



**MONTANA-DAKOTA**

**UTILITIES CO.**

*A Division of MDU Resources Group, Inc.*

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400 North Fourth Street  
Bismarck, ND 58501  
(701) 222-7900

June 30, 2008

Office of the Commissioners  
Public Utilities Commission  
Capitol Building, 1st Floor  
500 E Capitol Avenue  
Pierre, SD 57501

Dear Sir/Madam:

Pursuant to Section 20:10:21:22 of the Administrative Rules of the South Dakota Public Utilities Commission, enclosed please find ten (10) copies of Montana-Dakota Utilities Co. Ten Year Energy Facilities Plan for the period of January 1, 2008 through December 31, 2017.

If you have further questions, please feel free to contact me.

Sincerely,

Karl Tammar

System Operations & Planning Manager

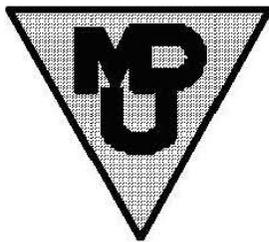
KT/th  
Enclosure

**MONTANA-DAKOTA UTILITIES CO.  
TEN YEAR PLAN  
FOR  
SOUTH DAKOTA ELECTRIC PROPERTIES**

For Planning Years January 1, 2008 through December 31, 2017

Submitted to

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION JULY 1, 2008



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July 1, 2008

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400 North 4th Street  
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20:10:21:04 Existing Energy Conversion Facilities

Montana-Dakota Utilities Co. (Montana-Dakota) has a 22.7 percent ownership in the 415 MW coal-fired Big Stone 1 plant located near Big Stone, South Dakota. Otter Tail Power Company of Fergus Falls, Minnesota, operates the plant and reports all information required by 20:10:21:04.

20:10:21:05 Proposed Energy Conversion Facilities

Montana-Dakota, together with four other utilities operating in the upper Midwest, filed an application on July 20, 2005, for an Energy Conversion Facility Siting Permit for the addition of a second unit (Big Stone II) near Big Stone City, South Dakota. The South Dakota Public Utilities Commission approved this permit on July 21, 2006. At this time the new plant will be rated at 500-580 MW. The plant is planned for commercial operation in 2013 with Montana-Dakota taking up to 133 MW of the total plant.

Otter Tail Power Company made the filing on behalf of the Big Stone Unit II co-owners and will report the Big Stone II information required by 20:10:21:05. The Big Stone II co-owners at this time are:

- Central Minnesota Municipal Power Agency
- Heartland Consumers Power District
- Montana-Dakota Utilities Co.
- Otter Tail Corporation dba Otter Tail Power Company
- Missouri River Energy Services

Montana-Dakota is studying renewable resource options to meet the North Dakota renewable energy objective.

20:10:21:06 Existing Transmission Facilities

Montana-Dakota has no transmission facilities of 250 kilovolts (kV) or more in South Dakota. Exhibit A shows the 115 kV and 46 kV transmission network which serves Montana--Dakota's South Dakota customers. It also shows 47.5 miles of 230 kV line extending northwesterly from the Big Stone 1 Plant. This line transmits electric energy from the Big Stone Plant to Montana-Dakota's transmission network. Montana-Dakota owns this portion of the transmission line. Otter Tail Power Company owns the remaining portion of the line extending northerly.

Montana-Dakota, Basin Electric Power Cooperative (Basin Electric) of Bismarck, North Dakota, and Western Area Power Administration (Western) of Billings, Montana, own a 230 kV transmission line extending from Miles City, Montana through Baker, Montana; Bowman, North Dakota; and Hettinger, North Dakota to New Underwood, South Dakota. Western owns the South Dakota portion of this facility.

20:10:21:07 Proposed Transmission Facilities

As part of the Big Stone Unit II project reported in 20:10:21:05, the proposed transmission facilities associated with the unit consist of two 230 kV high voltage transmission lines that will run from the Big Stone plant to substations in Minnesota. One line will be from the plant to Johnson Junction in Minnesota and then to Morris, Minnesota. The other line will be built from the plant to Canby, Minnesota and then to Granite Falls, Minnesota. The Morris line will be located in Big Stone and Stevens Counties, and the Granite Falls line will be located in Yellow Medicine and Chippewa Counties.

The South Dakota PUC approved the route permit for these transmission lines on January 17, 2008 for the South Dakota portion, and the approval for the Minnesota portion is still pending before the Minnesota Public Utilities Commission.

Montana-Dakota has been coordinating planning, construction, and operation of electric facilities with other utilities and agencies serving North Dakota since 1945. Montana-Dakota has agreements for joint planning and common use of area facilities with Basin Electric Power Cooperative (Basin Electric) and Western Area Power Administration (Western).

