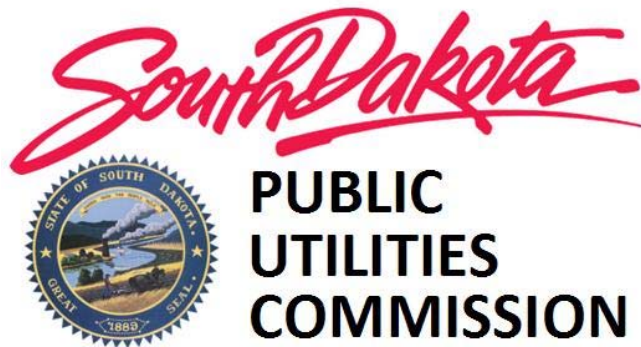


# **South Dakota's Renewable, Recycled and Conserved Energy Objective**

**Report for Calendar Year 2010**



**Submitted to the Legislature  
December 30, 2011**

# Background

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## PURPOSE OF THIS REPORT

South Dakota Codified Law (SDCL) 49-34A-101 through 106 established South Dakota's Renewable, Recycled and Conserved Energy Objective (RRCEO) in 2008.<sup>1</sup> As part of the RRCEO, utilities are required to report annually to the South Dakota Public Utilities Commission (Commission) on 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 2009<sup>2</sup> 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

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### UTILITY REPORTS

Each retail provider has submitted a report to the Commission. These reports are attached in Appendix A in alphabetical order. In previous years, the Commission requested specific data from the reporting entity for each retail provider via a short spreadsheet, found in Appendix B. The results can be found in Appendix C.

All utilities are procuring renewable energy generation, either through power purchase agreements (PPAs) or direct ownership. However, most utilities are still not retiring RECs for South Dakota's RRCEO. MidAmerican Energy Co. retired 1,860 RECs making up less than 1 percent of its retail sales, and Missouri River Energy Services retired 12,300 RECs making up 2 percent of its retail sales. The small amount of credits retired is not surprising and reflects the fact that retiring RECs for the South Dakota RRCEO is not cost effective when providers can sell those credits to bring down their cost of service in the state. However, most utilities report they are making a good faith effort to meet the RRCEO by procuring renewable generation and banking and/or selling credits until 2015, at which time they will begin retiring enough credits to meet the 10 percent goal. In fact, a number of utilities already have the resources in place to meet the goal, but are either banking or selling their credits for the time being.

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<sup>1</sup> Conserved Energy was added during the 2009 Legislative Session

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

## **BARRIERS TO DEVELOPMENT**

This year utilities included many of the same challenges as they have in the past including the following:

- **Transmission** – Consistently listed as a barrier to wind development in South Dakota, transmission issues continue to slow wind energy development by not allowing wind energy to be dispersed to regions with larger loads. Interconnection queue delays in MISO have largely been solved, but cost allocation, planning and siting are still significant challenges.
- **Intermittency** – Because most forms of renewable generation are not dispatchable, there is an added cost to firm intermittent resources. Wind forecasting is continuously improving, but wind's unpredictable nature continues to make it more expensive to integrate.
- **Siting** – Getting the necessary permits to install generation can be a challenge. Specifically, impacts of wind towers and transmission on bats and migratory birds have become issues. Working through these issues can add costly delays and risk.
- **Need** – With the recent economic downturn, forecasting demand has become more difficult. If the economy continues to slump and electricity sales stay flat, it is difficult to justify bringing new renewable resources online.
- **Lack of incentives for public power** – Some of the federal incentives for investing in renewables do not apply to public power entities such as cooperatives and municipal energy suppliers.
- **Financing** – All the issues raised above add uncertainty and risk which makes finding financing difficult in an economic downturn.

## **COMMISSION RULES**

During the past two years, the Commission has undertaken a rulemaking procedure to make reporting requirements more transparent and homogenous, specifically with respect to conserved energy. That process was completed in Commission dockets RM09-002 and RM11-001, and was approved by the Legislative Rules Review Committee on Dec. 20, 2011. With the new rules in place under ARSD 20:10:38, we expect future reports to be much more transparent and consistent.

