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SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

SOUTH DAKOTA

TEN YEAR

BIENNIAL PLAN

Report SS06 - 3

Resource Planning Department

Otter Tail Power Company

June 2006

June 30, 2006

South Dakota Public Utilities Commission State Capitol Building Pierre, SD 57501

Attention: Executive Director

Commissioners:

Subject: OTTER TAIL POWER COMPANY'S BIENNIAL TEN YEAR PLAN - JUNE 2006

Pursuant to the rules of the South Dakota Public Utilities Commission Energy Facility Plans ARSD 20:10:21, Otter Tail Power Company hereby files its Biennial Ten Year Plan.

With the above introduction, Otter Tail Power Company submits the following biennial ten year plan in accordance with ARSD 20:10:21 and Guidelines issued October 1977.

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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 Power Company hereby files its Biennial Ten Year Plan.

Ten copies of this Biennial Ten Year Report are being filed with the Commission with enclosures. 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.

- 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, I-314 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 450 MWs using the sub-bituminous coal. Net generation for the year 2004 was 3,447,705 MWh, and for 2005 was 2,846,714 MWh.
 - 4. The Big Stone Plant appropriates its entire supply of water from Big Stone Lake. During calendar year 2004, 4,047 acre-feet of water was appropriated, and during 2005, 4,356 acre-feet was appropriated.
 - 5. The Big Stone Plant continued to burn sub-bituminous coal in 2004 and 2005. The amount of sub-bituminous coal burned in 2004 was 2,155,060 tons and 1,701,748 tons in 2005. 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 2004 was 19,539 tons and for 2005 was 22,339 tons. In addition, 7,103 tons of RRM was burned in 2004 and 1,559 tons of RRM was burned in 2005.
 - 6. Otter Tail Power 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 Power, Montana-Dakota Utilities Co., and Northwestern Public Service. Otter Tail Power serves as the operating agent for the tit.

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 tired combustion turbine connected to an electrical generator with a rated capacity of 23.95 MW at 59 degrees F. ambient temperature.
- 3. In 2004 the unit had net generation of 1,040 MWh and 2,962 MWh in 2005.
- 4. Water source does not apply for this unit.
- 5. In 2004, 144,100 gallons of #2 fuel oil were consumed and in 2005, 454,602 gallons were consumed.
- 6. Otter Tail Power 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.

On March 31, 2006 Otter Tail Power Company issued a Request-for-Proposals (RFP) for approximately 75 MW of renewable resources eligible to qualify for the Minnesota Renewable Energy Objective. Approximately 45 proposals were received from 28 entities, which are currently being evaluated to determine a short list of potential projects. All of the proposals that were received were based on wind generation. The proposals include potential sites in Minnesota, North Dakota, and South Dakota. It is possible that Otter Tail may have some form of ownership in the final project(s) selected. At this time, it is too early to identify a location or possible ownership. The expectation is that the project(s) chosen would begin commercial operation in late 2007 or in 2008.

The possibility of a second unit at Big Stone Generation Station near Milbank in Grant County exists.

(1) General location and reasons for the selections;

The project would be located on an industrial site adjacent to the existing Big Stone Plant unit I. The Big Stone Plane unit II site is located in Grant County **east** of Milbank and northwest of Big Stone City, SD. Construction of the project at the site of an existing facility considerably reduces the construction cost of a new plant. This approach enables the proposed Big Stone II unit to share existing major infrastructure with the existing Big Stone Plant unit I including the following: coiling water intake structure, pumping system and delivery line, rail spur, coal unloading facilities, solid waste disposal facilities. The existing Big Stone site was designed originally to accommodate future units and includes the following: road access, railroad access, plant make-up water (Big Stone Lake), potable water, sanitary sewer, electricity, and transmission corridor.

(2) Probably type and nameplate capacity;

Plans are to construct a single pulverized coal fired supercritical boiler and steam turbine generator capable of generating approximately 600 MW of net electrical power. The nameplate and net output rating is subject to final design and equipment availability.

(3) Projected annual production in MWhs

The projected annual production is approximately 4,645,000 MWhs at an 88% capacity factor.

(4) Proposed water source and point withdrawal, estimated maximum and rate of withdrawal, estimated maximum and annual use and consumption in acre-feet.

