



UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

June 26, 2014

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

Re: Ten-Year Plan

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., herewith electronically submits its Ten-Year Plan in accordance with South Dakota Administrative Rules Chapter 20:10:21.

If you should have any questions, please feel free to contact me at 701-222-7856

Sincerely,

A handwritten signature in red ink that reads 'Tamie A. Aberle'.

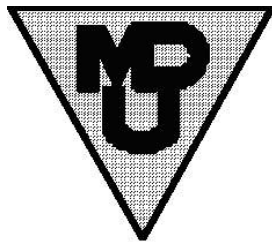
Tamie A. Aberle
Director of Regulatory Affairs

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

For Planning Years January 1, 2014 through December 31, 2023

Submitted to

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION JUNE 26, 2014



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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 in the 475 MW coal-fired Big Stone Plant located near Big Stone City, 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 is continually studying additional resource options to meet its customer needs along with studying renewable resource options to meet the South Dakota renewable energy objective. Montana-Dakota is not currently proposing to build any new energy conversion facilities in South Dakota.

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. The Exhibit 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, 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

The Mid-Continent Independent System Operator, Inc. (MISO) has established a classification of transmission expansion projects called Multi-Value Projects (MVPs). There is currently one MVP project that will connect to Montana-Dakota's transmission system which will be jointly owned by Montana-Dakota and Otter Tail Power Company that consists of a 345 kV line to a new substation south of the current Big Stone Substation and then continuing west and north to a new substation located near the existing Ellendale Junction Substation in North Dakota. Cost allocation for MVPs will be shared across the entire MISO footprint on a per MWh basis. The Companies have requested a Permit to Construct the Big Stone South to Ellendale 345 kV Transmission Line located in South Dakota with a Commission decision pending in Docket No. EL13-028. The project will begin construction in 2016 and have a planned in-service date of 2019.

20:10:21:08 Coordination of Plans

Montana-Dakota has been coordinating the planning, construction and operation of electric facilities with other utilities and agencies serving South Dakota since 1945. Montana-Dakota has agreements for joint planning and common use of area facilities with Basin Electric and an agreement with 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 December 31, 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.

With the expiration of the Western Transmission Service Agreement (TSA), Montana-Dakota will need to make transmission service arrangements to serve approximately one-third to one-half of its customer load in western North Dakota and eastern Montana. Western and Basin Electric are scheduled to join the Southwest Power Pool (SPP) in October 2015, so Montana-Dakota expects to take transmission service from SPP upon expiration of the Western TSA.

Initial analysis shows a greater value for Montana-Dakota to remain a MISO member and take SPP transmission service to replace the Western TSA over a complete withdrawal from MISO. Montana-Dakota is concerned with the pancaking of transmission services by taking both SPP and MISO transmission services for the same load and is continuing to explore measures that will minimize customer cost impacts.

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 to terminate. 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 Western Integrated System (WAPA IS) and MISO bulk transmission facilities.

Montana-Dakota, Otter Tail Power Company, and Northwestern Energy Corporation own the 475 megawatt (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 427 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 electric generation required of it and its partners through fewer facilities.

Montana-Dakota is a transmission owning member of MISO. MISO 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 started on January 6, 2009 at which time Montana-Dakota became a Local Balancing Authority within

MISO. Montana-Dakota actively participates in the planning processes performed by MISO, which 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 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 one of eight regional entities in North America operating under authority through a delegation agreement with the North American Electric Reliability Corporation (NERC). The primary focus of the MRO is developing and ensuring compliance with regional and international standards and performing assessments of the grid's ability to meet the demands for electricity.

20:10:21:09 Single Regional Plans

Montana-Dakota's membership in MISO provides coordination in operating facilities and assistance in developing joint facilities. If Montana-Dakota has any proposed facilities in sections 20:10:21:05 and 20:10:21:07 these facilities would be part of the MISO Transmission Expansion Plan.