**Appendix A**  
**Utility Reports (in alphabetical order)**

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**BASIN ELECTRIC  
POWER COOPERATIVE**

1717 EAST INTERSTATE AVENUE  
BISMARCK, NORTH DAKOTA 58503-0564  
PHONE 701-223-0441  
FAX: 701/224-5336



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July 1, 2011

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

Re: Basin Electric Power Cooperative – South Dakota Renewable Energy Objective Report

Dear Ms. Van Gerpen:

Enclosed please find Basin Electric Power Cooperative's 2010 Renewable Energy Objective Report per SDCL 49-34A-105. The format for this report is an Excel spreadsheet provided by the PUC Staff. This report is filed on behalf of the following members within South Dakota:

- Grand Electric
- Rosebud Electric
- Rushmore Electric and their members (Black Hills Electric Cooperative, Butte Electric Cooperative, Cam Wal Electric Cooperative, Cherry Todd Electric Cooperative, Lacreek Electric Association, Moreau Grand Electric Cooperative, West Central Electric Cooperative and West River Electric Association).

Should you have any questions regarding this report, please feel free to contact me at (701) 557-5413 or [cjacobson@becp.com](mailto:cjacobson@becp.com).

Sincerely,

Casey J. Jacobson  
Attorney, Office of General Counsel  
Basin Electric Power Cooperative

cjj/ds  
enclosure

cc by e-mail:

Ed Anderson, South Dakota Rural Electric Association  
Jerry Reisenauer, Grand Electric  
Gary Clayton, Rosebud Electric  
Vic Simmons, Rushmore Electric  
Daniel Hutt, Black Hills Electric  
Kenneth Wetz, Butte Electric  
Jeff Bonn, Cam Wal Electric  
Timothy Grablander, Cherry-Todd Electric  
Wayne Sterkel, Lacreek Electric  
Melissa Maher, Moreau-Grand Electric  
Steven Reed, West Central Electric  
Dick Johnson, West River Electric

Wayne Backman  
Dave Raatz  
Zane Zuther  
Becky Kern

Please provide a value in each of the boxes below with an "X" in it.

**Company:**  
**BASIN ELECTRIC POWER COOPERATIVE**

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	16,522,428	Member Sales
SD (MWh)	178,693	Rosebud & Grand
	891,091	Rushmore
<b>Generation Capacity Owned (summer)</b>		
Total - All States (MW)	2,998	
SD (MW)	262	
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		
Wind	551.5	2.6 MW owned, 426.3 MW long-term purchased power agreement
Solar	X	122.6 MW PrairieWinds (subsidiary of Basin Electric)
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	0.4	Biogas
Geothermal	X	
Recycled	44	0 MW owned, 44 MW long-term purchased power agreement
Total - All States (MW)	595.9	owned, purchased and through subsidiary
SD (MW)		
Wind	142.5	2.6 owned, 139.9 MW long-term purchased power agreement
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	0.4	Biogas
Geothermal	X	
Recycled	16.5	0 MW owned, 16.5 MW long-term purchased power agreement
Total SD (MW)	159.4	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	x	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
Total - All States (MWh)	x	
Generated in SD (MWh)		
Wind	x	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
Total SD (MWh)	x	

<b>Renewable Energy Credits Retired for Other States</b>		
<b>Total - Generated In All States (MWh)</b>		
Wind	33,205	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total - All States (MWh)</b>	<b>33,205</b>	
<b>Generated In SD (MWh)</b>		
Wind	0	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States	X	
SD	X	
<b>Conserved Capacity (MW)</b>		
Total - All States	X	
SD	X	



**Chris Kilpatrick**  
Director, Resource Planning and Electric Rates  
Chris.Kilpatrick@blackhillscorp.com

625 Ninth Street • P.O. Box 1400  
Rapid City, South Dakota 57709-1400  
P: 605.721.1700  
F: 605.721.2568

June 27, 2011

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

Re: Black Hills Power, Inc. – South Dakota Renewable Energy Objective Report

Dear Ms. Van Gerpen:

Pursuant to SDCL 49-34A-105, Annual Reports Concerning Renewable and Recycled Energy Objective, following is a status of Black Hills Power's renewable energy program.

Black Hills Power does not currently own any renewable generation, however, Black Hills Power has purchase power agreements for old hydro and wind energy.

