

South Dakota's Renewable, Recycled and Conserved Energy Objective

Report for Calendar Year 2014



**Submitted to the Legislature
December 31, 2015**

Background

South Dakota Codified Law (SDCL) 49-34A-101 through 106 established South Dakota's Renewable, Recycled and Conserved Energy Objective (RRCEO) in 2008.¹ As part of the RRCEO, utilities are required to report annually to the South Dakota Public Utilities Commission (Commission) about their progress toward meeting the RRCEO of 10 percent by 2015. SDCL 49-34A-105 specifically requires the Commission to compile those reports and submit that data to the Legislature. This report satisfies that requirement.

The report released in 2009² included a detailed discussion of electric utilities in South Dakota, generation sources, renewable portfolio standards and objectives, renewable energy credits (RECs), REC tracking systems, the RRCEO and commission rules. Those seeking a deeper background on this topic can review that report on the PUC website at <http://puc.sd.gov/energy/reo/reo.aspx>.

Findings

The reports submitted by each retail utility provider are attached in Appendix A in alphabetical order. Being the final year report before the target year of 2015, nearly all utilities are utilizing both renewables and energy efficiency in their resource mixes and expect to be in a position to meet the 10 percent goal for 2015. Although most will have enough renewables procured to meet the goal, many are choosing to sell the environmental attributes (RECs) associated with their renewable generation for the benefit of ratepayers instead of complying with the RRCEO.

Although most have already integrated enough renewables and energy efficiency to meet the 10 percent goal, the following challenges were identified:

- Transmission – Multiple projects are being constructed, but it will likely be years before large capacities are available for export.
- Intermittency – Renewable generation is only available when the renewable resource (sun/wind) is available. Increasing renewable generation generally requires integrating more nimble generation alongside.
- Siting – Environmental studies for both wind farms and transmission are time-consuming and expensive.
- Cost – Although most of the recently built renewable generation in South Dakota was cost effective when compared to all other generation options, continuously low natural gas prices make it very difficult for new renewable projects to compete economically.
- Policy Uncertainty – The ambiguous role of renewables in the EPA's Clean Power Plan and the potential extension of federal tax credits have many utilities waiting on certainty.
- Awareness – Utility customers are often unaware of available energy efficiency options.

¹ Conserved Energy was added during the 2009 Legislative Session

² <http://puc.sd.gov/commission/Energy/REO/2009-12-232008RRCEOReport1stRevision.pdf>

Appendix A
Utility Reports (in alphabetical order)

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

Directions: Fill in each orange box, save your responses, and email the completed spreadsheet back to brian.rounds(at)state.sd.us by July 1, 2015. Your completed spreadsheet will fulfill the reporting requirements in SDCL 49-34A-105. If you wish to supplement the spreadsheet with an additional narrative report, please include that report in your submission. If you have any questions, please contact Brian Rounds at 605.773.3201 or brian.rounds(at)state.sd.us.

- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy

5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

Black Hills Power has purchase power agreements for old hydro and wind energy. The Happy Jack and Silver Sage purchase power agreements provide Black Hills Power with 35 MW of wind power. In 2014, Black Hills Power had the ability to serve approximately 4.99% of the total retail sales with renewable resources, but the Company chose not to retire any RECs. Black Hills Power will continue to pursue prudent renewable energy generation and purchase opportunities that will achieve environmental improvements at the lowest reasonable cost to customers. Some of Black Hills Power's challenges are due to the physical location of our system and quality of renewable opportunities. In addition, if renewable energy generation is not connected to our transmission system, the price to deliver energy becomes difficult to overcome. The final barrier to renewable energy generation at a reasonable cost to customers is the ability to dispatch the energy. If renewable energy is not firm, the cost of firming this energy becomes a significant barrier.

Black Hills Power's Energy Efficiency Solutions Program (EESP) offers customers an opportunity to reduce electric consumption and an alternative to the construction of infrastructure. In Docket EL14-038, the EESP was extended through August 2017 in an effort to cost effectively meet this objective.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

- 6 Total amount of RECs retired for CY2014 compliance across all jurisdictions
- 7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

N/A

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

N/A

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

Black Hills Power did not retire any RECs in 2014 in any jurisdiction

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

N/A

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

- 12 MWH of conserved energy achieved through energy efficiency
- 13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

Black Hills Power files an annual EESP report which outlines the programs, demand and energy savings, and the cost to customers. In Docket EL14-038, the energy efficiency impact evaluations were provided in Attachment 4 for each program. The energy efficiency impact evaluation for calendar year 2014 will be included in the 2015 EESP annual report due October 15, 2015.

The Total Resource Cost Test ("TRC") was the primary method of assessing the cost-effectiveness of energy efficient measures and programs. The TRC test is a widely-accepted methodology that has been used across the United States for over twenty-five years. TRC measures the net costs and benefits of an energy efficiency program as a resource option based on the total costs of the program, including both the participant's and the utility's costs. This test represents the combination of the effects of a program on both participating and non-participating customers.

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

Residential customers are offered an optional demand service rate in combination with the installation of a demand controller that limits their on-peak energy usage. The impact is included in the cost of service through base rates and all customers benefit from lower electric costs by shifting usage to non-peak times.

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other -	Total Check
Black Hills Power	80.98%			4.60%	1.80%					12.62%		100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

For the renewable generation listed above, please provide:	
RECs retired for SD RRCEO compliance in 2014	0
RECs held or "banked"	102,930
RECs sold or transferred to other parties	0

SDCLs

49-34A-101 State renewable, recycled, and conserved energy objective established. There is hereby established a state renewable, recycled, and conserved energy objective that [ten percent of all electricity sold at retail within the state by the year 2015](#) be obtained from renewable, recycled, and conserved energy sources. In the case of renewable and recycled energy, the objective shall be measured by [qualifying megawatt hours delivered at retail or by certificates representing credits purchased and retired to offset nonqualifying retail sales](#). In the case of conserved energy, the objective shall be measured by methods established by rules promulgated by the commission pursuant to chapter 1-26. This objective is [voluntary, and there is no penalty or sanction for a retail provider of electricity that fails to meet this objective](#). The objective applies to each retail provider of electricity in the state, regardless of the ownership status of the electricity retailer. Any municipal or cooperative utility that receives wholesale electricity through a municipal power agency or generation and transmission cooperative may aggregate the utility's renewable, recycled, and conserved energy objective resources to meet this objective.

Source: SL 2008, ch 244, § 1; SL 2009, ch 241, § 1.

49-34A-102 Qualifications for meeting renewable, recycled, and conserved energy objective. Electricity qualifies for meeting the state renewable, recycled, and conserved energy objective if the source meets the requirements of [§§ 49-34A-94 to 49-34A-96](#), inclusive, and the commission's rules for tracking, recording, and verifying renewable energy certificates. Electricity also qualifies for meeting the state renewable, recycled, and conserved energy objective if the source is [conserved energy and meets the requirements established by rules promulgated by the commission](#) pursuant to chapter 1-26.

Source: SL 2008, ch 244, § 2; SL 2009, ch 241, § 2.

49-34A-103 Calculation of amount of electricity from renewable, recycled, and conserved energy source. For the purpose of calculating the amount of electricity from a renewable, recycled, and conserved energy source needed to meet the state renewable and recycled energy objective, a retail provider may deduct from the [provider's baseline of total retail sales the proportion of electricity obtained from a hydroelectric facility with an inservice date](#) before July 1, 2008.

Source: SL 2008, ch 244, § 3; SL 2009, ch 241, § 3.

49-34A-104 Evaluation of use as reasonable and cost effective. Before using new renewable, recycled, and conserved energy after July 1, 2008, to meet the objective, the retail provider or the provider's generation supplier shall make an evaluation to determine if the use of new renewable, recycled, and conserved energy is reasonable and cost effective considering other electricity alternatives. After making such an evaluation and considering the state renewable, recycled, and conserved energy objective, the retail provider or the provider's generation supplier may use the electricity alternative that best meets the provider's resource or customer needs.

Source: SL 2008, ch 244, § 4; SL 2009, ch 241, § 4.

49-34A-105

Annual reports concerning renewable, recycled, and conserved energy objective.

Beginning on July 1, 2009, each retail provider shall annually report to the commission on the provider's energy sales during the twelve month period ending on the preceding December thirty-first. This report shall include information regarding qualifying electricity delivered and renewable and recycled energy certificates purchased and retired as a percentage of annual retail sales, the amount of conserved energy as a percentage of annual retail sales, and a brief narrative report that describes steps taken to meet the state renewable, recycled, and conserved energy objective over time and identifies any challenges or barriers encountered in meeting the objective. The last annual report shall be made on July 1, 2017. The commission shall make the data and narrative reports available and accessible to the public on the internet. The commission shall compile the data obtained from the reports and submit the data to the Legislature by the following January first. A distribution cooperative may aggregate the cooperative's reporting through generation and transmission cooperatives and a municipal utility may aggregate the utility's reporting through a municipal power agency.

