permit Application	U. S. Army Corps of	March 7, 2006
	Engineers	
Water Appropriations Permit	South Dakota Department of	March 15, 2006
Application (Surface Water)	Environment and Natural	
	Resources	
Water Appropriations Permit	South Dakota Department of	March 28, 2007
Application (Groundwater)	Environment and Natural	
	Resources	
Semi-Annual Progress Reports in	South Dakota Public	January 15, 2006
Compliance with Final Decision	Utilities Commission	July 18, 2007
and Order EL05-022 paragraph		January 21, 2008
2.C.		
Response to Decision and Order	South Dakota Public	August 1, 2007
No. 3 - EL05-022. (Alternative	Utilities Commission	
Water Supply Evaluation)		

Table 1 Reports and Permit Applications Filed in SD During Reporting Period

SECTION 15 -- CHANGES IN STATUS AT FACILITIES

There is no change in the Big Stone Plant status. The unit continues to be operated as a baseloaded unit for Otter Tail system load. Lake Preston continues to be operated during peak demands and line stability conditions. In the summer of 2001 an inlet fogging system was added at Lake Preston to increase monthly summer ratings.

SECTION 16 -- PROJECTED ELECTRIC DEMAND

The projected winter season demand for the Otter Tail system is shown in Table 2.

Year	Unmanaged Peaks (MW)	Managed Peaks (MW)	Load Management Utilized (MW)
2008	826	746	80
2009	841	761	80
2010	851	771	80
2011	862	782	80
2012	883	803	80
2013	893	813	80
2014	904	824	80
2015	915	835	80
2016	926	846	80
2017	938	858	80
2018	949	869	80

Table 2 Projected Winter Season Peak Demand¹ for Otter Tail System

¹ Peak values are prior to new conservation program impacts.

The South Dakota portion of the Otter Tail system demand is not metered. It is estimated to be about 8.1% of the Otter Tail system total. Table 3 shows the projected winter season peak demand for the South Dakota portion of Otter Tail's system.

Year	Unmanaged Peaks (MW)	Managed Peaks (MW)	Load Management Utilized (MW)
2008	67	60	6.5
2009	68	62	6.5
2010	69	62	6.5
2011	70	63	6.5
2012	72	65	6.5
2013	72	66	6.5
2014	73	67	6.5
2015	74	68	6.5
2016	75	69	6.5
2017	76	69	6.5
2018	77	70	6.5

Table 3 Projected Winter Season Peak Demand¹ for SD Portion of Otter Tail System

¹ Peak values are prior to new conservation program impacts.

The 2006-2020 MAPP Load & Capability Forecast reports Otter Tail's projected seasonal surpluses and deficits. As a company, Otter Tail will continue to use a combination of load management and purchase agreements with other utilities to meet any future deficits. Otter Tail also continues to study and assess the potential for future additions to its generation resources. In 2007, Otter Tail had a system peak of 705 MW on February 2nd for hour ending at 10 a.m.

Otter Tail has purchased year-round capacity, as well as summer and winter season peaking capacity for the year 2008 that includes a summer and winter capacity from Manitoba Hydro Electrical Board that runs through April 30, 2010. Further detailed information may be obtained from Otter Tail's 2005 Resource Plan filed with the Minnesota Department of Commerce. Copies of the 2005 Resource Plan were provided to the South Dakota Public Utilities Commission.

SECTION 17 -- CHANGES IN ELECTRIC ENERGY

The projected increase of winter season demand for Otter Tail's system and South Dakota is shown in Table 4.

Year	Unmanaged System Load Increase (MW)	Percent Increase of System	South Dakota Load Increase (MW)	Percent Increase of South Dakota
2008	32	4.0%	2.6	4.0%
2009	15	1.8%	1.2	1.8%
2010	10	1.2%	0.8	1.2%
2011	11	1.3%	0.9	1.3%
2012	21	2.4%	1.7	2.4%
2013	10	1.1%	0.8	1.1%
2014	11	1.2%	0.9	1.2%
2015	11	1.2%	0.9	1.2%
2016	11	1.2%	0.9	1.2%
2017	12	1.3%	1.0	1.3%
2018	11	1.2%	0.9	1.2%

Table 4 Projected Increase of Winter Season Demand¹ for Otter Tail System and South Dakota Portion

¹ Load values are prior to new conservation program impacts.

SECTION 18 -- MAP OF SERVICE AREA

A map of the Otter Tail service area is shown in Figure 2 below.