In 2010, renewable resources accounted for 4.5% of South Dakota retail energy sales and none of those renewable energy credits were retired for Black Hills Power in South Dakota. 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 and a fair return to shareholders. 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, the price to deliver the 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 the renewable energy is not firm, the cost of firming this energy becomes a significant barrier.

Feel free to contact me if there are any questions related to this report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chris Kilpatrick', written over a horizontal line.

Chris Kilpatrick



Please provide a value in each of the boxes below with an "X" in it.

Company:  
Black Hills Power

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	2,172,029	
SD (MWh)	1,442,669	
<b>Generation Capacity Owned</b>		
Total - All States (MW)	491	
SD (MW)	175	
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		Black Hills Power (BHP) currently does not own any renewable generation, however, it has purchase power agreements for Old Hydro and wind energy. In September 2008, the Happy Jack portion of the wind project became operational and Black Hills Power began purchasing energy. The Silver Sage portion of the wind project became operational in October 2009. Based on the operation from the Happy Jack wind project, the Silver Sage wind project, and the current output from the Old Hydro, these renewable resources served approximately 4.5% of the total retail sales for Black Hills Power in 2010.
Wind	98,308	
Solar	-	
New Hydro	-	
Old Hydro	29,065	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total - All States (MW)	127,373	
SD (MW)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	29,065	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total SD (MW)	29,065	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total - All States (MWh)	-	
Generated in SD (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total SD (MWh)	-	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)		
Wind	1,985	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total - All States (MWh)	1,985	
Generated In SD (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total SD (MWh)	-	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States		BHP does not currently track Conserved Energy. An energy efficiency plan that will track conserved energy has been filed with the SD PUC to be approved in 2011.
SD		
<b>Conserved Capacity (MW)</b>		
Total - All States		BHP does not currently track Conserved Energy. An energy efficiency plan that will track conserved energy has been filed with the SD PUC to be approved in 2011.
SD		



E L E C T R I C

A Touchstone Energy® Cooperative 

211 South Harth Ave. | P.O. Box 227  
Madison, SD 57042-0227

Telephone: (605) 256-4536  
Fax: (605) 256-8058

June 24, 2011

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". The signature is fluid and cursive.

Robert K. Sahr  
General Counsel

RKS/sl

Enc.

# East River Electric Power Cooperative South Dakota Renewable Energy Objective Report July 1, 2011

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

<b>East River South Dakota Members</b>	<b>Location</b>
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 REO 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; small locally-owned wind projects; waste heat recovery units; solar power generation; and methane digesters with several more renewable energy projects, large and small, in the works. These projects include:

- **Large Scale Wind Energy Generation: 718.9 MW**
- **Recycled Energy Generation: 44 MW**
- **Methane Digesters: 475 kW**
- **Solar Generation: 55.3 kW**
- **Missouri River Hydroelectric Resources**

During 2010, Basin Electric significantly increased the amount of new renewable energy generation with additional resources coming on-line in 2011. 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.

Looking forward, the year 2011 promises to be a landmark one for the rural electric cooperatives, including East River and its member, with the commissioning of the \$363 million Crow Lake Project in February of this year.

The Crow Lake Project is an industry trifecta... it's the largest wind project in the United States owned solely by a cooperative, it includes a first-of-its-kind local community wind investment partnership, and in partnership with the Mitchell Technical Institute is being used to educate future wind technicians. Of the 108 1.5-megawatt turbines, 100 will be owned and operated by PrairieWinds, SD1, Inc. (a subsidiary of Basin Electric), one turbine has been sold to the Mitchell Technical Institute (MTI), Mitchell, South Dakota, and the remaining seven are owned by about 600 South Dakota investors who own the South Dakota Wind Partners.

*The MTI turbine will provide real-world training for students and instructors and ensures MTI will remain at the forefront of technical renewable energy education.*

South Dakota Wind Partners has enabled more than 600 individual South Dakota investors to own a share of the Crow Lake project. By utilizing the tax incentives created by Section 1603 of the 2009 American Recovery and Reinvestment Act, local investors fulfilled the long-standing dream of community ownership in a utility-sized, wind energy project. Four South Dakota organizations formed South Dakota Wind Partners: East River Electric Power Cooperative, Inc.; South Dakota Corn Utilization Council; South Dakota Farmers Union, and South Dakota Farm Bureau. Another South Dakota company, Val-Add Service Corporation, spearheaded the business planning and fundraising efforts. PrairieWinds constructed the seven turbines for South Dakota Wind Partners and will operate them. Through PrairieWinds, Basin Electric will purchase the 10.5 megawatts of electricity produced from the South Dakota Wind Partners' owned turbines.