Source: SL 2008, ch 244, § 5; SL 2009, ch 241, § 5.

49-34A-106

Purchase and retirement of renewable energy and recycled energy credits. A portion or all of the renewable energy and recycled energy objective may be met by the purchase and retirement of renewable energy and recycled energy certificates representing credits from a qualified source and facility pursuant to §§ 49-34A-101 to 49-34A-106, inclusive. Renewable energy and recycled energy certificates do not need to be acquired from an in-state facility.

Source: SL 2008, ch 244, § 6.

ARSDs

20:10:38:01

Definitions. Terms defined in SDCL 49-34A-1 have the same meaning when used in this chapter. In addition, terms used in this chapter mean:

- (1) "Conserved energy," the reduction of energy or capacity usage achieved through energy efficiency measures and demand response measures;
- (2) "Demand response," temporary changes in energy use by end use customers from their normal consumption patterns in response to changes in the price of energy over time, in response to periods of high energy use, or in response to incentive payments designed to induce lower energy use at times of high wholesale market prices, high energy use, or when system reliability is jeopardized;
- (3) "Demand response baseline energy use," an estimate of the electricity that would have been consumed in the absence of the implementation of a demand response measure;
- (4) "Demand response impact evaluation," the performance of studies and activities intended to determine demand response reduction;
- (5) "Demand response measure," any measure designed, intended, or used to implement demand response;
- (6) "Demand response reduction," the reduction of electrical consumption achieved during the time a demand response measure was implemented as compared to the demand response baseline energy use;
- (7) "Energy efficiency," the decrease in electricity requirements of specific customers during any selected period with end-use services of such customers held constant;
- (8) "Energy efficiency baseline energy use," the energy consumption estimated to have occurred before the energy efficiency measure was implemented and is representative of normal operations;
- (9) "Energy efficiency impact evaluation," the performance of studies and activities intended to determine the actual savings and other effects from energy efficiency measures;
- (10) "Energy efficiency measure," any measure designed, intended, or used to improve energy efficiency;
- (11) "Location," the county and state where the facility is located;

(12) "Post-installation energy use," energy consumption that occurs after an energy efficiency measure is implemented;

(13) "Reported conserved energy savings," the capability of installed energy efficiency and demand response measures to result in conserved energy. Reported conserved energy savings are an estimate of electricity savings from individual projects where engineering or other calculations were submitted with project proposals for specific energy conservation projects or where deemed savings are used.

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-27, 49-34A-96, 49-34A-101.

Law Implemented: SDCL 49-34A-96, 49-34A-101, 49-34A-102, 49-34A-105, 49-34A-106.

20:10:38:02 Applicability of rules. The provisions of §§ 20:10:38:03 through 20:10:38:06, inclusive, [apply only to retail providers who use conserved energy sources to meet the renewable, recycled, and conserved energy objective](#) established by § 49-34A-101. Municipal and cooperative retail providers may aggregate the conserved energy with their wholesale municipal power agency or generation and transmission cooperative suppliers. The retail providers [shall follow the requirements in this chapter to determine the amount of conserved energy](#)

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-27, 49-34A-96, 49-34A-101.

Law Implemented: SDCL 49-34A-96, 49-34A-101, 49-34A-102, 49-34A-105, 49-34A-106.

20:10:38:03 Measurement and verification of energy efficiency measures. A retail provider of electricity [shall use a deemed savings approach or a measured savings approach](#), as appropriate, to estimate or determine the amount of conserved energy achieved through an energy efficiency measure. The [amount of conserved energy achieved through energy efficiency measures shall be validated by the use of an energy efficiency impact evaluation](#). An [energy efficiency impact evaluation shall be performed at appropriate periodic intervals](#) that may be no more frequent than once every three years and shall be consistent with generally accepted industry guidelines for measurement and verification. As necessary, an energy efficiency impact evaluation shall include adjustments to account for factors that are beyond the control of the retail provider of electricity or energy consumer in order to bring baseline energy use and post-installation energy use subject to the same or similar conditions. Adjustments may include weather corrections, occupancy levels and hours, change of building or facility use, and production levels. [The retail provider shall provide a general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year.](#)

If an energy efficiency impact evaluation has not been completed at the time the retail provider's annual report is due, the retail provider may use reported conserved energy savings for the time period the energy efficiency measure was in effect. If the energy efficiency impact evaluation has been completed at the time the retail provider's annual report is due, the retail provider shall report the amount of conserved energy achieved through energy efficiency measures as found in the evaluation.

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-27, 49-34A-96, 49-34A-101.

Law Implemented: SDCL 49-34A-96, 49-34A-101, 49-34A-102, 49-34A-105, 49-34A-106.

20:10:38:04 Deemed savings approach. A deemed savings approach uses pre-determined, validated estimates of energy savings attributable to a particular energy efficiency measure based upon engineering calculations, baseline studies, or reasonable assumptions. A retail provider of electricity may use a deemed savings approach for projects that involve simple energy efficiency measures with documented per-measure values.

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-27, 49-34A-96, 49-34A-101.

Law Implemented: SDCL 49-34A-96, 49-34A-101, 49-34A-102, 49-34A-105, 49-34A-106.

- 20:10:38:05** Measured savings approaches. A measured savings approach shall be based on one or more of the following methods:
- (1) The use of direct metering and monitoring to measure baseline energy use and post-installation energy use;
 - (2) The use of engineering methods that use standard formulas and assumptions to calculate the energy use of baseline and post-installation energy systems;
 - (3) The use of statistical analyses to estimate baseline energy use and post-installation energy use; or
 - (4) The use of computer models to predict the change in energy use after energy efficiency measures are implemented.

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-4(2), 49-34A-27, 49-34A-101.

Law Implemented: SDCL 49-34A-96, 49-34A-101, 49-34A-102, 49-34A-105, 49-34A-106.

- 20:10:38:06** Measurement and verification of demand response measures. A retail provider of electricity shall use metering data collection and analyses, statistical estimations, engineering analyses, or a combination of these methods to estimate or determine the amount of conserved energy achieved through a demand response measure. The amount of conserved energy achieved through demand response measures shall be validated by the use of a demand response impact evaluation. A demand response impact evaluation shall be performed at appropriate periodic intervals consistent with generally accepted industry guidelines for measurement and verification. The retail provider shall provide a general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spent on demand response measures for the calendar year.

If a demand response impact evaluation has not been completed at the time the retail provider's annual report is due, the retail provider may use reported conserved energy savings for the time period the demand response measure was in effect. If the demand response impact evaluation has been completed at the time the retail provider's annual report is due, the retail provider shall report the amount of conserved energy achieved through demand response measures as found in the evaluation.

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-4(2), 49-34A-27, 49-34A-101.

Law Implemented: SDCL 49-34A-96, 49-34A-101, 49-34A-102, 49-34A-105, 49-34A-106.

- 20:10:38:07** Renewable energy credit requirements. A provider of electricity that generates electricity from renewable electricity or recycled energy and that retires renewable energy credits to meet the renewable, recycled, and conserved energy objective shall provide to the commission:
- (1) The amount of renewable energy credits that the provider retired, the amount of renewable energy credits that the provider retired to meet South Dakota's renewable energy objective, the tracking system the renewable energy credits were retired under, and the name and location of each facility that produced the retired renewable energy credits; and
 - (2) The amount of renewable energy credits that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services, and the name and location of each facility that produced the retired renewable energy credits.

The information shall be provided for the preceding calendar year by July first.

Source: 38 SDR 116, effective January 10, 2012.

General Authority: SDCL 49-34A-4(2), 49-34A-27, 49-34A-96.

Law Implemented: SDCL 49-34A-27, 49-34A-94, 49-34A-95, 49-34A-96, 49-34A-101, 49-34A-102.



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A Touchstone Energy® Cooperative 

July 1, 2015

Ms. Patricia Van Gerpen, Executive Director
South Dakota Public Utilities Commission
500 East Capitol
Pierre, SD 57504-5070

RE: East River Electric Power Cooperative – South Dakota Renewable Energy Objective Report

Dear Ms. Van Gerpen:

Enclosed please find East River Electric Power Cooperative's Renewable Energy Objective Report per SDCL 49-34A-105. This report is filed on behalf of the following members within South Dakota:

Bon Homme-Yankton Electric Association, Inc.
Central Electric Cooperative, Inc.
Charles Mix Electric Association, Inc.
City of Elk Point
Clay Union Electric Corporation
Codington-Clark Electric Cooperative, Inc.
Dakota Energy Cooperative, Inc.
Douglas Electric Cooperative, Inc.
FEM Electric Association, Inc.
H-D Electric Cooperative, Inc.