Montana-Dakota and Western have an agreement that provides for mutual wheeling and coordinates construction of transmission facilities. The current agreement is in effect through the year 2015. Montana-Dakota originally entered into this agreement with Western's predecessor, the United States Bureau of Reclamation, in 1945 and the agreement has been renewed several times since then. Over the years since, cooperation among Montana-Dakota, Western, and rural electric cooperatives has resulted in numerous interconnections between Montana-Dakota's and Western's systems, avoiding duplication of hundreds of miles of transmission facilities.

Montana-Dakota has an agreement with Basin Electric that provides for joint planning and common use of transmission facilities. This agreement, first signed in 1972, is perpetual until terminated by one of the parties with a five year notice required prior to termination. Joint planning involving Montana-Dakota and Basin Electric and its member cooperatives continues to provide maximum utilization and benefit of existing and new transmission facilities. Load flow studies provided for under this agreement assure that adequate facilities will be provided to meet expected long-range demands.

Montana-Dakota has interconnection agreements with Otter Tail Power Company, NorthWestern Energy Corporation, and Minnkota Power Cooperative, Inc. These agreements, along with the Basin Electric and Western agreements, provide for the interconnection of Montana-Dakota's bulk transmission facilities with the Mid-Continent Area Power Pool (MAPP) and Midwest Independent Transmission System Operators (Midwest ISO or MISO) bulk transmission facilities.

Montana-Dakota, Otter Tail Power Company, and NorthWestern Energy Corporation own the 415 MW Big Stone generating station near Big Stone, South Dakota, and associated bulk transmission facilities. Montana-Dakota owns 22.7 percent of the Big Stone Plant. In addition, Montana-Dakota is a participant in another joint venture with Minnkota Power Cooperative, Inc. (agent for Northern Municipal Power Agency), Otter Tail Power Company, and NorthWestern Energy Corporation. This is the 415 MW Coyote generating plant near Beulah, North Dakota, and associated bulk transmission facilities. Montana-Dakota currently owns 25 percent of the Coyote Station. These cooperative efforts permit Montana-Dakota to realize economic benefits from construction and operation of a large generating station and to provide the service required of it and its partners using fewer facilities.

Montana-Dakota is a transmission owning member of the Midwest ISO. The Midwest ISO is a FERC-authorized Regional Transmission Organization (RTO). MISO commenced tariff administration for the operational control of the transmission systems of its members in February 2002. MISO commenced its energy market on April 1, 2005. The MISO Ancillary Services Market is scheduled to start September 2008 at which time Montana-Dakota will become a Local Balancing Authority within MISO. Montana-Dakota is actively participating in the planning processes performed by MISO, who has the obligation to coordinate the planning of transmission facilities. Two of the planning processes mandated by FERC are generator interconnection and delivery service. The third process is related to expansion planning through the MISO Transmission Expansion Plan. As part of the market operation, Montana-Dakota's generating units are dispatched by MISO. Montana-Dakota is also participating in the Midwest Contingency Reserve Sharing Group in which the participants share their contingency (capacity) reserve as of January 1, 2007.

Montana-Dakota is a member of the MAPP Regional Transmission Committee, which coordinates the regional transmission planning with MISO through its Transmission Planning Subcommittee. Montana-Dakota is active in the Northern MAPP and Missouri Basin Subregional Planning Groups of the Transmission Planning Subcommittee. The objective of these subregional planning groups is to provide coordinated planning of transmission systems in North Dakota, South Dakota, and western Minnesota for Montana-Dakota, Otter Tail Power, Minnkota Power Cooperative Inc., Great River Energy, NorthWestern Energy Corporation, Minnesota Power Inc., and Xcel Energy. The groups in turn coordinate with other subregional planning groups in MAPP to provide a coordinated regional transmission plan for MAPP.

Montana-Dakota is also a member of the Midwest Reliability Organization (MRO), which is a Cross-Border Regional Entity representing the upper Midwest of the United States and Canada. MRO is organized consistent with the Energy Policy Act of 2005 and the bilateral principles between the United States and Canada.

## 20:10:21:09 Single Regional Plans

Montana-Dakota's memberships in the Midwest ISO and the MAPP provide coordination in operating facilities and assistance in developing joint facilities. Montana-Dakota's proposed facilities described in sections 20:10:21:05 and 20:10:21:07 comprise a part of the Midwest ISO Transmission Expansion Plan. Montana-Dakota also submits proposed facilities to MAPP for the 10-year Transmission Plan.

20:10:21:10 Submission of Regional Plan

Montana-Dakota submits to the Midwest ISO its transmission plans for inclusion into the Midwest ISO Transmission Expansion Plan, and also submits the transmission plans to MAPP to be included in the MAPP 10-Year Transmission Plan.