The rural electric cooperatives hope that South Dakota Wind Partners becomes a national model for community-based investment in renewable energy. East River and its members encourage the Commission to support the extension of the federal Production Tax Credit and the 1603 program as sound national energy policy.

## **II. CONSERVED ENERGY**

Commission-led changes to the South Dakota REO during the 2009 South Dakota State Legislature added the opportunity to count conserved energy towards the Objective. East River believes the Commission's revised proposed rules, if adopted, will effectively implement these changes.

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. We hope that any administrative rules implementing the REO acknowledge the ongoing conservation achieved because of these past investments. We encourage the Commission to complete its rule making on this important matter.

East River coordinates a joint marketing program on behalf of its 21 all-requirements member systems. In 2010, this program continued to focus on the installation of Energy Star heat pump systems and energy efficient electric water heaters. East River members installed 908 Energy Star heat pump systems and 1,304 energy efficient water heaters. In addition, over 1,400 members received incentives toward the purchase of Energy Star refrigerators, freezers, dish washers, and clothes washers replacing old inefficient models.

A new Energy Auditing program rolled out in 2010 resulted in residential energy audits being conducted on 119 homes. These comprehensive energy audits resulted in over \$130,000 in energy saving improvements being made to these structures. East River and its member systems provided the following financial incentives under these various programs: heat pump rebates - \$545,000; water heater rebates - \$430,000; Energy Star appliance rebates -\$120,000; energy audit/weatherization rebates - \$25,000; and energy audit/weatherization loans - \$37,000.

During 2010, utilization of East River's load management system avoided a total of approximately 695,545 kW of wholesale power supply capacity requirements. We urge the Commission to recognize load management as a key component to its future REO administrative rules.

### **III. REO OBSTACLES ENCOUNTERED**

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

1. Environmental Compliance
2. Transmission
3. Wind Energy Costs.

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 wind 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. 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. Finally, the cost dynamics of wind energy, even with the assistance of federal tax incentives, still leave many potential wind farms unable to competitively price their projects.

Please provide a value in each of the boxes below with an "X" in it.

Company:  
East River Electric Power Cooperative, Inc.

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	3,136,435	EREPC Sales to ALL Members
SD (MWh)	2,739,613	EREPC Sales to SD Members
<b>Generation Capacity Owned</b>		
Total - All States (MW)	0	
SD (MW)	0	
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)	0	
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MW)	0	
<b>SD (MW)</b>		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total SD (MW)	0	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MWh)	0	
Generated in SD (MWh)		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total SD (MWh)	0	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)		
Wind	22,745	Source: FPL Energy North Dakota Wind, LLC - Edgeley/Kulm Wind Program and Pipestone Wind Program
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MWh)	22,745	2010: MN 7% REO/RES = 22,713 RECs, MN PrairieWinds Marketing Program = 32 RECs
Generated in SD (MWh)		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total SD (MWh)	0	
<b>Conserved Energy &amp; Capacity</b>		
Conserved Energy (MWh)		
Total - All States	X	
SD	X	
Conserved Capacity (MW)		
Total - All States	X	
SD	X	

Public Document

June 30, 2011

Ms. Patricia Van Gerpen, Executive Secretary  
South Dakota Public Utilities Commission  
Capitol Building, 1<sup>st</sup> floor  
500 East Capitol Avenue  
Pierre, SD 57501-5070

RE: HCPD Renewable Energy Objective Progress Report

Dear Ms. Van Gerpen:

Heartland Consumers Power District (HCPD) submits this Renewable Energy Objective (REO) Progress Report on behalf of its South Dakota Customers, nineteen municipal utilities, one cooperative utility, and one State agency, pursuant to SDCL 49-34A-101 and SDCL 49-34A-105. This report is filed on behalf of the following HCPD Customers in South Dakota: Arlington, Aurora, Bryant, Colman, Estelline, Groton, Hecla, Howard, Langford, Madison, McLaughlin, Miller, Northern Electric, Parker, Plankinton, Sioux Falls, State of South Dakota, Tyndall, Volga, Wessington Springs, and White. This report outlines a twelve month period from January 1, 2010 through December 31, 2010.