Kingsbury Electric Cooperative, Inc.
Lake Region Electric Association, Inc.
Northern Electric Cooperative, Inc.
Oahe Electric Cooperative, Inc.
Sioux Valley Energy
Southeastern Electric Cooperative, Inc.
Traverse Electric Cooperative, Inc.
Union County Electric Cooperative, Inc.
Whetstone Valley Electric Cooperative, Inc.

Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Robert K. Sahr".

Robert K. Sahr
General Counsel

RKS/sl

Enc.

East River Electric Power Cooperative South Dakota Renewable, Recycled, and Conserved Energy Objective Report July 1, 2015

In accordance with SDCL 49-34A-105, East River Electric Power Cooperative, Inc. (“East River”) files this Renewable, Recycled, and Conserved Energy Objective Report (RRCEO) on behalf of its nineteen South Dakota members:

East River South Dakota Members	Location
Bon Homme-Yankton Electric Association, Inc.	Tabor, South Dakota
Central Electric Cooperative, Inc.	Mitchell, South Dakota
Charles Mix Electric Association, Inc.	Lake Andes, South Dakota
City of Elk Point	Elk Point, South Dakota
Clay Union Electric Corporation	Vermillion, South Dakota
Codington-Clark Electric Cooperative, Inc.	Watertown, South Dakota
Dakota Energy Cooperative, Inc.	Huron, South Dakota
Douglas Electric Cooperative, Inc.	Armour, South Dakota
FEM Electric Association, Inc.	Ipswich, South Dakota
H-D Electric Cooperative, Inc.	Clear Lake, South Dakota
Kingsbury Electric Cooperative, Inc.	DeSmet, South Dakota
Lake Region Electric Association, Inc.	Webster, South Dakota
Northern Electric Cooperative, Inc.	Bath, South Dakota
Oahe Electric Cooperative, Inc.	Blunt, South Dakota
Sioux Valley Energy	Colman, South Dakota
Southeastern Electric Cooperative, Inc.	Marion, South Dakota
Traverse Electric Cooperative, Inc.	Wheaton, Minnesota
Union County Electric Cooperative, Inc.	Elk Point, South Dakota
Whetstone Valley Electric Cooperative, Inc.	Milbank, South Dakota

These East River members have elected to aggregate their RRCEO resources and have East River report on their behalf.

I. EAST RIVER’S RENEWABLE ENERGY PORTFOLIO

As member owners of Basin Electric, East River and its members possess a sizeable, diverse, and growing renewable energy portfolio. This portfolio includes large wind projects, waste heat recovery units, and over fifty-five small locally-owned wind and solar projects. These projects include:

- **Large Scale Wind Energy Generation: 718.9 MW**
- **Recycled Energy Generation: 44 MW**
- **Locally-Owned Small Wind Generation: 631 kW**
- **Locally-Owned Small Solar Generation: 308 kW**

– ***Missouri River Hydroelectric Resources***

East River members Central Electric Cooperative and Sioux Valley Energy each began development of cooperative-owned solar generation projects during 2014. Sioux Valley Energy's 24 kW project came on-line on May 1, 2015, and is located at their Brandon Service Center. Central Electric's 7.2 kW project is expected to be on-line later this year and is located at their headquarters west of Mitchell, South Dakota. Each project will become part of the local energy supply mix and provide a variety of educational, research, and solar production analysis opportunities.

During the past several years, Basin Electric has significantly increased the amount of new renewable energy generation, and has recently executed long term purchased power contracts for an additional 376 MW of wind resources expected to be operation by the end of 2015. Basin Electric should report these resources on its spreadsheet as they are either under contract or owned by Basin on behalf of its members including East River, Rushmore Electric, and the South Dakota distribution cooperatives. East River has reported its member sales and the green tag retirement on the attached spreadsheet.

II. CONSERVED ENERGY

East River and its members are very proud of their long track records in promoting smart energy choices, energy efficiency, and conservation. This has been achieved through substantial investment in marketing programs, public education, and one of the most successful load management programs in this country. In fact, during 2014, utilization of East River's load management system avoided a total of approximately 766,000 kW of wholesale power supply capacity requirements.

East River thanks the Commission for its leadership in adopting sensible administrative rules to implement the 2009 amendments to the South Dakota RRCEO. We believe the rules recognize two key principles supported by East River and its members: 1) the vital role load management plays in conserving energy and 2) the on-going benefits of certain historical investments. We look forward to working with the Commission staff on the reporting and accounting requirements as we prepare to meet the 2015 South Dakota RRCEO, and East River is currently in development with Energy Platforms^{LL} to track and verify our entire portfolio of energy efficiency and demand response measures.

III. REO OBSTACLES ENCOUNTERED

East River identifies four major barriers to renewable energy expansion in South Dakota:

1. Environmental Compliance
2. Transmission
3. Renewable Energy Costs
4. EPA's Clean Power Plan

As to the first point, while an important part of any major project, environmental reviews are taking more time and becoming more costly. If reviews unnecessarily stretch projects past important deadlines or become so expensive as to affect the financial viability of projects, this could have a chilling effect on renewable resource development in this state and region.

Secondly, as more projects tap existing transmission opportunities, there becomes an increasing need for new transmission solutions to enable future projects. And it has been noted that the Integrated System, owned and operated by Basin Electric and Western Area Power Administration, is reaching a point where it is becoming more difficult to integrate increased intermittent resources.

Thirdly, the cost dynamics of renewable energy, even with the assistance of federal tax incentives, still leave many potential renewable projects unable to competitively price their projects. We urge the Commission to support federal tax incentives, such as the Production Tax Credit and 1603 Grant Program, that help spur renewable energy development at prices affordable to consumers.

Finally, depending upon its final form, the Environmental Protection Agency's (EPA) Clean Power Plan may provide incentives for developers and utilities to locate future wind farms outside of South Dakota.

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Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - Please Specify	Total Check
East River Electric Power Cooperative	51.10%	18.89%	1.62%	13.79%	3.24%				1.62%	9.73%		100.00%
% of Non-Hydro SD Sales , sourced from SD RRCEO-eligible facilities, in MWH:				369,508				0	0	43,471		412,979

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

For the renewable generation listed above, please provide:	
RECs retired for SD RRCEO compliance in 2014	0
RECs held or "banked"	125,887
RECs sold or transferred to other parties	0

Waste Heat Recovery RECs currently held in M-RETS

Non-Hydro SD Sales In MWH:
2,679,730

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- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

As a member of Basin Electric Power Cooperative, our renewables are met through the generation mix generated by Basin Electric.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

Midwest Renewable Energy Tracking Systems (MRETS)

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

Nexteraenergysbaldwin Wind Project, North Dakota

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

n/a

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

n/a

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

14 MWH of conserved energy achieved through demand response **((12) and (14) should sum to (4))**

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Recovered Energy Gen.	Total Check
Grand Electric Cooperative, Inc.	68.20%	0.70%	1.40%	9.70%	2.50%	0.00%	0.00%			16.60%	0.90%	100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

Directions: Fill in each orange box, save your responses, and email the completed spreadsheet back to [brian.rounds\(at\)state.sd.us](mailto:brian.rounds(at)state.sd.us) by **July 1, 2015**. Your completed spreadsheet will fulfill the reporting requirements in SDCL 49-34A-105. If you wish to supplement the spreadsheet with an additional narrative report, please include that report in your submission. If you have any questions, please contact Brian Rounds at 605.773.3201 or [brian.rounds\(at\)state.sd.us](mailto:brian.rounds(at)state.sd.us).

- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

HCPD acquires its renewable energy through a power purchase agreement (PPA) with Wessington Springs Wind Energy Center, LLC, a subsidiary of NextEra Energy Resources. The PPA entitles HCPD to purchase the entire 51 MW of nameplate wind capacity and own all of the environmental attributes associated with such generation from the Wessington Springs Wind Energy Center. (10 MW's of the project are committed to another wholesale power supplier, and in 2014, 7 MW's of the project were committed solely to one of HCPD's Minnesota Customers.) HCPD will be able to meet both the Minnesota Renewable Energy Standard (RES) and the South Dakota Renewable Energy Objective (REO) through its participation in the Wessington Springs Wind Energy Center project.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

Heartland did retire RECs for 2014 South Dakota load. However, Heartland did not retire these RECs to meet the South Dakota renewable energy objective, which begins in 2015. Heartland retired 7,362 RECs, representing the Heartland supplied load at South Dakota State University, University of South Dakota, and Northern State University per an agreement with the State of South Dakota. For South Dakota load in 2015, Heartland will retire RECs representing 10% of its South Dakota load served plus enough RECs equal to the supplied loads at the South Dakota Universities. These RECs were retired in M-RETS.

