

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

For Planning Years January 1, 2004 through December 31, 2013

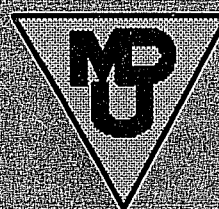
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SOUTH DAKOTA PUBLIC
UTILITIES COMMISSION

Submitted to

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
JULY 1, 2004



MONTANA-DAKOTA
UTILITIES CO.

A Division of MDU Resources Group, Inc.

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July 1, 2004

MONTANA-DAKOTA UTILITIES CO.
A Division of MDU Resources Group, Inc.
400 North 4th Street
Bismarck, North Dakota 58501

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Exhibit A - South Dakota Electric System Map

20:10:21:04

Existing Energy Conversion Facilities

Montana-Dakota Utilities Co. (Montana-Dakota) has a 22.7 percent ownership interest in the Big Stone Plant located near Big Stone, South Dakota. Otter Tail Power Company of Fergus Falls, Minnesota operates the plant and will report information required by 20:10:21:04.

Montana-Dakota currently has no plans to construct energy conversion facilities in South Dakota within the next ten years.

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 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, have built 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

Montana-Dakota has no plans for new transmission lines of 250 kV or higher voltage.

Montana-Dakota has been coordinating the construction and operation of electric facilities with other utilities and agencies serving South Dakota since 1945. Montana-Dakota is presently involved in agreements for joint planning and common use of area facilities: agreement with Basin Electric through the year 2007 and agreement with Western through the year 2015.

In 1945, Montana-Dakota signed a wheeling agreement with the United States Bureau of Reclamation, now Western, which coordinated construction of transmission facilities. This agreement was renewed in 1956 and again in 1988. 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.

In 1972, a thirty-five year agreement was entered into with Basin Electric which provides for joint planning and common use of facilities. 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 Public Service Company, and Minnkota Power Cooperative, Inc. These agreements, along with the aforementioned Basin Electric and Western agreements, provide for the interconnection of Montana-Dakota's bulk transmission facilities with the Mid-Continent Area Power Pool (MAPP) bulk transmission facilities.

Montana-Dakota joined Otter Tail Power Company and Northwestern Public Service Company in 1970 to construct, operate, and maintain the 415 megawatt (MW) Big Stone generating station near Big Stone, South Dakota, and associated bulk transmission facilities. Montana-Dakota currently owns 22.7 percent of the Big Stone Plant. This cooperative effort permits 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 through fewer facilities and minimal environmental impact.

In addition, Montana-Dakota is a participant in another joint venture with Minnkota Power Cooperative (agent for Northern Municipal Power Agency), Otter Tail Power Company, and Northwestern Public Service Company; namely the 415 MW Coyote generating station located near Beulah, North Dakota, and associated bulk transmission facilities. Montana-Dakota currently owns 25 percent of the Coyote Station and realizes the same benefits as those derived from the Big Stone Plant.

To comply with the Federal Energy Regulatory Commission (FERC) Order 2000, Montana-Dakota joined the Midwest Independent System Operator, Inc. (Midwest ISO or MISO) in September 2001. 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. The RTO provides a central one-stop shop for transmission service for the entire central United States and central Canadian region and provides for standardized operation and administration of the transmission system. It also has the obligation to coordinate the planning of transmission facilities. Montana-Dakota is actively participating in this planning process and is providing input to MISO in an advisory role.

At the present time, Montana-Dakota continues to be a member of the MAPP Regional Transmission Committee, which coordinates the Regional transmission planning with MISO through its Transmission Planning Subcommittee. Montana-Dakota has been active in the Red River Valley Subregional Planning Group of the Transmission Planning Subcommittee. The objective of the Red River Valley Subregional Planning Group 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, Great River Energy, Northwestern Public Service, Minnesota Power, and Northern States Power. The group in turn coordinates with other subregional planning groups in MAPP to provide a coordinated regional transmission plan for MAPP.