If you have any questions regarding this report, please contact me at 605-256-6536 or [njones@hcpd.com](mailto:njones@hcpd.com).

Respectfully submitted,



Nate Jones  
Market Operations Manager  
Heartland Consumers Power District

Copy via e-mail:

Amiel Redfish, Arlington Municipal Utilities  
Andy Studer, Aurora Municipal Utilities  
Garry Ladwig, Bryant Municipal Utilities  
Grant Groos, Colman Municipal Utilities  
Dan DeWitt, Estelline Municipal Utilities  
Ward Gilchrist, Groton Municipal Utilities  
Dennis Shelton, Hecla Municipal Utilities



432 SE 12th Street  
PO Box 248  
Madison, SD 57042  
(800) 520-4746

Gary Beaubien, Howard Municipal Utilities  
Blair Healy, Langford Municipal Utilities  
Dennis Poppen, Madison Municipal Utilities  
Lornie Hach, McLaughlin Municipal Utilities  
Bill Lewellen, Miller Municipal Utilities  
Jim Moore, Northern Electric Cooperative  
Rob Buller, Parker Municipal Utilities  
Vern Hill, Plankinton Municipal Utilities  
Mike Burkard, Sioux Falls Municipal Utilities  
Michele Farris, State of South Dakota  
Bob Brattmiller, Tyndall Municipal Utilities  
Steve Meyer, Volga Municipal Utilities  
Roger Larson, Wessington Springs Municipal Utilities  
Dan DeYoung, White Municipal Utilities  
Jeff Mehlhaff, SD Municipal Electric Association



# **Heartland Consumers Power District South Dakota Renewable Energy Progress Report**

**June 30, 2011**

Pursuant to South Dakota Codified Law, Chapter 49-34A-101 outlines a state renewable and recycled energy objective (REO) that ten percent of all electricity sold at retail within the state by the year 2015 be obtained from renewable energy and recycled energy sources. The objective shall be measured by qualifying megawatt hours delivered at retail or by certificates representing credits purchased and retired to offset non-qualifying retail sales. 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 its renewable and recycled energy objective resources to meet this objective.

South Dakota Codified Law, the amended Chapter 49-34A-105 establishes a requirement that annual reports concerning the REO commence on July 1, 2009 and that 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.

Given the power supply relationship between HCPD and its Customers, HCPD has assumed the responsibility for the REO and the associated reporting requirements on behalf of its South Dakota Customer communities. The following South Dakota entities, nineteen municipal utilities, one cooperative utility, and one State agency, are Customers of HCPD:

- Arlington
- Aurora
- Bryant
- Colman
- Estelline
- Groton
- Hecla
- Howard
- Langford
- Madison
- McLaughlin
- Miller
- Northern Electric
- Parker
- Plankinton
- Sioux Falls
- State of South Dakota
- Tyndall
- Volga
- Wessington Springs
- White

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 from January 1, 2010 - December 31, 2010, 5 MW's of the project were committed solely to one of HCPD's Minnesota Customers.) As was outlined in past reports, HCPD plans 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.

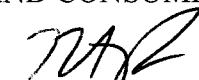
The attached spreadsheet report outlines HCPD's 2010 retail sales, generation capacity owned, renewable generation capacity owned, renewable energy credits (RECs) retired, and conserved energy and capacity. For the period from January 1, 2010 – December 31, 2010, HCPD's South Dakota retail load served was 203,179 MWh. HCPD's SD Customers conserved 45.37 MWh of energy. To comply with the MN RES for 2010, HCPD retired 46,015 RECs; 582 vintage 2008 RECs, 28,807 vintage 2009 RECs, and 16,626 vintage 2010 RECs corresponding to 7% of HCPD's 2010 MN retail load served (657,345 MWh). Per an agreement between the State of South Dakota and HCPD to provide the South Dakota State Universities with 100% renewable energy, HCPD retired 5,401 vintage 2010 RECs corresponding to the energy supplied by HCPD to South Dakota State University (5,400,389 kWh); HCPD didn't supply any energy to Northern State University or the University of South Dakota in 2010. To date, HCPD has not retired any RECs corresponding to any other 2010 SD retail load served by HCPD.