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

Heartland did retire RECs for 2014 South Dakota load. However, Heartland did not retire these RECs to meet the South Dakota renewable energy objective, which begins in 2015. Heartland retired 7,362 RECs, representing the Heartland supplied load at South Dakota State University, University of South Dakota, and Northern State University per an agreement with the State of South Dakota. For South Dakota load in 2015, Heartland will retire RECs representing 10% of its South Dakota load served plus enough RECs equal to the supplied loads at the South Dakota Universities. The M-RETS facility name was Wessington Wind I - Wessington Springs Energy Facility (M496): Location - Jerald County, South Dakota

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

Heartland retired 76,536 RECs for its MN load served.

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

The RECs were retired in M-RETS and the M-RETS facility name was Wessington Wind I - Wessington Springs Energy Facility (M496): Location - Jerald County, South Dakota

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - <i>Please Specify</i>	Total Check
	26.38%	59.90%	0.00%	2.64%	0.00%	0.00%	0.00%	0.00%	0.00%	11.08%	0.00%	100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

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- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

MidAmerican Energy began offering energy efficiency programs to South Dakota customers on May 1, 2009. MidAmerican offers a variety of energy efficiency programs aimed at helping residential, commercial, and industrial customers reduce energy use and save money. In 2014, the South Dakota programs incented customers to make energy efficiency investments that are expected to save approximately 215.5 MWh per year. Significant challenges and barriers in delivering energy efficiency programs include customer and trade ally awareness, and providing appropriate incentives needed to encourage customers to make energy efficient choices.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

MidAmerican has not retired any certificates for South Dakota in any renewable attribute tracing system including M-RETS.

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

None

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

143,226

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

MidAmerican retires all Iowa registered AEP RECs in the M-RETS tracking system, as required for Iowa compliance. These Iowa AEP Facilities are:
Name, Location (County) , Nameplate Rating (MW)
Storm Lake Power Partners I, Buena Vista County, Iowa, 112.5
Davenport Water Pollution Control Plant, Scott County, Iowa, 1.28
DSM Waste Management, Polk County, Iowa, 6.4

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

MidAmerican has not completed an energy efficiency impact evaluation specific to South Dakota. Total kWh savings by measure, along with spending by measure for 2014 was provided in Exhibits A and B of MidAmerican's 2014 South Dakota energy efficiency annual report. Savings for each measure are calculated in accordance with the formulas provided in revised Appendix A of MidAmerican's 2013-2017 South Dakota energy efficiency plan filing.

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spent on demand response measures for the calendar year (ARSD 20:10:38:06).

Total kWh savings for demand response programs are estimated through demand response models developed from previous load research data for residential curtailment programs in Iowa. These models use known number of participants and high temperatures for the day to estimate total MWh savings for the program based on the number of participating customers. Approximate spending on demand response programs is \$16,000 per year.D14

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind ¹	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - Please Specify	Total Check
MidAmerican Energy Company	55.37%	0.01%	11.67%	24.18%	0.35%	0.00%	0.00%	0.00%	0.00%	8.42%	0.00%	100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

For the renewable generation listed above, please provide:	South Dakota % Allocation
RECs retired for SD RRCEO compliance in 2014	-
RECs held or "banked" ²	3,535
RECs sold or transferred to other parties ³	72,240

1 Approximately 95% of the Wind energy is considered "Null" Power for Green-e REC reporting. To meet Green-e standards for REC sales, the energy associated with REC sales must be described as "Null" and emissions must be counted at the system average emission rate

2 Wind RECs used for MidAmerican retail customers in 2014. Does not include Iowa AEP RECs

3 "Null" Power wind RECs sold or expected to be sold in 2014. This includes most of the share shown as "Wind" in South Dakota in this report by regulatory requirement.

Notes:

Allocation based on ratio of South Dakota Retail Sales to Total Company Retail Sales

Total energy sources include generation for sales for resale.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

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- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
** Includes MRES sales and that portion of MRES SD member sales supplied by WAPA*
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

MRES has developed a plan to meet the South Dakota Renewable, Recycled and Conserved Energy Objective (RRCEO) goal of 10% by 2015 as part of its overall renewable energy goals for members in Minnesota, North Dakota, and South Dakota. The SD RRCEO has been integrated into the MRES resource planning process, and MRES is committed to pursuing renewable energy as part of its balanced portfolio to supply its member communities with reliable and cost-effective power supply.

MRES acquires renewable energy resources through its exclusive power supply arrangement with Western Minnesota Municipal Power Agency (Western Minnesota), and through power purchase agreements with independent developers. At the present time, all MRES renewable resources are based on wind generation. MRES has included wind energy in its power supply program since 2002. Currently, MRES contracts for the output of the following wind generating resources:

- Worthington (MN) Wind Project, 3.7 MW
- Marshall (MN) Wind Project, 18.7 MW
- Odin (MN) Wind Project, 20.0 MW
- Rugby (ND) Wind Project, 40.0 MW
- Hancock (IA) Wind Project, 3.3 MW

MRES purchases the output of the units in each of these wind projects, and owns all of the environmental attributes associated with such generation. These resources total 85.7 MW of nameplate capacity, most of which is dedicated to meeting the Renewable Energy Objective (REO) goals of North Dakota and South Dakota, and the requirements of the Minnesota Renewable Energy Standard. MRES intends to meet its REO goals by utilizing the contracted wind generation, associated renewable attributes, and conserved/recycled energy to meet the MRES SD RRCEO benchmark for each year. MRES allocates its renewable energy generation and renewable energy credits (RECs) based on S-1 energy sales by state.

At this time, MRES does not envision any obstacles to meeting the RRCEO goals established through 2015. MRES continues to evaluate opportunities for additional renewable resources to ensure continuing compliance with the various state REOs and the Minnesota RES. In 2015 and beyond, MRES will evaluate its renewable energy portfolio and the energy market to determine cost-effective purchases or the acquisition of such resources. MRES seeks out projects that meet its needs as well as the needs of its members as part of our continuing commitment to expand the role of renewable energy used to serve our member communities.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

MRES established an M-RETS retirement subaccount to demonstrate compliance with the RRCEO requirements of SDCL 49-34A-101. In order to comply with those requirements, MRES transferred 52,554 RECs to its 2014 South Dakota REO subaccount (2014 SD REO).

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

Rugby Wind Project near Rugby, N.D., in Pierce County
Worthington Wind Project near Worthington, Minn., in Nobles County

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

168,141: Minnesota RES (160,885), ND RREO (6,402), and Green Pricing in all states (854)

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

Marshall Wind Project near Marshall, Minn., in Lyon County
Odin Wind Project near Odin, Minn., in Watonwan and Cottonwood Counties
Rugby Wind Project near Rugby, N.D., in Pierce County
Worthington Wind Project near Worthington, Minn., in Nobles County

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

Energy impacts of the MRES energy efficiency measures are primarily determined by the Minnesota Technical Reference Manual (MN TRM, formerly the MN Deemed Savings Database). For prescriptive measures that are not in the MN TRM, MRES has retained Franklin Energy Services of Port Washington, WI to research and calculate deemed savings for use in our program. Savings estimates for custom measures are typically submitted by the customer's engineer or vendor and then reviewed and approved by an MRES staff engineer and/or the engineering team at Franklin Energy. Projects that have potential savings of 1 million kWhs or more, and select smaller projects, are pre and post-metered, in addition to the engineering review. Post inspections are completed on minimum of 10 percent of commercial and industrial projects and on 100 percent of custom projects. Spending on energy efficiency measures in South Dakota in 2014 totaled \$524,503, which included \$285,252 in incentives and \$239,251 in administrative expenses.

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spent on demand response measures for the calendar year (ARSD 20:10:38:06).