20:10:21:09

Single Regional Plans

Other than the coordination of plans described in 20:10:21:08, Montana-Dakota is not aware of any single regional plan. Montana-Dakota's memberships in the Midwest Independent System Operator, Inc. (MISO) and the Mid-Continent Area Power Pool (MAPP) provide coordination in operating facilities and assistance in developing joint facilities.

There are no formal regional plans to be submitted.

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 Independent System Operator, Inc. and Mid-Continent Area Power Pool 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.

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 a liaison 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 to maximize operational efficiency and economic benefits and to minimize impacts upon 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 has developed plans to comply with the requirements of Title IV of the Clean Air Act Amendments of 1990 at all of its wholly-owned and jointly-owned generating stations. Operating permits under Title V are in place for all plants operated by Montana-Dakota.

Montana-Dakota anticipates that mercury emission control, as well as additional reductions in sulfur dioxide and nitrogen oxide emissions, will be required within the next ten years. Montana-Dakota is supporting research on mercury control strategies for plants combusting lignite coal, and is actively considering the options available for additional criteria pollutant control.

The effects of load management programs in South Dakota are expected to be relatively uncertain for the reported ten-year period. This is because the number of customers served by Montana-Dakota in South Dakota is a small percentage (8.3% in 2003) of those served on Montana-Dakota's Integrated System which comprises the service territories in Montana, North Dakota, and South Dakota. In addition, a high percentage of these are residential customers located in small communities with no industry and few large commercial establishments.

There are, however, some load management procedures available to customers on a voluntary basis which may be beneficial in reducing peak load demand.

1. Montana-Dakota offers financial incentive to those customers willing to switch to an alternate fuel source for their space heating requirements during periods of high demand on Montana-Dakota's Interconnected System. Marketed as the "Econo Heat" program, these dual-fuel space heating service rates also include controlled electric water heating.
2. Montana-Dakota offers optional residential and general service time-of-day rates which provide for low "off-peak" rates and higher "on-peak" rates. This service offers an incentive to those customers who are willing to shift loads away from the time of day where loads are heaviest on the system.
3. For many years, Montana-Dakota has been offering bulletins, pamphlets, advertisements, and personal assistance on energy management and conservation techniques which provide customers with information on how to use energy wisely.
4. Montana-Dakota provides customized energy audits to commercial and industrial customers upon request. Depending on customer needs and desires, those audits may vary from a simple walk-through to detailed energy analysis.
5. Since 1987, Montana-Dakota has implemented a planning process known as Integrated Resource Planning (IRP). The process analyzes supply-side options and demand-side management (DSM) programs on an equal basis to determine the most economical 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.

The first Integrated Resource Plan was published in October 1989, and the most recent Integrated Resource Plan was published on September 15, 2003; both Plans are on file with the Public Utilities Commission. The results of the 2003 Plan indicate certain strategic marketing programs, both residential and commercial, implemented in 2004 would benefit Montana-Dakota customers. Furthermore, Montana-Dakota is continuing the IRP effort and will constantly review the customers' needs as well as the benefits provided by the DSM programs.

20:10:21:14

LIST OF REPORTS

NONE

20:10:21:15

Changes in Status of Facilities

No changes have occurred in Montana-Dakota facilities.

Projected Electric Demand (Megawatts)

<u>Year</u>	South Dakota		Integrated System	
	<u>Summer Peak Demand (MW)</u>	<u>Winter Peak Demand (MW)</u>	<u>Summer Peak Demand (MW)</u>	<u>Winter Peak Demand (MW)</u>
2004	29.9	25.0	464.0	384.4
2005	30.1	25.2	468.4	387.3
2006	30.4	25.4	472.8	390.3
2007	30.7	25.6	477.2	393.3
2008	31.0	25.8	481.6	396.3
2009	31.3	25.9	486.0	399.2
2010	31.6	26.1	490.4	402.2
2011	31.8	26.3	494.8	405.2
2012	32.1	26.5	499.2	408.1
2013	32.4	26.7	503.6	411.1