HCPD doesn't anticipate encountering any obstacles to meet South Dakota's REO with the execution of the Wessington Springs Wind Energy Center PPA.

In conclusion, HCPD currently has an adequate amount of renewable resource available and a plan to utilize the resource to meet the South Dakota REO of 10% by 2015 as part of its overall renewable energy goals for Customers in Minnesota, Iowa, and South Dakota.

Respectfully submitted this 30th day of June, 2011.

HEARTLAND CONSUMERS POWER DISTRICT



---

Nate Jones  
Market Operations Manager  
Heartland Consumers Power District  
432 SE 12<sup>th</sup> St  
Madison, SD 57042  
(605) 256-6536  
njones@hcpd.com

Please provide a value in each of the boxes below with an "X" in it.

**Company:**

Heartland Consumers Power District on behalf of its South Dakota Customers.

Calendar Year 2010 REO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	866,254	
SD (MWh)	203,179	Arlington, Aurora, Bryant, Colman, Estelline, Groton, Hecla, Howard, Langford, Madison, McLaughlin, Miller, Northern Electric, Parker, Plankinton, Sioux Falls, State of South Dakota, Tyndall, Volga, Wessington Springs, White.
<b>Generation Capacity Owned</b>		
Total - All States (MW)	55	Laramie River Station and Wessington Springs Diesel Generating Units 1 and 2.
SD (MW)	4	Wessington Springs Diesel Generating Units 1 and 2.
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		HCPD has contracted via a PPA with NextEra Energy Resources for the entire output from the Wessington Springs Wind Energy Center project: 51 MW project with 34 turbines.
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total - All States (MW)	-	
SD (MW)		HCPD has contracted via a PPA with NextEra Energy Resources for the entire output from the Wessington Springs Wind Energy Center project: 51 MW project with 34 turbines.
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
Total SD (MW)	-	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	

<b>Total - All States (MWh)</b>	-	
<b>Generated in SD (MWh)</b>		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	-	
<b>Renewable Energy Credits Retired for Other States</b>		
<b>Total - Generated In All States (MWh)</b>		REC's generated in South Dakota from the Wessington Springs Wind Energy Center project and retired for HCPD's Minnesota Customers as required for the Minnesota RES (7% of 2010 load).
Wind	46,015	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total - All States (MWh)</b>	<b>46,015</b>	
<b>Generated In SD (MWh)</b>		REC's generated in South Dakota from the Wessington Springs Wind Energy Center project and retired for HCPD's Minnesota Customers as required for the Minnesota RES (7% of 2010 load).
Wind	46,015	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	<b>46,015</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States	58	Conservation for Madelia, Truman, Lake Crystal, Marshall, Grove City not included. Doesn't include those listed above as well as Akron, IA and Tyler, MN.
SD	45	
<b>Conserved Capacity (MW)</b>		
Total - All States	64	Conservation for Madelia, Truman, Lake Crystal, Marshall, Grove City not included. Doesn't include those listed above as well as Akron, IA and Tyler, MN.
SD	52	

# **South Dakota Renewable and Recycled Energy Objective**

## **2010 Annual Report MidAmerican Energy Company**

MidAmerican Energy Company files the following report in compliance with SDCL 49-34A-105 covering the twelve-month period ending on December 31, 2010. The attached spreadsheet provides the following information:

- Retail Sales (MWh) - Total & SD-based
- Generation Capacity Owned (MW) - Total & SD-based by technology
- Renewable Generation Capacity Owned (MW) - Total & SD-based by technology
- Renewable Generation with RECs retired for SD (MWh) - Total & SD-based by technology
- Renewable Generation with RECs retired for other states/purposes (MWh) - Total & SD-based by technology
- Conserved Energy (MWh) and Capacity (MW)

### **Brief Narrative Report Describing Steps Taken and Challenges or Barriers:**

MidAmerican Energy Company currently is the nation's leader in owned wind generation by a rate-regulated utility and continues to take steps to increase the amount of renewable energy generation capacity in its generation portfolio. At the end of 2010, approximately 20 percent of MidAmerican Energy Company's existing electric generation capability came from renewable resources. In December 2010, MidAmerican Energy Company and Siemens Energy, Inc. entered into a turbine supply agreement for 258, 2.3-megawatt turbines – a total of 593.4 megawatts. The turbines will be erected in Iowa during 2011. When the 593.4-megawatt expansion project is complete, approximately 26 percent of MidAmerican Energy's total generation capacity will come from wind. Production tax credits and the sale of renewable energy credits both help to promote the further development of renewable projects.