20:10:21:10 Submission of Regional Plan

Montana-Dakota submits to MISO its transmission plans for inclusion into the MISO Transmission Expansion 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. In addition, Montana-Dakota is a member of MISO, 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 comply with or exceed 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 strives to maintain compliance and operate its facilities in an environmentally proactive manner, while taking into consideration the cost to customers. Montana-Dakota actively monitors federal and state legislative and regulatory activity related to environmental issues, including air emissions, greenhouse gases (GHG), waste disposal and water discharges. The Company has also established memberships in relevant trade organizations to assist in monitoring the potential impact of proposed legislation and regulation to the Company's operations.

The U.S. Environmental Protection Agency (EPA) has finalized significant air emissions regulations for coal-fired electric generating facilities and has made known that it intends to issue several other significant new air emissions, waste disposal and water discharge regulations aiming to reduce impacts from air emissions, including GHGs, from fossil-fired electric

generating facilities, and pollutants in wastewater discharges and management of coal ash at coal-fired electric generating facilities. The culmination of all various pending environmental requirements may result in the retirement of existing coal-fired baseload units earlier than otherwise would occur.

Montana-Dakota is currently reviewing potential impacts from the EPA's proposed GHG rule for existing fossil-fired generation units that was released on June 2, 2014. In the rule, the EPA identifies a required CO₂ emissions reduction from each state and instructs each state, or group of states that work together, to submit a plan to the EPA by June 30, 2016 that demonstrates how the state will achieve the emission reductions by 2030. The plan will include performance standards for each existing fossil-fired generating unit, as well as the available compliance options. Montana-Dakota does not yet know what each state will require for emissions reductions from each Montana-Dakota owned and jointly-owned fossil-fired electric generation unit, but will continue to work with states where Montana-Dakota has fossil-fired generation units to understand the potential impacts and will take these requirements into consideration when planning for future resource needs.

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 evaluates various 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 July 2013; both plans are on file with the Public Utilities Commission.

Currently, Montana-Dakota has 15 MW of demand response on its Integrated System which comprises the service territories in Montana, North Dakota, and South Dakota. Based on analysis presented in the IRP, Montana-Dakota has implemented and will continue to add additional customers to the programs below:

DSM programs	Programs by State
Residential Programs	
A/C Energy Efficient Programs	MT
Thermal Storage with ASHP	MT
Lighting	MT
Commercial Programs	
Lighting	MT
Motors	MT
Variable Speed Drives	MT
A/C Energy Efficient Programs	MT
Partnership Program	MT
Commercial Demand Response	MT,ND,SD
Interruptible Rate Demand Response	MT,ND

The effects of load management programs in South Dakota are, however, expected to be relatively small for the reported ten-year period. This is because the number of customers served by Montana-Dakota in South Dakota is a small percentage (7.2% in 2013) of those served on the Integrated System. In addition, a high percentage of these are residential customers located in small communities with no industry and few large commercial establishments.

20:10:21:14 LIST OF REPORTS

None

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

The Big Stone Plant is required to comply with the Regional Haze Rule under the EPA Clean Air Act. The facility is required to install the Best Available Retrofit Technologies (BART) as identified in the South Dakota State Implementation Plan (SIP). The BART for the Big Stone Plant are: semi-dry flue gas desulfurization for SO₂, selective catalytic reduction with separated over-fire air for NO_x control, and baghouse for particulate matter. The project will be completed within five years of the EPA approving the SD SIP, which was approved on April 26, 2012.

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)
2014	28.4	26.5	598.6	558.0
2015	28.0	26.7	635.3	605.2
2016	28.0	27.0	659.0	634.4
2017	28.1	27.2	674.5	652.4
2018	28.3	27.4	685.3	664.4
2019	28.5	27.7	696.3	676.7
2020	28.8	28.0	706.9	688.0
2021	29.0	28.2	717.1	699.2
2022	29.2	28.5	726.6	709.3
2023	29.5	28.8	735.9	719.2