#### 20:10:21:11 Utility Relationships

Montana-Dakota has several agreements with other electric utilities in its service area. These are described in Section 20:10:21:08 on the coordination of plans. In addition, Montana-Dakota is a member of the Midwest ISO, and MAPP which coordinates the joint operation and planning of electric facilities over the Region and permits Montana-Dakota to participate in the benefits and economics derived from large bulk electric systems. Montana-Dakota is also a member of the MRO.

20:10:21:12 Efforts to Minimize Adverse Effects

The Corporate Environmental Policy of MDU Resources Group, Inc., the parent corporation of Montana-Dakota, states that:

*Our company will operate efficiently to meet the needs of the present without compromising the ability of future generations to meet their own needs. Our environmental goals are:*

- *To minimize waste and maximize resources;*
- *To support environmental laws and regulations that are based on sound science and cost-effective technology; and*
- *To meet or surpass all applicable environmental laws, regulations and permit requirements.*

Montana-Dakota maintains good relationships with local, state, and federal agencies involved with environmental protection and land use planning in its service area.

Transmission and energy conversion facilities will be designed and located in such a manner as to maximize operational efficiency and economic benefits and to minimize impacts on agriculture, extractable resources, health and safety, plant and animal life, communications, and the visual effect on the surrounding area. Transmission and energy conversion facilities will be sited in compliance with federal, state, and local laws and with the Public Utilities Commission's rules and regulations.

Montana-Dakota complies with all federal, state and local environmental regulations and requirements at its wholly-owned and jointly-owned generating facilities.

20:10:21:13 Efforts Relating to Load Management

Montana-Dakota uses an Integrated Resource Planning method that analyzes both supply-side options and demand-side management (DSM) programs. This planning method determines the best means of providing electric energy to Montana-Dakota customers. Examples of supply-side options include central generating stations or alternate energy sources, while DSM programs include load management and conservation. Montana-Dakota first implemented Integrated Resource Planning in 1987 with the first integrated resource plan (IRP) being published in October 1989, and the most recent IRP was published in May 2007; all plans are on file with the Public Utilities Commission.

Currently, Montana-Dakota has 6.5 MW of interruptible loads on its Integrated System, which comprises the service territories in Montana, North Dakota, and South Dakota. As the result of its IRPs, by 2011 Montana-Dakota plans on having an additional 13.8 MW of Demand Response and Conservation, which will have an additional annual savings of 2,427 MWh. The programs implemented in 2006 will take three to five years to be fully implemented. The following is a list of all the DSM programs Montana-Dakota has implemented or expects to implement in the coming years:

DSM program	Implementation Date	Expected kWh Savings	Expected Peak kW Savings
Residential high efficiency A/C	2006	440,818	374.3
High efficiency commercial lighting	2006	4,063,754	1,467.9
ENERGY STAR refrigerators	2008	312,191	195
ENERGY STAR freezers	2008	175,574	127
Refrigerator round-up	2008	473,999	503
LED exit signs	2008	86,944	124
Commercial High Efficiency A/C	2008	203,689	199
High Efficiency Motors	2008	567,063	138
IT Rate – Demand Response	2008	340,025	4,500
Residential A/C Cycling	2009	238,782	7,151
Commercial A/C Cycling	2009	29,157	873
<b>Total by 2011</b>		<b>6,931,996</b>	<b>15,652.2</b>

20:10:21:14 LIST OF REPORTS

Otter Tail Power Company reports all permits and reports with respect to the proposed Big Stone II plant and transmission lines associated with the plant as required by 20:10:21:14.

20:10:21:15 Changes in Status of Facilities

No significant changes have occurred at Montana-Dakota's South Dakota facilities.

20:10:21:16 Projected Electric Demand (Megawatts)