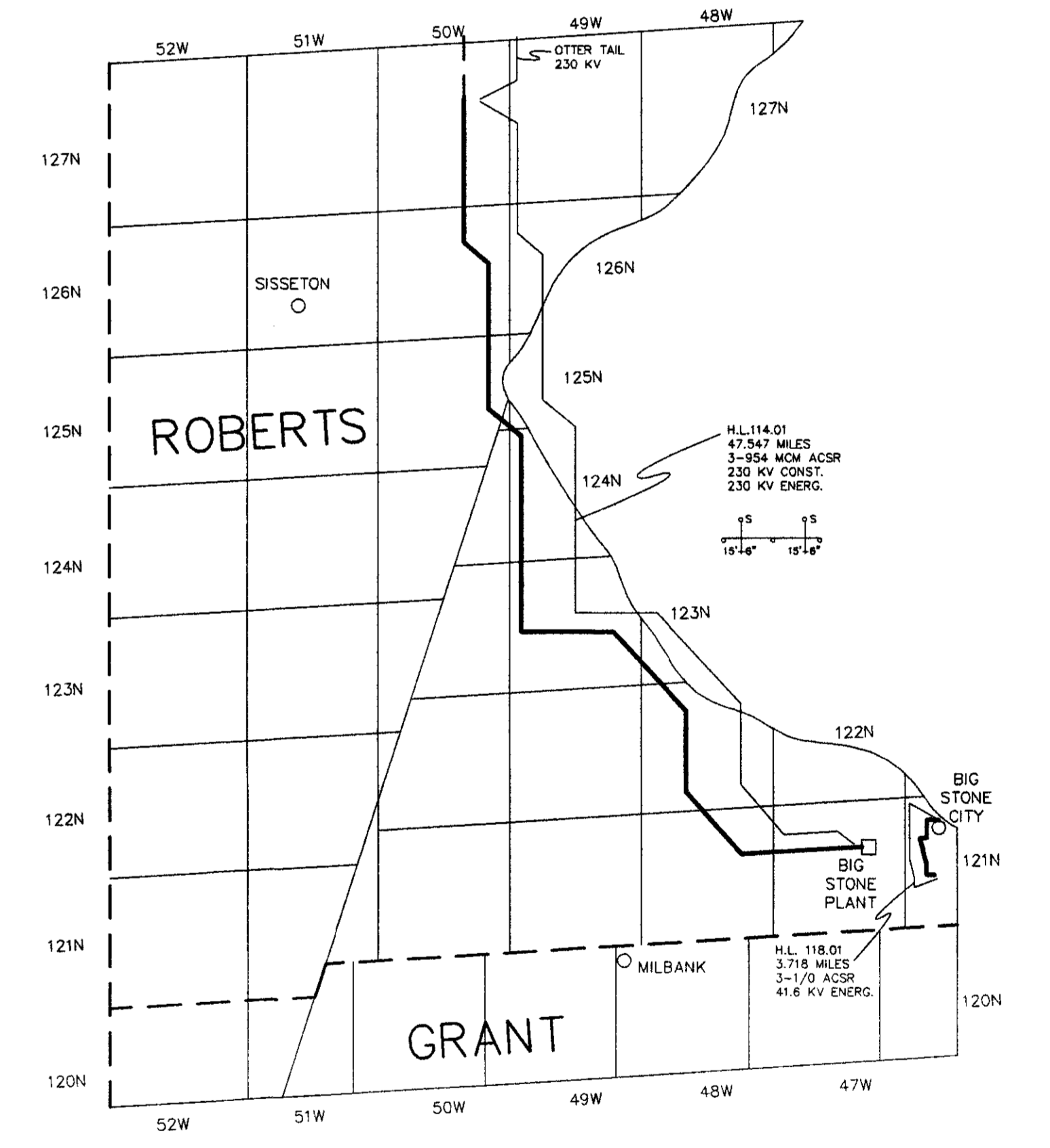
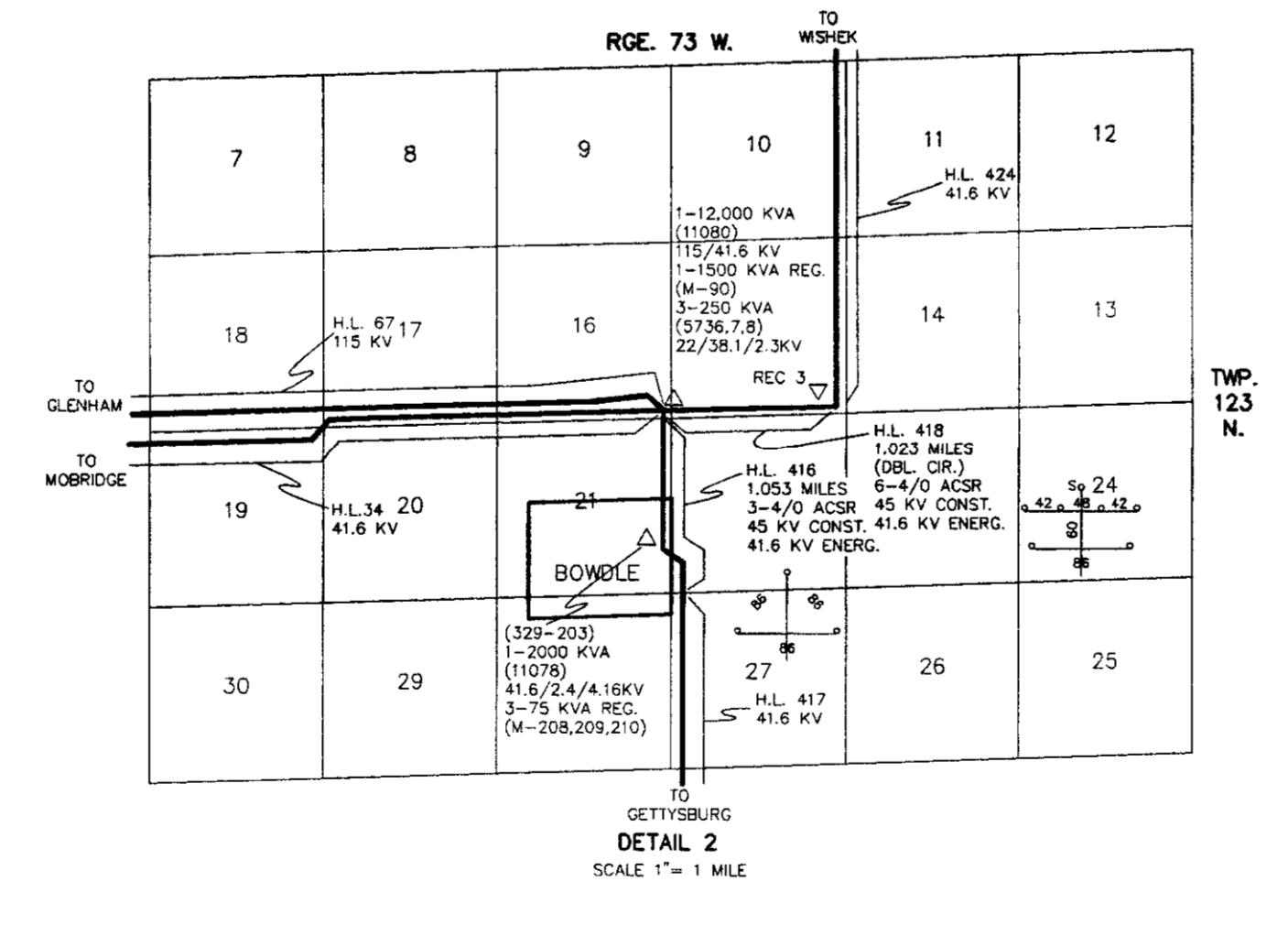