The project's water appropriation from Big Stone Lake will need to be increased to supply both Big Stone unit I and Big Stone unit II, but modifications to the water intake structure or pumps on Big Stone Lake are not expected to be necessary.

The freshwater makeup requirement for operation of the existing Big Stone unit I plant is approximately 4,200 acre-feet per year. With the addition of Big Stone II, the total fresh makeup requirement for the Big Stone Station will increase to approximately 11,700 acre-feet per year. Both plants will draw plant makeup water from Big Stone Lake, which, in turn is recharged by precipitation from the surrounding basin. Makeup water is drawn from Big Stone Lake to refill **onsite** makeup ponds, provided the lake is at acceptable levels in accordance with the water appropriation permit from the State of South Dakota. Currently, the permit authorizes the appropriation of up to 100 cubic feet per second (cfs), and up to 8,000 acre-feet per year. Additional water appropriation up to a total annual volume 18,000 acre-feet will be requested.

(5) Proposed fuel type and source, estimated maximum and annual consumption of fuel, and, if known, proposed means for transporting fuel to facility;

Fuel for the project will be Powder River Basin (PRB) coal, which is currently being burned at Big Stone Plant unit I.

The expected annual use for Big Stone unit II is 2.9 million tons per year with a maximum use of 3.3 millions tons per year.

Coal is currently being transported to the site by rail, and that delivery mode is planned to continue for the second unit.

(6) Proposed plans for waste disposal and monitoring of emissions and wastes, as known;

Combustion by-products that cannot be marked for reuse will be transported by trucks or scrapers to the **onsite** landfill for disposal. At the landfill, fly ash, bottom ash, and gypsum will be distributed in layers and compacted. Water from the stormwater pond and other plant wastewater sources will be applied to the layers to assist in compaction and dust control.

The existing landfill will accommodate approximately 10 years of disposal before it will need to be expanded. This projection is based on average coal characteristics, an 88 percent plant capacity factor, and average ash and sulfur content of the coal.

Solid wastes other than coal combustion by-products generated by the addition of Big Stone unit II will include construction debris, office waste, laboratory wastes, and wastes generated during normal operation and maintenance activities.

Solid waste materials will be generated on a daily basis, including plastics, cardboards, paper, small pieces of wood, food waste, miscellaneous trash, and office waste. The waste will be trucked by a private contractor to an approved solid waste landfill or treatment facility.

Any non-hazardous chemical waste will be shipped offsite by contractors to be recycled when possible or transported to an approved treatment or disposal facility.

The proposed facility is subject to the compliance monitoring requirements under the Acid Rain Regulations in 40 CFR Part 75 and New Source Performance Standards in accordance with 40 CFR Part 60. The boiler will employ continuous emission monitoring systems (CEMS) in accordance with 40 CFR Part 75 and 40 CFR Part 60 to continuously monitor NOx, SO₂, CO₂, opacity, mercury, and volumetric flows. Continuous monitoring of mercury will be required under the Clean Air Mercury Rule. CEMS or a sorbent trap can be used.

(7) Description of anticipated associated facilities;

Fresh water from Big Stone Lake will be stored in the existing Big Stone Plant unit I cooling pond, in the new Big Stone II makeup pond, and in the existing holding and evaporation ponds which will be converted into additional make-up ponds. A pipe installed in the dike between he converted ponds will be used to connect the ponds, effectively turning them into a single pond.

Water will be delivered form Big Stone Lake to the converted evaporation and holding pond, or directly to the new makeup storage pond. Water diverted to the converted evaporation and holding ponds will subsequently be fed into the existing cooling pond. If water is delivered to the new makeup storage pond, it can be pumped either to the converted storage ponds, or directly to the cooling pond.

Big Stone II heat rejection will be accomplished by utilizing a mechanical, counter-flow cooling tower.

Operational requirements include the installation of a diesel-fired internal combustion engine driven generator for back-up and emergency power. This engine will include a state-of-the-art engine technology to minimize emissions and is expected to meet all emission limits.

Three diesel-fired internal combustion engine-driven emergency tire water pumps will be installed to support fire suppression in the event of fire at the site. Similar to the emergency generator, these engines will include a state-of-the-art engine technology to minimize emissions and is expected to meet all emission limits.