Additionally, MidAmerican began offering many of its successful energy efficiency programs to South Dakota customers on May 1, 2009. MidAmerican is offering a variety of energy efficiency programs aimed at helping residential, commercial and industrial customers reduce energy use and save money in the process. In 2010, the South Dakota programs saved customers approximately 400,000 kilowatt-hours of electricity and 237,000 therms of natural gas.

Please provide a value in each of the boxes below with an "X" in it.

Company:  
MidAmerican Energy Company

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	21,711,926	
SD (MWh)	215,867	
<b>Generation Capacity Owned</b>		
Total - All States (MW)	6,974	12/31/10 nameplate rating per FERC Form 1
SD (MW)	59	Allocated 0.84%
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		
Wind	1,284	
Solar	-	
New Hydro	-	
Old Hydro	4	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total - All States (MW)</b>	<b>1,288</b>	
SD (MW)		
Wind	11	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MW)</b>	<b>11</b>	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	1,583	
Solar	-	
New Hydro	-	
Old Hydro	52	
Hydrogen	-	
Biomass	225	
Geothermal	-	
Recycled	-	
<b>Total - All States (MWh)</b>	<b>1,860</b>	
Generated in SD (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	<b>-</b>	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)		
Wind	422,601	Total retired for all states including South Dakota
Solar	-	
New Hydro	-	
Old Hydro	6,165	Total retired for all states including South Dakota
Hydrogen	-	
Biomass	86,745	Total retired for all states including South Dakota
Geothermal	-	
Recycled	-	
<b>Total - All States (MWh)</b>	<b>515,511</b>	Total retired for all states including South Dakota
Generated In SD (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	<b>-</b>	
<b>Conserved Energy &amp; Capacity</b>		
Conserved Energy (MWh)		
Total - All States	1,470,277	Per EIA-861 (Annual Effects)
SD	763	Per EIA-861 (Annual Effects)
Conserved Capacity (MW)		
Total - All States	606	Per EIA-861 (Annual Effects)
SD	-	



3724 West Avera Drive  
PO Box 88920  
Sioux Falls, SD 57109-8920  
Telephone: 605.338.4042  
Fax: 605.978.9360  
[www.mrenergy.com](http://www.mrenergy.com)

June 29, 2011

Ms. Patricia Van Gerpen, Executive Secretary  
South Dakota Public Utilities Commission  
Capitol Building, 1st floor  
500 East Capitol Avenue  
Pierre, SD 57501-5070

RE: MRES Renewable, Recycled and Conserved Energy Objective Progress Report

Dear Ms. Van Gerpen:

Missouri River Energy Services (MRES) submits this Renewable, Recycled and Conserved Energy Objective (RRCEO) Progress Report on behalf of its twelve South Dakota municipal utility members, pursuant to SDCL 49-34A-101 and 49-34A-105. This report covers the twelve month period from January 1, 2010 through December 31, 2010.

This report is filed on behalf of the following MRES members in South Dakota: Beresford, Big Stone City, Brookings, Burke, Faith, Flandreau, Fort Pierre, Pickstown, Pierre, Vermillion, Watertown and Winner.

If you have any questions regarding this report, please contact me at 605-338-4042 or [mrgsimon@mrenergy.com](mailto:mrgsimon@mrenergy.com).

Sincerely,

A handwritten signature in blue ink that reads "Mrg Simon".