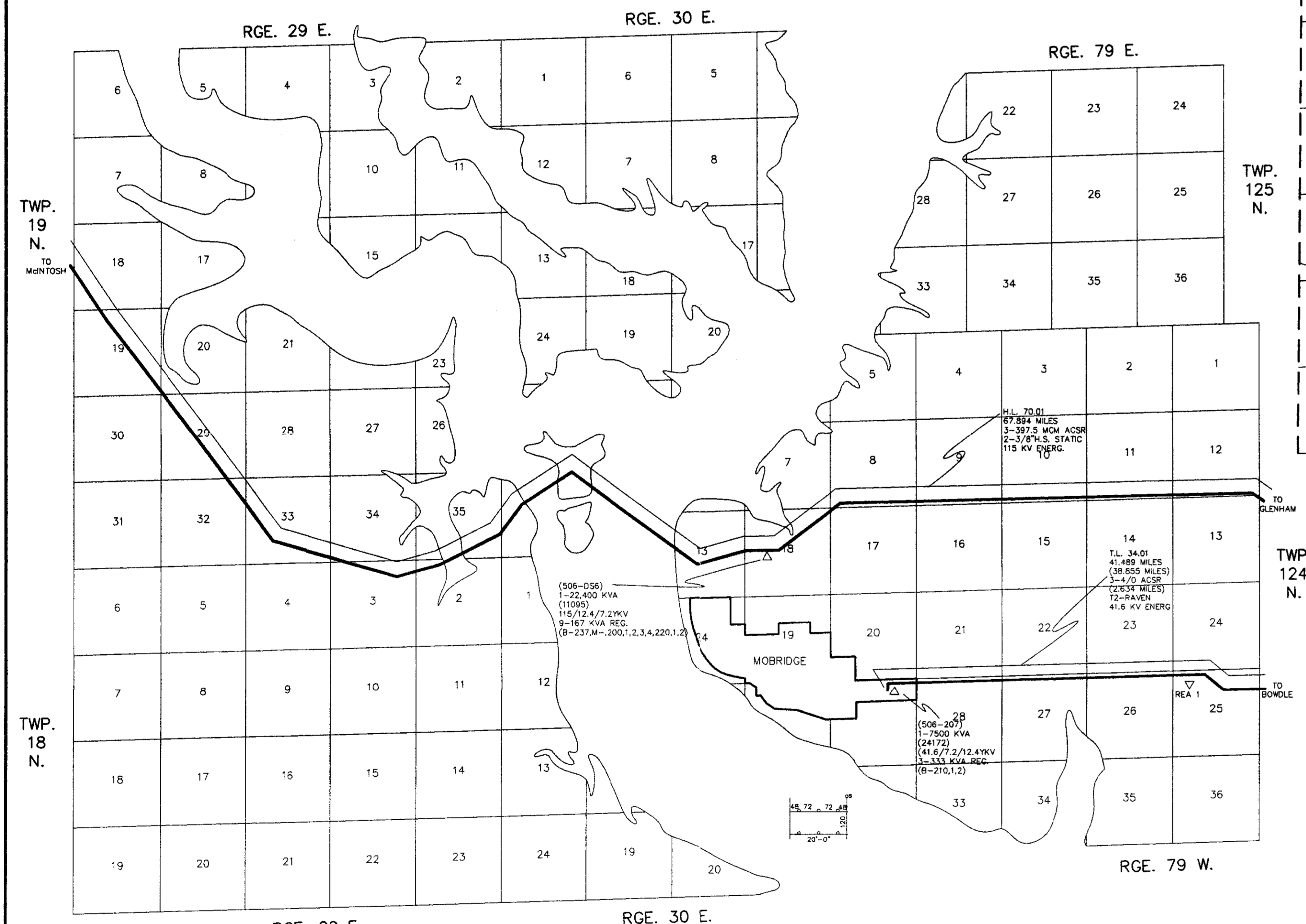