MRES collects data on the demand response efforts of our South Dakota members through a Verification Payment Program whereby members are encouraged to use direct load control on central air conditioners and electric water heaters to remove load during peak times. MRES members report the number of devices controlled and annually test a statistical sampling of the devices to ensure they are working properly. MRES pays an incentive of \$5.00 per kW per year of controlled load. The deemed kW savings, based on the MN TRM, are 1 kW per central air conditioner and .35 kW per electric water heater. In 2014, three SD members controlled 3,720 air conditioners and 1,240 water heaters for total controlled KW of 4,154 kW. To determine MWHs of conserved energy, MRES estimates that members control air conditioners an average of 80 hours per year and control water heaters an average of 150 hours per year for total savings of 484 MWHs in 2014. The number of hours controlled fluctuates greatly from year to year. At this time, all load control is done using one-way communication to the load control device, so exact savings cannot be measured. In 2014, MRES paid \$20,770 in incentives to our members to verify and report on the operation of their load control systems. We did not track administrative costs for this activity and we don't have access to the costs incurred by MRES members to operate the system.

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - <i>Please Specify</i>	Total Check
Missouri River Energy Services	40.23%	37.97%	5.01%	5.55%	0.10%	0.00%	0.00%	0.00%	0.00%	11.13%		100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.



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

July 2, 2015

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

Re: 2014 Annual Renewable, Recycled, and
Conserved Energy Objective Report

Dear Ms. Van Gerpen:

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., hereby submits its report regarding South Dakota's renewable energy objective as required by SDCL 49-34A-105. Also attached is the form, provided by Commission Staff, completed for Montana-Dakota's generation mix attributable to South Dakota in 2014.

Sincerely,

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

Tamie A. Aberle
Director of Regulatory Affairs

Montana-Dakota Utilities Co.
Renewable, Recycled, and Conserved Energy Objective
Annual Report to the South Dakota Public Utilities Commission
July 1, 2015 Update

Requirement

SDCL 49-34A-105. Annual reports concerning renewable and recycled energy objective. Beginning on July 1, 2009, each retail provider shall annually report to the Public Utilities Commission on the provider's energy sales during the twelve month period ending on the preceding December thirty-first. This report shall include information regarding qualifying electricity delivered and renewable energy and recycled energy certificates purchased and retired as a percentage of annual retail sales, the amount of conserved energy as a percentage of annual retail sales, and a brief narrative report that describes steps taken to meet the state renewable and recycled energy objective over time and identifies any challenges or barriers encountered in meeting the objective.

Report for Calendar Year 2014

Montana-Dakota Utilities Co. (Montana-Dakota) provides electric service to customers in portions of Montana, North Dakota, and South Dakota through an integrated electric system which has generation and transmission facilities in each of those states. Customer power supply needs are met through a resource portfolio consisting of Company-owned generation comprised of coal fired resources, natural gas peaking capacity, Midcontinent Independent System Operators, Inc. market purchases, and renewable resources; purchased power contracts, and demand side management programs. Renewable energy requirements applicable to Montana-Dakota's integrated electric system are as follows:

- Montana Standard – For compliance years from 2010 through 2014, obtain a minimum of 10 percent of all retail sales of electrical energy within the state for the prior calendar year from eligible renewable resources with 5.6 MW required to be obtained from a Community Renewable Energy Project.
- North Dakota Objective – By the year 2015, obtain 10 percent of all retail sales of electrical energy within the state from renewable and recycled energy sources.
- South Dakota Objective – By the year 2015, obtain 10 percent of all retail sales of electrical energy within the state from renewable, recycled, and conserved energy.

The Company's electric retail sales in the State of South Dakota for the twelve month period ending December 31, 2014 were 155,418 MWh, representing approximately 5 percent of the Company's integrated system retail sales. As described further below, Montana-Dakota's generating resources produced 187,225 renewable energy credits (REC's) in 2014 with 9,598 REC's applicable to South Dakota. This resulted in 6.2 percent of the South Dakota retail load served from renewable resources. Montana-

Dakota is selling the REC's allocated to South Dakota when cost effective to do so. Proceeds from the sale of REC's are recorded as a revenue credit. Montana-Dakota did not offer incentives for electric conservation programs in South Dakota in 2014, therefore, conserved energy resources are not being used to meet the South Dakota objective.

Construction is underway on the Company's 107.5 MW Thunder Spirit Wind Project. It is expected that the Project will go into service by the end of 2015. This will bring the Company's renewable resources to 20 percent of retail sales thereby allowing the Company to meet the South Dakota Objective for a number of years.

Following is a description of the generating resources that supplied the REC's produced in 2014.

- In February 2008, Montana-Dakota commenced commercial operation of Diamond Willow, a 19.5 Megawatt facility located in Fallon County, Montana. An additional 10.5 Megawatt Diamond Willow expansion project commenced commercial operation on June 28, 2010. In calendar year 2014, the Diamond Willow facilities produced 96,410 RECs. This wind resource is registered on the Midwest Renewable Energy Tracking System (M-RETS) with a designated identifier of "M-152". The M-RETS Administrator issues one electronic Certificate for each MWh of energy generated by Diamond Willow and a unique serial number is assigned to each Certificate.
- In July 2009, Montana-Dakota began commercial operation of a 7.5 MW waste heat recovery generating station on the Northern Border Pipeline near Glen Ullin, North Dakota. In calendar year 2014, the Glen Ullin facility produced 31,439 RECs. This resource is registered on the M-RETS system with a designated identifier of "M-535".
- On June 6, 2010, Montana-Dakota commenced commercial operation of Cedar Hills, a 19.5 Megawatt wind facility located in Bowman County, North Dakota. In calendar year 2014, the Cedar Hills facility produced 59,376 RECs. This wind resource is registered on the M-RETS system with a designated identifier of "M-584".

The Commission's Reporting form is provided in Attachment A.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

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- 1 155,418 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

Following is a description of the generating resources that supplied the REC's produced in 2014.

- In February 2008, Montana-Dakota commenced commercial operation of Diamond Willow, a 19.5 Megawatt facility located in Fallon County, Montana. An additional 10.5 Megawatt Diamond Willow expansion project commenced commercial operation on June 28, 2010. In calendar year 2014, the Diamond Willow facilities produced 96,410 RECs. This wind resource is registered on the Midwest Renewable Energy Tracking System (M-RETS) with a designated identifier of "M-152". The M-RETS Administrator issues one electronic Certificate for each MWh of energy generated by Diamond Willow and a unique serial number is assigned to each Certificate.
- In July 2009, Montana-Dakota began commercial operation of a 7.5 Megawatt waste heat recovery generating station on the Northern Border Pipeline near Glen Ullin, North Dakota. In calendar year 2014, the Glen Ullin facility produced 31,439 RECs. This resource is registered on the M-RETS system with a designated identifier of "M-535".
- On June 6, 2010, Montana-Dakota began commercial operation of Cedar Hills, a 19.5 MW wind facility located in Bowman County, North Dakota. In calendar year 2014, the Cedar Hills facility produced 59,376 RECs. This wind resource is registered on the M-RETS system with a designated identifier of "M-584".

Construction is underway on the Company's 107.5 MW Thunder Spirit Wind Project. The Project is expected to go into service by the end of 2015. This will bring the Company's renewable resources to 20 percent of retail sales thereby allowing the Company to meet the South Dakota Objective for a number of years.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

N/A

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

N/A

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

77,660 RECs were retired in 2014 to meet the state of Montana's renewable energy standard. Of these RECs, 17 were 2013 certificates.

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

Cedar Hills- Rhame, ND
Diamond Willow - Baker, MT

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

N/A

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

N/A

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - Please Specify	Total Check
Montana Dakota Utilities Co.	50.69%			6.76%	25.14%				1.02%	16.39%		100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

For the renewable generation listed above, please provide:

RECs retired for SD RRCEO compliance in 2014	0
RECs held or "banked"	2,359
RECs sold or transferred to other parties	#VALUE!

Facilities Producing 2014 RECs	RECs Produced	RECs Retired	RECs Sold	Remaining RECs
Diamond Willow	96,410	47,899	42,972	5,539
Cedar Hills	59,376	29,761	27,028	2,587
Glen Ullin	31,439		20,777	10,662
Total	187,225	77,660	90,777	18,788
% Allocated to SD	9,598	2586*	4,653	2,359

*Retired to meet the Montana Renewable Standard. Transfer payment credited to South Dakota.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

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- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

NorthWestern Energy continues to explore the integration of cost effective renewable, recycled and conserved energy resources for its SD energy supply portfolio. With the initiation of our DSM program in South Dakota on October, 1, 2014, conserved energy resources played a small role in assisting NorthWestern Energy as it continues its efforts to meet South Dakota's RRECO. Mail-in rebate coupons for CFL purchases by customers was the initial offering to formally roll-out our DSM program. The CFL mail-in rebates also served to help educate our customers about the availability of energy savings incentives for their homes and/or businesses. Home energy audits are proving to be one of the more popular DSM program initiatives.