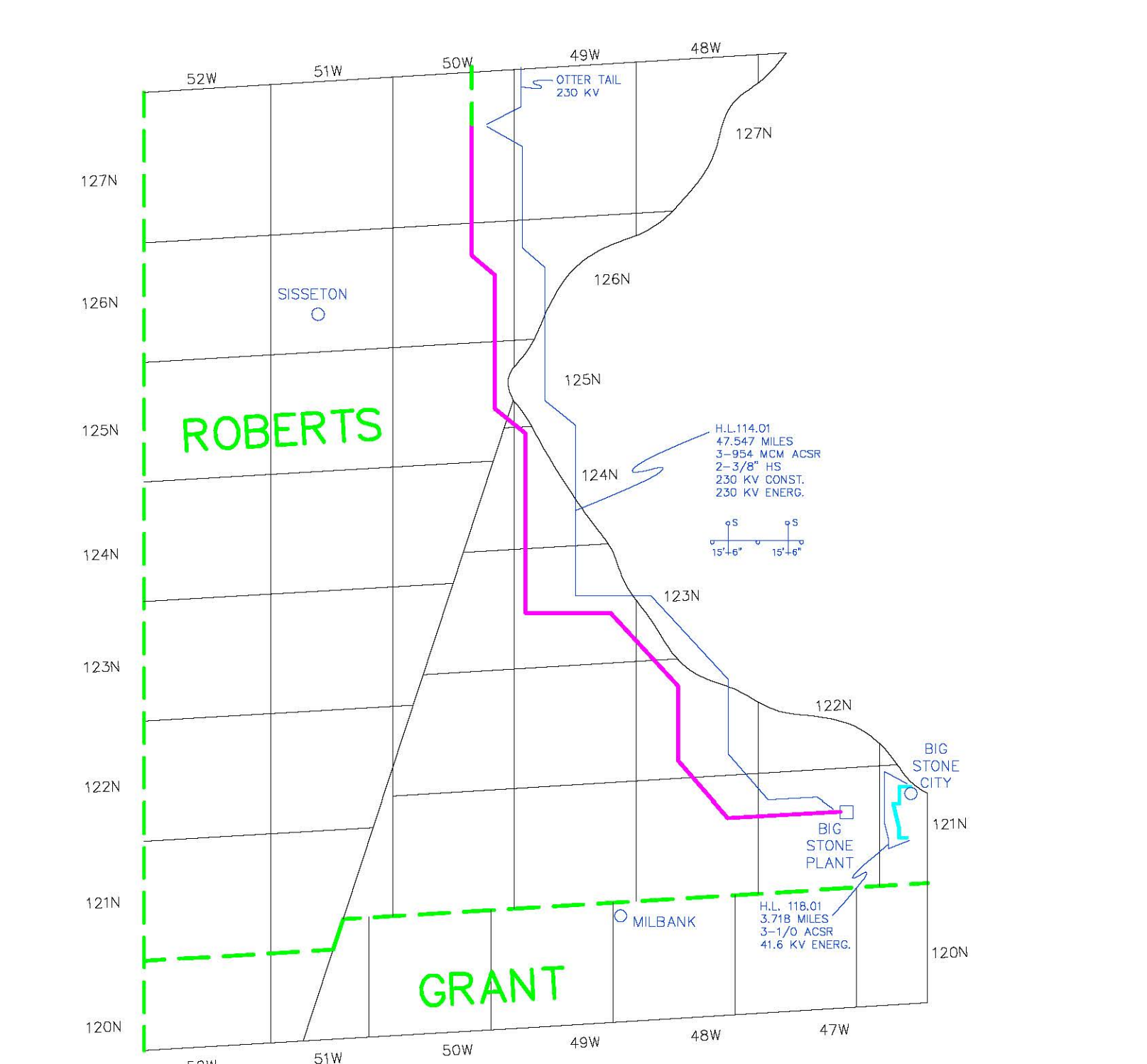
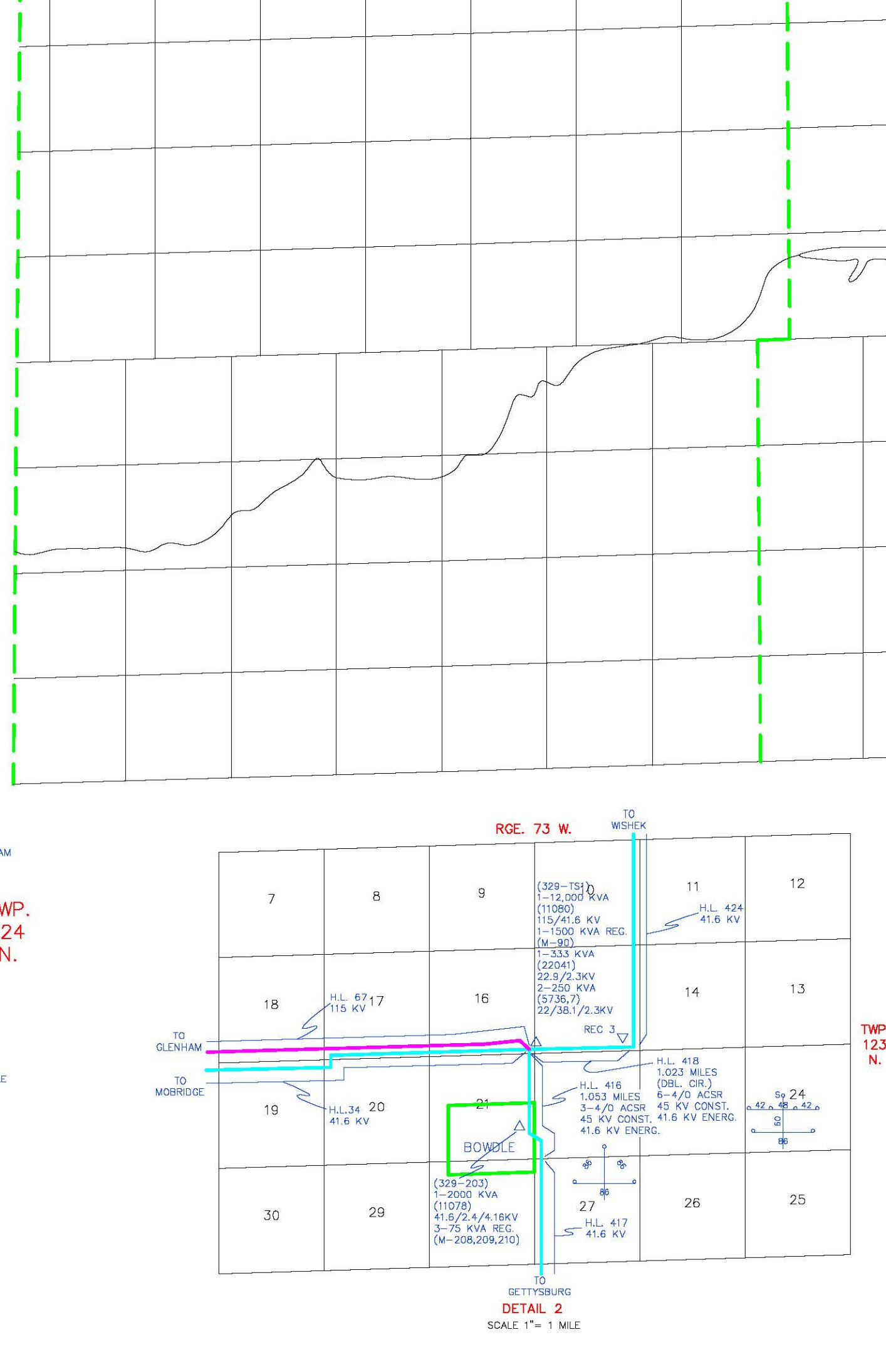