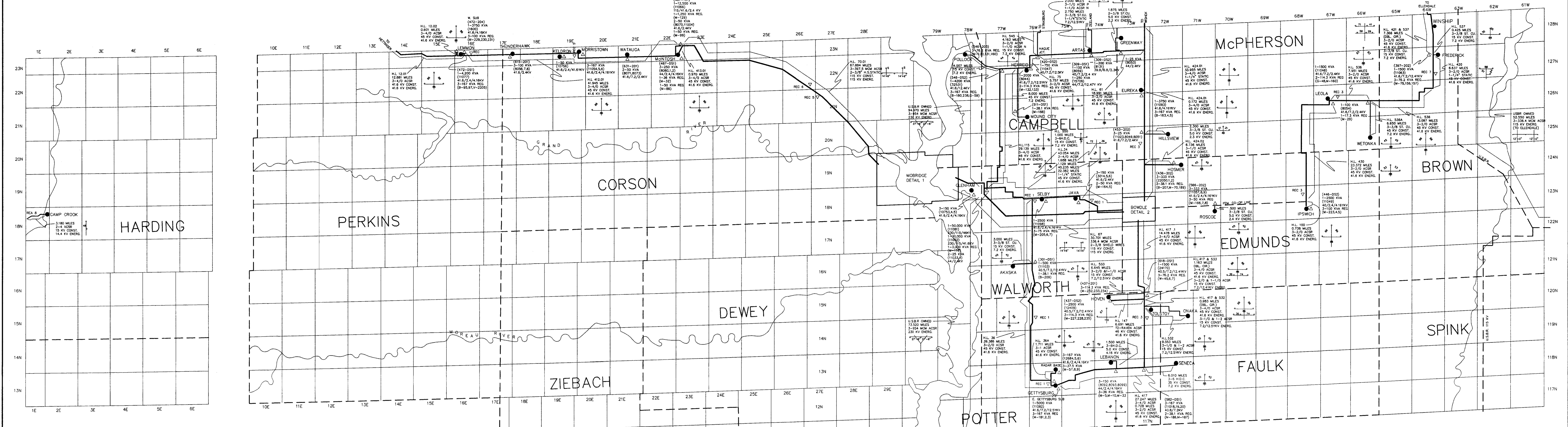
Changes in Electric Energy (Megawatt-hours)