NorthWestern continues to buy output from the Titan 1 wind farm (25 MW nameplate capacity) located near Ree Heights, SD. Also during 2014, NorthWestern finalized its Purchased Power Agreement with the Beethoven wind project located in Bon Homme County for another 80 MW (nameplate) of wind.

Cost effective energy resources - including renewable, recycled and conserved resources – must be carefully evaluated as to their reliability, need to meet customer demand, and the potential financial impact to our customers. NorthWestern Energy will continue to explore all possible renewable, recycled, and conserved energy resources for integration into our energy supply portfolio to achieve South Dakota's RRCEO by 2015.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - <i>Please Specify</i>	Total Check
	71.00%	0.00%	0.00%	6.00%	0.10%	0.10%	0.00%	0.00%	0.00%	22.80%	0.00%	100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

Directions: Fill in each orange box, save your responses, and email the completed spreadsheet back to [brian.rounds\(at\)state.sd.us](mailto:brian.rounds(at)state.sd.us) by **July 1, 2015**. Your completed spreadsheet will fulfill the reporting requirements in SDCL 49-34A-105. If you wish to supplement the spreadsheet with an additional narrative report, please include that report in your submission. If you have any questions, please contact Brian Rounds at 605.773.3201 or [brian.rounds\(at\)state.sd.us](mailto:brian.rounds(at)state.sd.us).

- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

Otter Tail Power Company has over 248 MW of cost effective wind resources in its resource mix. In 2014, wind generation comprised nearly 19% of Otter Tail's retail load. This will be in excess of the South Dakota 10% objective. Otter Tail does not anticipate any barriers in meeting the South Dakota objective. To be clear, OTP did not retire credits and is not reporting compliance for CY 2014. However, should the company decide to allocate credits towards the objective, Otter Tail is well-positioned.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

N/A

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

N/A

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

Minnesota - 278,453

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

Dayton Hollow Hydro 1, MN; Dayton Hollow Hydro 2, MN; Hoot Lake Hydro, MN; Wright Hydro, MN; Taplin Gorge Hydro, MN; Pisgah Hydro, MN; Bemidji Hydro 1, MN; Bemidji Hydro 2, MN; UM-Morris, MN; FPL Energy North Dakota Wind II LLC, ND; Langdon Wind Farm, ND; Langdon Wind LLC, ND; Ashtabula Wind Center, MN; Luverne Wind Farm - OTP, ND; District 45 Dairy LLP Unit #1, MN; District 45 Dairy LLP Unit #2, MN

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

Otter Tail Power Company has filed all 2014 energy efficiency efforts, including budgets and energy savings results in our annual Status Report. The Status Report was filed with the South Dakota PUC on May 1, 2015, docket no. EL15-016.

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spent on demand response measures for the calendar year (ARSD 20:10:38:06).

N/A

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - Please Specify	Total Check
Otter Tail Power Company	57.18%	1.06%		18.94%	0.45%					22.37%		100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

For the renewable generation listed above, please provide:	
RECs retired for SD RRCEO compliance in 2014	0
RECs held or "banked"	36,608
RECs sold or transferred to other parties	69,776

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

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- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

Rosebud Electric Cooperative recieves 4.217% of it's power through the generation of wind power and Renewables (REGS)

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - <i>Please Specify</i>	Total Check
Rosebud Electric Cooperative	25.44%	62.92%	0.52%	3.63%	0.94%	0.00%	0.00%	0.00%	0.33%	6.22%	0.00%	100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

Directions: Fill in each orange box, save your responses, and email the completed spreadsheet back to [brian.rounds\(at\)state.sd.us](mailto:brian.rounds(at)state.sd.us) by **July 1, 2015**. Your completed spreadsheet will fulfill the reporting requirements in SDCL 49-34A-105. If you wish to supplement the spreadsheet with an additional narrative report, please include that report in your submission. If you have any questions, please contact Brian Rounds at 605.773.3201 or [brian.rounds\(at\)state.sd.us](mailto:brian.rounds(at)state.sd.us).

- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
Note: incl. WAPA and Basin hydro - member allocations are included.
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy
- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

Rushmore Electric Power Cooperative (REPC) facilitates a small renewable energy program to member cooperatives and their members. Currently, 5 REPC members and 63 Co-op members participate in the small renewable program.

REPC has implemented demand response system.

A portion of REPC's marketing budget is allocated to energy conservation promotion.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

Basin Electric provides

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

Basin Electric facilities

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spend on demand response measures for the calendar year (ARSD 20:10:38:06).

REPC Demand Response system controls: 4842 water heaters, 571 central airs, 260 storage heat systems, 82 irrigations systems, and 4 other systems controlled.

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - <i>Please Specify</i>	Total Check
Rushmore Electric Power Cooperative, Inc.	68.20%	0.70%	1.40%	9.70%	2.50%				0.90%	16.60%		100.00%

Other: For any generation listed under "Other", please provide the generation source and percentage associated with each.



500 West Russell Street
Sioux Falls, SD 57101-0988

June 30, 2015

—Via Electronic Filing—

Patricia Van Gerpen
Executive Director
South Dakota Public Utilities Commission
Capitol Building, 1st Floor
500 East Capitol Avenue
Pierre, SD 57501

Re: 2014 REPORT OF NORTHERN STATES POWER COMPANY ON MEETING THE
RENEWABLE, RECYCLED AND CONSERVED ENERGY OBJECTIVE

Dear Ms. Van Gerpen:

In accordance with SDCL 49-34A-105, Northern States Power Company, doing business as Xcel Energy, provides the attached report on meeting South Dakota's renewable, recycled and conserved energy objective for 2014.

Based on the jurisdictional energy allocator applicable to South Dakota, we have determined that the share of system-wide energy from renewable resources allocable to South Dakota was 343,866 MWh. This represents the energy we provided to our customers in 2014 that was generated by renewable generation facilities as defined by SDCL 49-34A-94.

As provided in Chapter 49-34A-103, we have deducted electricity obtained from hydro facilities with an in-service date before July 1, 2008 from retail sales. As a result, we calculate that approximately 17.2 percent of the energy provided to South Dakota customers in 2014 was from renewable energy resources. This percent reflects an increase from the 2013 level of 13.8 percent due to the continued addition of renewable resources, increased generation from all renewable resources except hydroelectric resources. In addition, no renewable energy credits have been retired to date to comply with the South Dakota renewable energy objective (REO).

The attached reporting form includes the following information as requested by the Commission:

- Retail Sales (MWh) - Total & SD-based

- Total Renewable Generation Capacity Owned (MW) - All States & SD¹
- Renewable Generation Capacity Owned (MW) - Total & SD-based by technology¹
- Renewable Generation with RECs Retired for SD (MWh) - Total & SD-based by technology¹
- Renewable Generation with RECs Retired for other states/purposes (MWh) - Total & SD-based by technology¹
- Conserved Energy (MWh) and Capacity (MW)
- Renewable Energy Calculations

The Company files and achieves energy efficiency and load management savings. Planned savings for 2014 were approved on December 3, 2013 in Docket No. EL13-017.² However, the Company does not include conserved energy toward our compliance with the REO at this time.

Additionally, the Commission's Order in Docket No. EL09-029, dated February 12, 2010, directs the Company to report any sales of RECs in this report. Vintage 2014 RECs sold from transactions executed to date are shown in row 17 of Attachment A. For the reporting period, we have sold 9,204 SD RECs which accounts for approximately \$222,691 (gross revenue) allocated to the SD ratepayers. South Dakota customers have been credited \$200,422 as net revenue (which excludes 10 percent of expenses) through the monthly Fuel Clause Charge consistent with the Commission's February 12, 2010 Order in Docket No. EL09-029.³

Finally, the Company continues to seek to incorporate renewables and energy efficiency measures when and where those measures are cost effective. The Company expects to continue to be able to meet the renewable energy objective in South Dakota.

If there are questions regarding information contained in the report, please feel free to contact me at (605) 339-8350 or Jeff Haskins at 303-571-6454.

SINCERELY,

ERIC PAULI
COMMUNITY RELATIONS MANAGER

Enclosures

¹ As defined in SDCL 49-34-94.

² These figures were calculated using both the deemed and measured energy savings approaches outlined in the Commission's rules, SD Admin. R. 20:10:38:04 and 20:10:38:05.

³ See our February FCC report, Attachment 3, page 4.