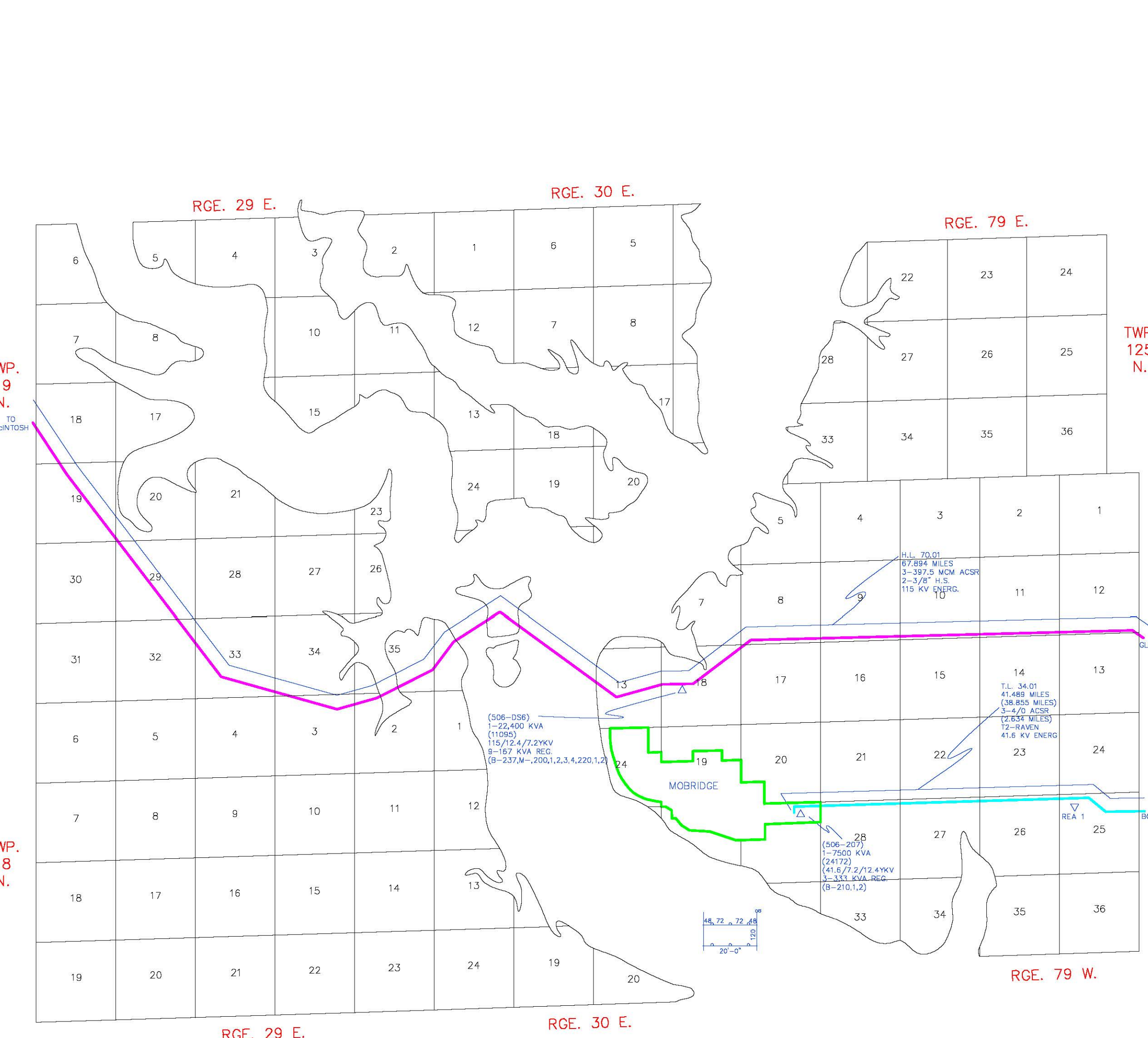
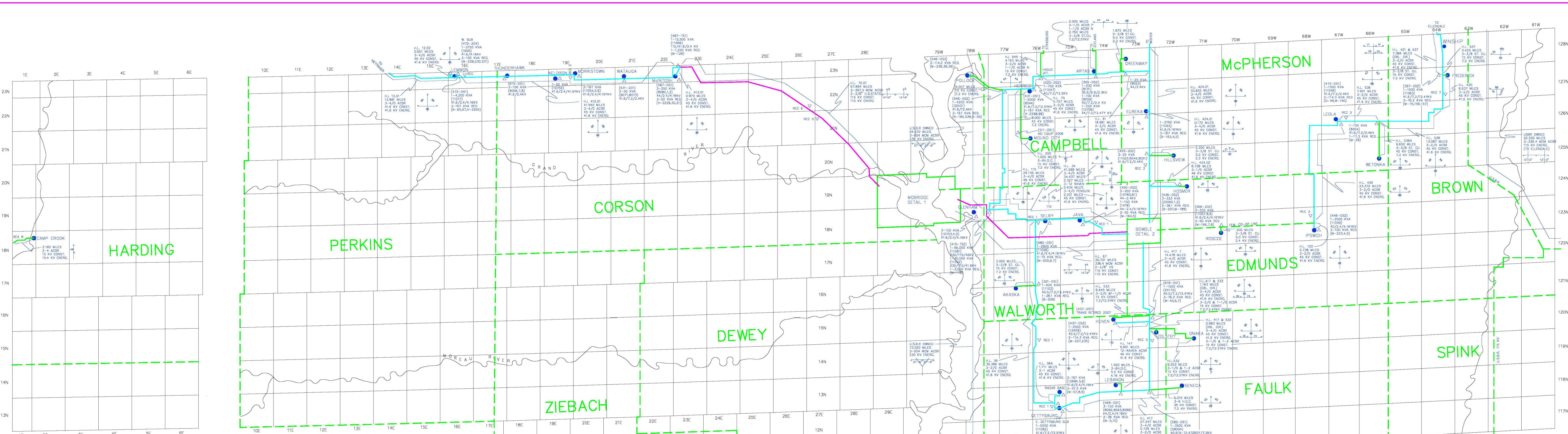
*Integrated System and South Dakota Summer Peak Demand is represented as net of Energy Efficiency