Limestone will be used in the flue gas desulfurization system to remove sulfur dioxide from the flue gases. Limestone will be received by rail (100 tons per railcar) or truck (22 tons per truck) deliveries, and unloaded through a track/truck hopper. Limestone will be stored in a cover storage area.

(8) Projected operating life from fuel source in this state, if any;

Not applicable.

(9) Projected date of removal from service;

While the proposed project is being designed for a 30-year minimum operating life, it is common in the power industry for units to operate well beyond their initial projected design operating life. There are solid fossil fuel plants originally designed for a 20 to 30-year life that are still operating after 50 to 60 years. Assessments of plant components are made periodically and repairs and improvements are made as needed. Future improvements oftentimes are made that take advantage of the most recent technological advances in equipment and materials. Such future technological advancements cannot be identified at this time. Therefore, it cannot be predicted at this time when the proposed unit will be decommissioned.

(10) Total estimated capital

Approximately \$1 billion.

SECTION 6 -- EXISTING TRANSMISSION FACILITIES

Otter Tail Power owns three 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. Maps were provided with the 1998 plan.

- 2. A section of the Big Stone-Gary 230 kV line starting from a point .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. Maps were provided with the 1998 plan.
- 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 .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. Maps were provided with the 1998 plan.

SECTION 7 -- PROPOSED TRANSMISSION FACILITIES

Otter Tail along with six other partners are proposing to build new 230 kV transmission facilities associated with the Big Stone II power plant. These transmission include the following:

- Big Stone Canby Granite Falls
- . Big Stone Johnson Morris

Both of these facilities are partially located in South Dakota, and route permit applications have been filed with the South Dakota Public Utilities Commission. The Big Stone – Canby – Granite Falls line is intended to be designed and constructed for future 345 kV operation. The timing of when the Big Stone – Canby – Granite Falls line is actually operated at 345 kV is dependent upon the completion of another transmission project, Brookings County, SD to the Southeast Twin Cities 345 kV project.

Otter Tail is a participant in the CapX 2020 effort to build significant transmission infrastructure. One of the initial projects includes the Brookings County, SD to Southeast Twin Cities 345 kV project. This project is partially located in South Dakota and will require a Route Permit. The project is in its early stages and set schedule has been defined, but it is anticipated that this facility could be placed into service in the 2012 timeframe.

SECTION 8 -- COORDINATION OF PLANS

Otter Tail continues to play an active role in the regional transmission planning efforts. While Otter Tail still leads and conducts studies to ensure the adequacy of the transmission system to serve its customers, all transmission planning activities related to regional transmission are coordinated with the MISO and the surrounding non-MISO transmission owners.

Transmission planning occurs at several different levels from individual utility plans, to local joint utility plans to broad regional studies. Regardless of the type of studies, the forum for which these studies are carried out is through a regional transmission planning process. Otter Tail actively participates in the Northern MAPP sub-regional planning group (NM SPG), which is a forum for regional transmission planners to discuss the needs and projects related to the transmission system, Transmission planners from the following entities along with Otter Tail participate in the NM SPG forums: Xcel Energy, Great River Energy, Minnesota Power, Minnkota Power Cooperative, Basin Electric Power Cooperative, Western Area Power Administration, Missouri River Energy Services, and Montana Dakota Utilities.

Otter Tail closely coordinates its transmission planning efforts with the MISO. For transmission planning purposes, MISO performs three primary functions. The first two are federally mandated processes established by FERC, generator interconnection and delivery service, and the third process is related to expansion planning.

MISO administers and processes requests to use the transmission system of the MISO transmission owners. MISO has established procedures for processing generation interconnection and delivery service transmission requests of generators and market participants. Through this FERC mandated process, MISO offers the area utilities opportunities to participate in "ad-hoc" study groups to provide adequate input and review of the technical studies completed for generation interconnection and delivery service. In addition to these FERC mandated requirements, MISO has formed Reliability Study Groups (RSG) to assess transmission system adequacy in different regions throughout the MISO footprint. Otter Tail's transmission system falls within the MAPP RSG. Through the RSG process, MISO completes a Baseline Reliability study every other year that assesses transmission system performance in accordance with the regional reliability criteria. In the event, that standards are not met, additional analysis is completed to find a "tix" to the system. Otter Tail actively participates in the RSG efforts, by attending meetings, reviewing study results and providing input into the study process.