<u>Year</u>	<u>South Dakota Total Annual Energy (MWh)</u>	<u>Percentage of Change</u>
2004	141512	--
2005	142884	1.0%
2006	144411	1.1%
2007	145754	0.9%
2008	146771	0.7%
2009	147485	0.5%
2010	148163	0.5%
2011	148682	0.4%
2012	149341	0.4%
2013	149965	0.4%

20:10:21:18

Map of Service Area

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



LEGEND

REC

- 1 - CAM-WAL ELEC. CO-OP., INC.
- 2 - DAHE ELEC. CO-OP., INC.
- 3 - FEM ELEC. CO-OP., INC.
- 4 - GRAND ELEC. CO-OP., INC.
- 5 - MOREAU-GRAND ELEC. CO-OP., INC.
- 6 - MOR-GRAN-SOU ELEC. CO-OP., INC.
- 7 - NORTHERN ELEC. CO-OP., INC. (ABERDEEN)
- 8 - SOUTHEAST ELEC. CO-OP., INC.

SYMBOLS

- MDU CO 345,230,115 KV LINES
- MDU CO 57.61 KV LINES
- MDU CO 41.8,33 KV LINES
- MDU CO DIST. LINES (22 KV AND BELOW)
- - - USER AND UFA LINES
- TOWNS SERVED BY MDU CO
- △ ELECTRIC SUBSTATIONS
- ELECTRIC POWER PLANT OR SUBSTATION
- ▽ REC TAPS

SYSTEM MAP OF ELECTRICAL PROPERTIES IN SOUTH DAKOTA

MONTANA-DAKOTA UTILITIES CO.

DRAWN BY DATE APPROVED SCALE DRAWN NO.

REVISED			
DATE	BY	REASON	SCALE
12-31-92	K.G.P.P.		1-27-2000
12-31-93	K.G.P.P.		2-8-2001
12-31-94	K.G.P.P.		1-24-2002
12-31-99	K.G.P.P.		2-3-2003
12-31-98	K.G.P.P.		2-11-2004
2-4-98	K.G.P.P.		
NO CHANGE 1-27-99			