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

Year	South Dakota	
	Total Annual Energy (MWH)	Percentage of Change
2014	155,892	--
2015	157,250	0.9%
2016	158,822	1.0%
2017	160,362	1.0%
2018	161,949	1.0%
2019	163,521	1.0%
2020	165,124	1.0%
2021	166,784	1.0%
2022	168,430	1.0%
2023	170,133	1.0%

20:10:21:18 Map of Service Area

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



LEGEND

REC	SYMBOLS
1 - CAM-WAL ELEC. CO-OP, INC.	— MDU CO 345,230,115 KV LINES
2 - DAHE ELEC. CO-OP, INC.	— MDU CO 57,69 KV LINES
3 - FEM ELEC. CO-OP, INC.	— MDU CO 41.6,33 KV LINES
4 - GRAND ELEC. CO-OP, INC.	— MDU CO DIST. LINES (22 KV AND BELOW)
5 - MOREAU-GRAND ELEC. CO-OP, INC.	— USBR AND UPA LINES
6 - MOR-GRAN-SOU ELEC. CO-OP, INC.	● TOWNS SERVED BY MDU CO
7 - NORTHERN ELEC. CO-OP, INC. (ABERDEEN)	△ ELECTRIC SUBSTATIONS
8 - SOUTHEAST ELEC. CO-OP, INC.	□ ELECTRIC POWER PLANT OR SUBSTATION
	▽ REC TAPS

SYSTEM MAP OF ELECTRICAL PROPERTIES IN SOUTH DAKOTA
MONTANA-DAKOTA UTILITIES CO.

DRAWN BY	DATE	APPROVED	SCALE	DRAWING NO.
RAK	5-28-92	RAK		17-6M, SD ELEC. SYS

REVISED

K.O.P.P.	NO CHANGE	3-14-07	K.O.P.P.	1-26-2012
K.O.P.P.	3-8-2008	K.O.P.P.	1-21-2013	
K.O.P.P.	3-8-2009	K.O.P.P.	1-26-2014	
K.O.P.P.	2-1-2010			
K.O.P.P.	C.W. CORRECTIONS	8-2010		
K.O.P.P.	NO CHANGE	1-24-11		
K.O.P.P.	T.C. STAFF	2-2011		