MISO has also sponsored exploratory studies across their footprint as part of the expansion planning process. Otter Tail has actively participated in the Northwest Exploratory study sponsored by the MISO. The purpose of this study was to develop a transmission plan for the purpose of transmitting a significant amount of additional generation from the Dakota's area (up to 200 MWs) to loads in the Twin Cities metro area of Minnesota. Similar to the Otter Tail involvement in the MAPP RSG, Otter Tail attended meetings, reviewed study results and provided input into the study process.

In addition to the specific study opportunities, the MISO conducts bi-monthly meetings of the Planning Committee (PC). The PC is made up of various representatives of the different stakeholder groups at MISO. These meetings act as a forum between MISO staff and the stakeholders to provide input into the processes of the MISO. There are other working groups underneath the PC that address other specific issues. Otter Tail regularly attends these meetings to provide input and feedback to the MISO transmission planning process.

Otter Tail has been an active participant in the CapX 2020 effort. The CapX 2020 sponsoring companies embarked on a transmission study developing a long-term transmission plan to ensure reliable service to customer loads in the year 2020. The efforts of the CapX 2020 studies have been closely coordinated with the MISO planning process.

All of these transmission planning activities provide for an efficient and effective planning process among utilities in this region.

SECTION 9 -- SINGLE REGIONAL PLANS

The proposed facilities mentioned in Sections 5 and 7 comprise a part of the Midwest ISO Transmission Expansion Plan.

SECTION 10 -- SUBMISSION OF REGIONAL PLAN

Otter Tail's submits its transmission plans to the Midwest ISO for inclusion in the Midwest ISO Transmission Expansion Plan.

SECTION 1 1 -- UTILITY RELATIONSHIPS

Refer to Section 8 for a listing of the associations and power pools in which Otter Tail Power Company is involved. In addition, we have interconnections and transmission agreements in South Dakota with the following utilities: Northwestern Energy, Montana-Dakota Utilities Co., East River Electric Cooperative, and Western Area Power Administration.

SECTION 12 -- EFFORTS TO MINIMIZE ADVERSE EFFECTS

Otter Tail Power Company 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 Power 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 will enable the new emission-control 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 demonstrates the emissions design parameters were met. The Department. of Energy's National Energy Technology

Laboratory, consultants, equipment vendors and the Utility (Otter Tail) have assessed the operational performance of the unit and its balance-of-plant impacts as part of the ongoing effort to refine the demonstration technology. Even though Big Stone Plant co-owners replaced the remaining four precipitator fields with Advanced HybridTM technology in 2005, the technology continues to impose limits on plant output. The Big Stone Plant co-owners are evaluating particulate emissions control technology options. The Big Stone Plant is currently operating within all presently applicable federal and state air quality and emission standards.

By monitoring programs, OTP 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 Power 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 Water and Natural Resources.

Otter Tail Power 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. The South Dakota Public Utilities Commission is currently considering a permit to site an Energy Conversion Facility Siting Permit for the Construction of the Big Stone II Project that was filed on July 21, 2005.

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 Power 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 Power Company 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 Power'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 Power will comply with these regulations. In addition, Otter Tail Power 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 Power 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 Power complies with all applicable construction codes for the construction of electrical transmission lines and generation facilities.

Otter Tail Power 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

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 Power Company 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 replacement program will extend from 2003 through 2007. The existing system is 24 years old and it's becoming difficult to find replacement components to keep it operational. Also, the communications protocol it uses is no longer supported by equipment manufacturers and is not compatible with current Load Management system architecture supplied by equipment manufacturers. As of June 1, 2006, Otter Tail has replaced all the system software and communications infrastructure and is approximately 74% complete with the replacement of individual radio receivers at customer premises.

The main objective of the control system is to turn off a variety of selected customer loads at times when Otter Tail Power Company'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 natural result of load management efforts.

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. Depending upon evaluation of that program's success, the air conditioning program may be rolled into North and South Dakota in future years. These loads are turned off at varying periods of time to achieve lower energy usage when Otter Tail Power is in a peak period.

Total installations as of June 1, 2006 include 40,948 radio receivers on the Otter Tail Power system with 4,169 of these radio receivers located on customer premises in the state of South Dakota.