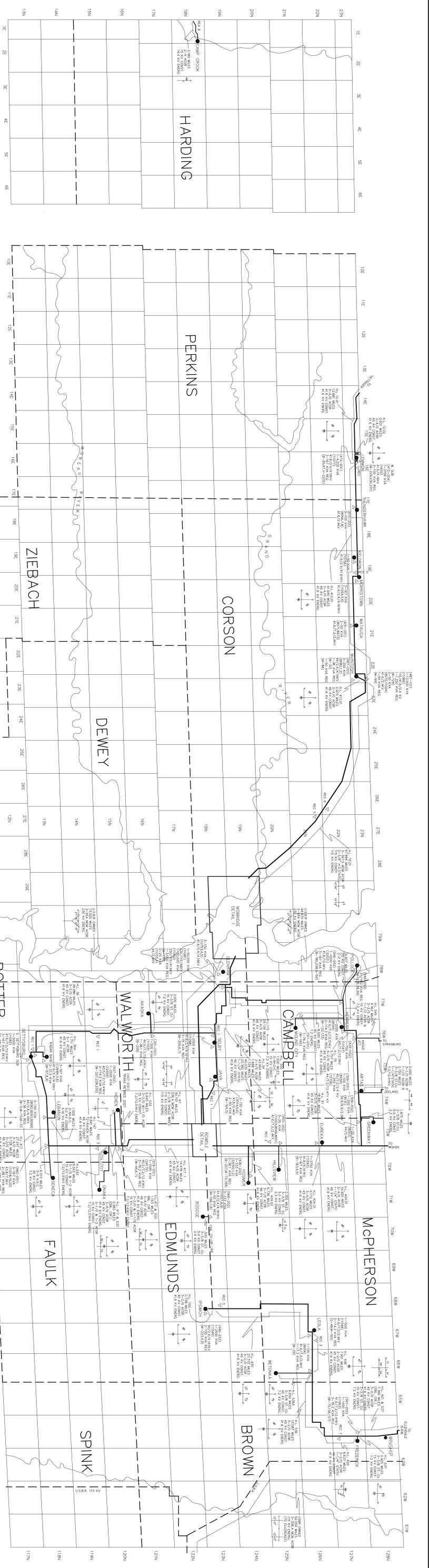
Year	South Dakota		Integrated System	
	Summer Peak Demand (MW)	Winter Peak Demand (MW)	Summer Peak Demand (MW)	Winter Peak Demand (MW)
2008	28.9	23.0	483.5	398.1
2009	29.1	23.3	486.0	404.5
2010	29.2	23.6	487.7	408.7
2011	29.5	23.9	491.7	413.4
2012	29.8	24.2	497.5	418.2
2013	30.2	24.4	503.3	422.8
2014	30.5	24.7	509.1	427.5
2015	30.9	25.0	514.9	432.2
2016	31.2	25.2	520.7	436.9
2017	31.6	25.5	526.4	441.6

20:10:21:17 Changes in Electric Energy (Megawatt-hours)

Year	South Dakota Total Annual Energy (MWH)	Percentage of Change
2008	147,194	--
2009	150,044	1.9%
2010	151,919	1.2%
2011	153,994	1.4%
2012	155,265	0.8%
2013	156,554	0.8%
2014	157,940	0.9%
2015	159,294	0.9%
2016	160,691	0.9%
2017	162,160	0.9%

20:10:21:18 Map of Service Area

Enclosed is Exhibit A which shows Montana-Dakota's South Dakota Service Area.



**RE C**

**LEGEND**

**SYMBOLS**

- 1 - CAM-WAL ELEC. CO-OP - INC.
  - 2 - OME ELEC. CO-OP - INC.
  - 3 - FEM ELEC. CO-OP - INC.
  - 4 - GRAND ELEC. CO-OP - INC.
  - 5 - MOBEAL-GRAND ELEC. CO-OP - INC.
  - 6 - MOE-GRAND ELEC. CO-OP - INC.
  - 7 - NORTHEN ELEC. CO-OP - INC. (ABBREVIEN)
  - 8 - SOUTHEAST ELEC. CO-OP - INC.
- 
- MUO CO 34520B115 KV LINES
  - MUO CO 375B9 KV LINES
  - MUO CO 416.53 KV LINES
  - MUO CO DIST. LINES (22 KV AND BELOW)
  - USRR AND USA LINES
  - TOWNS SERVED BY MUO CO
  - ELECTRIC SUBS. STATIONS
  - ELECTRIC POWER PLANT OR SUBSTATION
  - REC TAPS

SYSTEM MAP OF ELECTRICAL PROPERTIES IN SOUTH DAKOTA			
MONTANA-DAKOTA UTILITIES CO.			
ISSUED BY	DATE	APPROVED BY	SCALE
REVISION	DATE	BY	DESCRIPTION
1	1-27-2000	KJDP	NO CHANGE 31-44-07
2	3-24-2002	KJDP	NO CHANGE 31-44-07
3	1-11-2004	KJDP	NO CHANGE 31-44-07
4	1-11-2004	KJDP	NO CHANGE 31-44-07
5	1-11-2004	KJDP	NO CHANGE 31-44-07
6	1-11-2004	KJDP	NO CHANGE 31-44-07
7	1-11-2004	KJDP	NO CHANGE 31-44-07
8	1-11-2004	KJDP	NO CHANGE 31-44-07
9	1-11-2004	KJDP	NO CHANGE 31-44-07
10	1-11-2004	KJDP	NO CHANGE 31-44-07