Renewable, Recycled, and Conserved Energy Objective Annual Report for 2014

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- 1 MWH of electricity delivered to retail customers (retail sales) in 2014
- 2 MWH of electricity obtained from a hydroelectric facility in 2014 with an inservice date before July 1, 2008 (old hydro)
- 3 MWH of electricity obtained from qualifying renewable or recycled facilities
- 4 MWH of qualifying conserved energy

- 5 Please provide a brief narrative that describes steps taken to meet the state renewable, recycled, and conserved objective over time and identifies any challenges or barriers encountered in meeting the objective.

With our current portfolio and SD's current mandate, we believe that we own or have under contract sufficient renewable resources for REO compliance through at least 2020. In addition, we will be able to comply with the renewable requirements of other states in which we have service territory. However, we are paying close attention to a number of issues that may affect renewable energy development in our region. These issues include:

- Cost-effectiveness of wind energy. Natural gas prices and, correspondingly, market energy prices, have continued to stay low and are projected to continue at a lower level for a number of years to come. With those lower long-term price expectations, wind energy may not be as cost-effective as its likely alternative, natural gas generation, if the Production Tax Credit (PTC) or Investment Tax Credit (ITC) expire.
- Wind integration and baseload cycling. As the percentage of wind energy on our system and in the Midwest ISO (MISO) region continues to increase, we remain concerned about the cost and possible reliability impacts of integrating wind with other generation resources. The Company continues to monitor the MISO ancillary services market costs as wind penetration levels increase.
- Transmission Construction Lead Time. The best wind resource areas within and adjacent to our service territory do not currently have the necessary transmission infrastructure to support the level of wind generation needed to meet some REO compliance deadlines. CapX and other transmission initiatives will substantially improve transmission from those areas into our primary load center in the Twin Cities. Furthermore the transmission infrastructure between the Twin Cities and other parts of the MISO footprint appears inadequate to accommodate the ebb and flow of expected 2020 wind generation. It will be important to coordinate the planning of wind resources with the transmission necessary to integrate it into the electrical system. The Company is working with MISO and other stakeholders on these challenges.
- MISO Interconnection Queue. MISO has reformed its interconnection queue process of the the past several years, which has resulted in substantially reducing the lag time between making an interconnection request and executing a signed interconnection agreement. These changes appear to have resolved the problem of having thousands of MW of projects ready for development, but waiting years for interconnection studies. However, there has also been a lull in wind project development due to uncertainty about extension of the Federal PTC, which has dampened interconnection request activity. The Company will continue to monitor the interconnection queue process, and its effect on the aforementioned lag time, as more is known about PTC extension.
- PTC/ITC Extension Uncertainty. Currently the PTC requires wind projects to be producing energy by December 31, 2015 and the ITC requires projects to be producing energy by December 31, 2016 to receive the full 30% tax credit (though a 10% tax credit applies after January 1, 2017). Without the benefit of the PTC/ITC provisions, project economics are challenging for new renewable generation projects to be cost-competitive with natural gas generation alternatives.

If the Company is claiming renewable MWH in (3) above or retiring RECs in other jurisdictions, please provide the following per ARSD 20:10:38:07:

6 Total amount of RECs retired for CY2014 compliance across all jurisdictions

7 Amount of RECs retired to meet South Dakota's renewable energy objective for CY2014

8 For RECs listed above in (7), please provide the tracking system(s) RECs were retired under:

NA

9 For RECs listed above in (7), please provide the name and location of each facility that produced the retired RECs:

NA

10 Amount of RECs that the provider retired to meet a renewable energy objective or renewable energy standard in each of the other states it provides electricity services:

Please see attachment B.

11 For RECs listed above in (10), please provide the name and location of each facility that produced the retired RECs:

Please see attachment C.

If the Company is claiming conserved MWH in (4) above, please provide the following per ARSD 20:10:38:03 through 06:

12 MWH of conserved energy achieved through energy efficiency

13 A general explanation of each energy efficiency impact evaluation or estimate, the rationale for using each energy efficiency impact evaluation or estimate, and the amount of expenditures spent on energy efficiency measures for the calendar year (ARSD 20:10:38:03).

NA

14 MWH of conserved energy achieved through demand response ((12) and (14) should sum to (4))

15 A general explanation of each demand response impact evaluation or estimate, the rationale for using each demand response impact evaluation or estimate, and the amount of expenditures spent on demand response measures for the calendar year (ARSD 20:10:38:06).

NA

Generation Mix Attributable to SD in 2014

Utility Name	Coal	Hydro	Nuclear	Wind	Natural Gas	Oil	Biomass	Solid Waste	Waste Heat	Purchases	Other - <i>Please Specify</i>	Total Check
Northern States Power Company	38.44%	7.72%	29.21%	13.79%	7.68%	0.05%	2.76%	0.22%	0.03%		0.11%	100.00%

Other:	Other comprises the generation produced from fossil fuel and other non-renewable fuel for multi fuel refuse derived generating facilities
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For the renewable generation listed above, please provide:	
RECs retired for SD RRCEO compliance in 2014	0
RECs held or "banked"	1,253,008
RECs sold or transferred to other parties	9,204

South Dakota Renewable, Recyclable and Conserved Energy Objective 2014 Status Report

System Total Generation (and Jurisdictional Allocator)

<u>State</u>	<u>State Allocators</u>
1 Minnesota	73.7784%
2 North Dakota	5.5828%
3 South Dakota	4.8404%
4 Wisconsin/Michigan	<u>15.7984%</u>
5 NSP System	100.0000%

System Renewable Generation

<u>Source</u>	<u>M-RETS RECs</u>
6 Wind	5,902,987
7 Solar	12,951
8 Hydro (pre-7/1/2008)	1,127,251
9 Hydro (post 7/1/2008)	38,569
10 Biomass\Wood\Landfill Gas	1,098,029
11 Refuse-Derived Fuel (RDF)	<u>241,661</u>
12 NSP System	8,421,448

SD RREO Renewable Energy

13 SD % of System Total Generation:	4.84042%
14 System RECs allocated to SD:	407,633
15 Remove Old Hydro (per SD RREO):	<u>(54,563)</u>
16 SD RREO qualifying renewable energy:	353,070
17 Vintage 2014 REC Sales ¹ :	<u>(9,204)</u>
18 Net SD RREO qualifying renewable energy:	343,866
19 SD retail sales:	2,056,586
20 Remove SD Hydro allocation (per SD RREO):	<u>(54,563)</u>
21 SD REO adjusted retail sales:	2,002,023

F

22 SD REO renewable energy %:	<u>17.2%</u>
23 RECs retired for 2014 REO compliance	0

¹ Vintage 2014 REC sales executed as of May 1, 2015

Attachment B is provided as part of the attached live Excel spreadsheet.