The radio receivers are used to control electric water heaters, small dual fuel accounts (less than 80 kW), large dual fuel accounts (greater than 80 kW), thermal storage accounts, and residential demand control customers on Otter Tail Power Company lines. The radio signal to control these loads is initiated at the System Operations Center in Fergus Falls, Minnesota.

SECTION 14 -- LIST OF REPORTS

The following is a list of reports and permit applications that have been tiled with respect to the proposed Big Stone II project:

Report/Permit Application	Agency	Date Filed
Draft Federal EIS	Western Area Power	May 19, 2006
	Administration	
Energy Conversion Facility Siting	South Dakota Public	July 21, 2005
Permit Application	Utilities Commission	
PSD Air Quality Construction	South Dakota Department of	July 20, 2005
Permit Application	Environment and Natural	
	Resources	
Water Appropriations Permit	South Dakota Department of	March 15, 2006
Application	Environmental and Natural	
	Resources	
Section 404 Permit Application	u. s. Army corps of	March 7, 2006
	Engineers	
Solid Waste Disposal Permit	South Dakota Department of	October 12, 2005
	Environment and Natural	
	Resources	
Transmission Facility Routing	South Dakota Public	January 12, 2006
Permit	Utilities Commission	
Minnesota Certificate of Need for	Minnesota Public Utilities	October 3, 2005
a High Voltage Transmission Line	Commission	
Minnesota Transmission Line	Minnesota Public Utilities	December 9, 2005
Facility Route Permit	Commission	

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

	Unmanaged	Managed	Load Management.
Year	Peaks	Peaks	Utilized
2006	747	667	80
2007	756	676	80
2008	765	685	80
2009	778	698	80
2010	787	707	80
2011	796	716	80
2012	809	729	80
2013	818	738	80
2014	827	747	80
2015	839	759	80
2016	848	768	80

The projected winter season demand for the Otter Tail Power system is as follows:

The South Dakota portion of the Otter Tail Power System Demand is not metered, it is estimated. It is estimated to be about 8.1% of the Otter Tail Power System total.

	Unmanaged	Managed	Load Management
Year	Peaks	Peaks	Utilized
2006	61	55	6
2007	61	55	6
2008	62	56	6
2009	63	57	6
2010	64	58	6
2011	64	58	6
2012	66	60	6
2013	66	60	6
2014	67	61	6
2015	68	52	6
2016	69	63	6

The 2006-2020 MAPP Load & Capability Forecast reports Otter Tail's projected seasonal surpluses and deficits. As a company, Otter Tail Power 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 2005, Otter Tail Power had a system peak of 665 MW on February 7th for hour ending at 9 a.m.

Otter Tail Power has purchased summer season peaking capacity for the year 2006 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 Power's 2004 Resource Plan filed with the Minnesota Department of Commerce. A copy of the 2004 Resource Plan is provided to the South Dakota Public Utilities Commission.

SECTION 17 -- CHANGES IN ELECTRIC ENERGY

The projected increase of winter season demand for Otter Tail Power system and South Dakota:

	Unmanaged System Load Increase	Percent Increase of System	South Dakota Load Increase	Percent Increase of South Dakota
Year	mercuse	bystem		South Dukota
2006	14 MW	1.87%	2 M W	3.28%
2007	9 MW	1.19%	OMW	0.00%
2008	9 MW	1.18%	1 MW	1.61%
2009	13 MW	1.67%	1 MW	1.59%
2010	9 MW	1.14%	1 MW	1.56%
2011	9 MW	1.13%	1 MW	1.56%
2012	13 Mw	1.61%	2 M W	3.03%
2013	9 MW	1.10%	OMW	0.00%
2014	9 MW	1.09%	1 MW	1.49%
2015	12 MW	1.43%	1 MW	1.47%

SECTION 18 -- MAP OF SERVICE AREA

A map of the Otter Tail Service Area is shown below.



Ten copies of this Ten Year Biennial Plan are being filed with the Commission with enclosures. 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. Should the commission wish additional copies of the Plan or Notices of Filing to be sent by Otter Tail Power, please inform us.

Very truly yours,

Stacie M. Hebert Manager, Supply Services

Enclosures

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

Bemadeen Bmtlag Daryl Hanson

Notices of Filing sent as designated in Section 23 of ARSD 2: 10:21.