FacilityName	County	State
Adams - Adams Wind	Meeker	MN
Agassiz Beach - Agassiz Beach	Clay	MN
Apple River (Unit 1)(Units 3-4) - Apple River	St Croix	WI
Bayfront (Unit 4) - Bayfront (Unit 4)	Ashland	WI
Bayfront (Unit 5) - Bayfront (Unit 5)	Ashland	WI
Bayfront (Unit 6) - Bayfront (Unit 6)	Ashland	WI
Big Blue Wind Farm - Big Blue Wind Farm, LLC	Faribault	MN
Big Falls (Units 1-3) - Big Falls	Rusk	WI
Carleton College - Carleton College	Rice	MN
Cedar Falls (Units 1-3) - Cedar Falls	Dunn	WI
Chanarambie Power Partners (1) - Chanarambie Power Partners (1)	Murray	MN
Chanarambie Power Partners (2) - Chanarambie Power Partners (2)	Murray	MN
Chippewa Falls (Unit 1) - Chippewa Falls (Unit 1)	Chippewa	WI
Chippewa Falls (Unit 2) - Chippewa Falls (Unit 2)	Chippewa	WI
Chippewa Falls (Unit 3) - Chippewa Falls (Unit 3)	Chippewa	WI
Chippewa Falls (Unit 4) - Chippewa Falls (Unit 4)	Chippewa	WI
Chippewa Falls (Unit 5) - Chippewa Falls (Unit 5)	Chippewa	WI
Chippewa Falls (Unit 6) - Chippewa Falls (Unit 6)	Chippewa	WI
Community Wind North - North Community Turbines	Lincoln	MN
Community Wind North - North Wind Turbines	Lincoln	MN
Cornell (Unit 1-4) - Cornell (Unit 1-4)	Chippewa	WI
Cow Poo - Cow Poo	Jackson	WI
Danielson - Danielson Wind Farms	Meeker	MN
Dells (Units 1-7) - Dells	Eau Claire	WI
East Ridge - East Ridge	Murray	MN
Ewington Energy Systems - Ewington Energy Systems	Jackson	MN
Fenton Power Partners I (1) - Fenton Power Partners I (1)	Murray	MN
Fenton Power Partners I (2) - Fenton Power Partners I (2)	Murray	MN
Fey Windfarm - Fey Windfarm	Pipestone	MN
Fibrominn LLC - Fibrominn	Swift	MN
FPL Energy Mower County - FPL Energy Mower County	Mower	MN
FreEner-g-2010-01 - FreEner-g-2010-01	Multiple	MN
French Island (Unit 1) - French Island (Unit 1)	La Crosse	WI
French Island (Unit 2) - French Island (Unit 2)	La Crosse	WI
GL Bio Gas I, LLC - GL Bio Gas I	La Crosse	WI
GL Bio Gas II, LLC - GL Bio Gas II	La Crosse	WI
Grand Meadow Wind Farm - Grand Meadow	Mower	MN
Grant County Wind - Grant County Wind	Grant	MN
Hayward (Unit 1) - Hayward	Sawyer	WI
Hibbing Public Utility - Laurentian	St. Louis	MN
Hilltop Power - Hilltop	Pipestone	MN
Holcombe (Unit 1) - Holcombe (Unit 1)	Chippewa	WI
Holcombe (Unit 2) - Holcombe (Unit 2)	Chippewa	WI
Holcombe (Unit 3) - Holcombe (Unit 3)	Chippewa	WI
Jeffers Wind 20 - Jeffers Wind 20	Cottonwood	MN
Jim Falls (Unit 1) - Jim Falls (Unit 1)	Chippewa	WI
Jim Falls (Unit 3) - Jim Falls (Unit 3)	Chippewa	WI
Kas Brothers Windfarm - Kas Brothers Windfarm	Pipestone	MN
Ladysmith (Units 1-3) - Ladysmith	Rusk	WI
Lake Benton Power Partners II (LBII) - LB II	Pipestone	MN
Lake Benton Power Partners, LLC - Lake Benton Power Partners (LBI)	Lincoln	MN
LCO Band of Lake Superior Chippewa Indians - Lac Courte Oreilles (LCO)	Sawyer	WI
MCC - Solar	Hennepin	MN

FacilityName	County	State
McNeilus Group - McNeilus Group	Dodge	MN
Menomonie (Units 1-2) - Menomonie	Dunn	WI
Merrick Solar - Merrick Solar	Ramsey	MN
Metro Wind - Metro Wind	Sherburne	MN
MinnDakota Wind (1) - MinnDakota Wind (1)	Lincoln	MN
MinnDakota Wind (1b) - MinnDakota Wind (1b)	Lincoln	MN
MinnDakota Wind (2) - MinnDakota Wind (2)	Brookings	SD
MNRDF_DNR - MNRDF_DNR	Multiple	MN
Moraine II - Moraine II	Pipestone/Murray	MN
Moraine Wind - Moraine Wind	Murray	MN
Neshonoc - Neshonoc	LaCrosse	WI
Nobles Wind Farm - Nobles Wind Farm I	Nobles	MN
Nobles Wind Farm - Nobles Wind Farm II	Nobles	MN
Norgaard North - Norgaard North	Lincoln	MN
Norgaard South - Norgaard South	Lincoln	MN
North Shaokatan Wind - Group	Lincoln/Lake Benton	MN
Olsen Windfarm LLC - Olsen Windfarm	Pipestone	MN
Pine Bend - Pine Bend	Dakota	MN
Pipestone - Pipestone	Pipestone	MN
Prairie Rose Wind - Prairie Rose Wind, LLC	Rock & Pipestone	MN
Red Wing (Unit 1) - Red Wing (Unit 1)	Goodhue	MN
Red Wing (Unit 2) - Red Wing (Unit 2)	Goodhue	MN
Ridgewind - Ridgewind	Murray	MN
Riverdale (Units 1-2) - Riverdale	St. Croix	WI
Rock Ridge Power Partners - Rock Ridge Power Partners	Pipestone	MN
Ruthon Ridge Wind - Group	Lincoln/Murray/Pipestone	MN
SAF Hydro, LLC - SAF Hydro	Hennepin	MN
Saxon Falls (Units 1-2) - Saxon Falls	Iron	MI
Shane's Wind Machine - Shane's Wind Machine	Pipestone	MN
South Ridge Power Partners - South Ridge Power Partners	Pipestone	MN
SRMN2010-J-01 - SRMN2010-J-01	Multiple	MN
SRMN2011-01 - SRMN2011-01	Multiple	MN
SRMN2011-02 - SRMN2011-02	Multiple	MN
SRMN2012-01 - SRMN2012-01	Multiple	MN
SRMN2012-02 - SRMN2012-02	Multiple	MN
SRMN2012-03 - SRMN2012-03	Multiple	MN
SRMN2012-04 - SRMN2012-04	Multiple	MN
St. Anthony (Units 1-5) - St. Anthony	Hennepin	MN
St. Croix Falls (Unit 1-8) - St. Croix Falls (Unit 1-8)	Polk	WI
St. John's Solar Farm - St. John's Solar Farm	Stearns	MN
St. Olaf College - St. Olaf College	Rice	MN
St. Paul Cogeneration - St. Paul Cogeneration	Ramsey	MN
Superior Falls (Units 1-2) - Superior Falls	Iron	MI
Tholen Transmission Inc. (North) - Tholen Transmission Inc. (North)	Pipestone	MN
Tholen Transmission Inc. (South) - Tholen Transmission Inc. (South)	Pipestone	MN
Thornapple (Units 1-2) - Thornapple	Rusk	WI
Trego (Units 1-2) - Trego	Washburn	WI
Uilk Wind Farm - Uilk Wind Farm	Pipestone	MN
Valley View - Valley View Wind	Murray	MN
Velva Windfarm - Velva Windfarm	McHenry	ND
West Ridge - West Ridge	Pipestone	MN
White River (Units 1-2) - White River	Ashland	WI
Wilmarth (Unit 1) - Wilmarth (Unit 1)	Blue Earth	MN

Attachment C

FacilityName	County	State
Wilmarth (Unit 2) - Wilmarth (Unit 2)	Blue Earth	MN
Wind Power Partners - Wind Power Partners	Lincoln	MN
Windvest Power Partners - Windvest Power Partners	Pipestone	MN
Winona County Wind - Winona County Wind	Winona	MN
Winona County Wind, LLC - Winona County Wind	Winona	MN
Wissota (Unit 1-3) - Wissota (Unit 1-3)	Chippewa	WI
Wissota (Unit 4-6) - Wissota (Unit 4-6)	Chippewa	WI
WM Renewable Energy - Burnsville - WM Renewable Energy - Burnsville	Burnsville/ Dakota	MN
Woodstock Municipal Wind - Woodstock Municipal Wind	Pipestone	MN
Zephyr Wind, LLC (CWS) - Zephyr Wind (2)	Nobles	MN
Zephyr Wind, LLC (CWS) - Zephyr Wind (1)	Nobles	MN

**Northern States Power Company - Minnesota
Generation Mix Support**

Fuel Type

Row Labels	Sum of Quantity
Biogas	43,983
Biomass	1,017,143
Biomass – Agricultural Crop (open loop)	185
Biomass – Animal Waste – Other	1,252
Biomass – Herbaceous Vegetative Matter or Residue	149
Biomass – Wood – Wood/Wood Waste Solids	145,974
Hydroelectric Water	418,563
Municipal solid waste	29,719
Solar	900
Wind	4,471,267
Grand Total	6,129,135

Retired RECs

Biomass	1,208,686	2.62%
MSW	29,719	0.06%
Hydro	418,563	0.91%
Solar	900	0.002%
Wind	4,471,267	9.69%
	6,129,135	

Total System Energy:	46,145,077
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Fleet Generation Mix (based on Gen above)

		Reported Mix	SD Mix	Difference
Biomass	1,274,043	2.76%	2.76%	0.00% x
Coal	17,736,048	38.44%	38.44%	0.00% x
Gas	3,543,686	7.68%	7.68%	0.00% x
Hydro	3,562,208	7.72%	7.72%	0.00% x
Nuclear	13,479,077	29.21%	29.21%	0.00% x
Oil	23,194	0.05%	0.05%	0.00% x
Other	49,952	0.11%	0.11%	0.00%
Solar	12,525	0.03%	0.03%	0.00%
Waste	99,967	0.22%	0.22%	0.00% x
Wind	6,364,377	13.79%	13.79%	0.00% x
	46,145,077	100.00%	100.00%	0.00%