Mrg Simon, Attorney at Law  
Director, Legal

Copy:

Jay Nordquist, Beresford Municipal Utilities  
Duane Henderson, Big Stone City Municipal Utilities  
Steve Meyer, Brookings Municipal Utilities  
Jerry Jones, Burke Municipal Utilities  
Debbie Brown, Faith Municipal Utilities  
Don Johnston, Flandreau Municipal Utilities  
Brad Lawrence, Fort Pierre Municipal Utilities  
Bonnie Nielsen, City of Pickstown  
Leon Schochenmaier, Pierre Municipal Utilities  
John Prescott, City of Vermillion  
Steve Lehner, Watertown Municipal Utilities Department  
Jack Day, Jr., Winner Municipal Utilities  
Jeffrey Mehlhaff, SD Municipal Electric Association

**Missouri River Energy Services**  
**South Dakota**  
**Renewable, Recycled and Conserved Energy Progress Report**

June 29, 2011

Missouri Basin Municipal Power Agency d/b/a Missouri River Energy Services (MRES) is a body politic and corporate and a public agency organized under the laws of the State of Iowa and existing under the intergovernmental cooperation statutes of the States of Iowa, Minnesota, North Dakota and South Dakota. MRES is a multi-state, member-based joint-action agency, headquartered in Sioux Falls, South Dakota. Its members receive a fixed allocation of hydroelectric power and energy from the Western Area Power Administration (WAPA), and purchase their supplemental power from MRES, a not-for-profit agency, to meet their needs over and above their WAPA allocations. As part of that responsibility, MRES provides its members with a balanced power supply portfolio, including renewable generation. MRES has included wind energy in its power supply program since 2002, which has been used primarily to meet Minnesota's Renewable Energy Objective (REO).

The South Dakota Legislature has adopted a voluntary Renewable, Recycled and Conserved Energy Objective (RRCEO) which provides 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," and allows municipal utilities to aggregate their RRCEO through their municipal power agency. SDCL 49-34A-101. The objective is measured by qualifying megawatt hours delivered at retail<sup>1</sup> or by certificates representing credits purchased and retired to offset non-qualifying retail sales. Additionally, in 2009, the legislature amended SDCL 49-34A-101 to include recycled or conserved energy as a renewable resource for RRCEO compliance.

The RRCEO also requires that reports be filed with the Public Utilities Commission (Commission) that detail energy sales during the previous twelve-month period, and efforts to meet the RRCEO goal through 2015. SDCL 49-34A-105. As with the RRCEO itself, municipal utilities are permitted to aggregate their reporting requirements through their municipal power agency. SDCL 49-34A-105 was also amended by the legislature in 2009, requiring that the reporting occur annually on July 1, 2009, for information regarding the previous calendar year.

Given the power supply relationship between MRES and its members, MRES has assumed responsibility for the RRCEO and the associated reporting requirements on behalf of all of its South Dakota member communities. The following twelve South Dakota municipal utilities are members of MRES:

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<sup>1</sup> Calculation of the amount of electricity sold excludes from the baseline of retail sales that portion of MRES SD member sales supplied by WAPA pursuant to each member's hydropower allocation. SDCL 49-34A-103. Calculations used in this report are based on the total MRES energy sales at the town gate, pursuant to the supplemental power supply obligations of the Power Supply Agreement (S-1) contract between MRES and its members.



- Beresford
- Big Stone City
- Brookings
- Burke
- Faith
- Flandreau
- Fort Pierre
- Pickstown
- Pierre
- Vermillion
- Watertown
- Winner

In order to meet the South Dakota RRCEO, MRES has integrated the South Dakota objective into its resource planning in conjunction with similar requirements in Minnesota and North Dakota.<sup>2</sup> MRES allocates its renewable energy generation and renewable energy credits (RECs) based on S-1 energy sales by state.

### MRES Renewable Energy Resources

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. Currently, MRES contracts for the output of the following wind generating resources:<sup>3</sup>

- 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

MRES purchases the full output of these units, and owns all of the environmental attributes associated with such generation. These resources total 82.4 MW of nameplate capacity, most of which is dedicated to meeting the various state REOs.<sup>4</sup> MRES intends to meet its REO goals by

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<sup>2</sup> Minnesota's REO goal is 7% by 2010. Minn Stat. 216B.1691, Subd. 2. Beginning in 2012, Minnesota's voluntary REO becomes a mandated Renewable Energy Standard (RES) of 12%, which increases to 17% in 2016, 20% in 2020, and ultimately 25% by 2025. Minn Stat. 216B.1691, Subd. 2a. North Dakota's REO is nearly identical to that of South Dakota, imposing a voluntary goal of 10% by 2015. NDCC 49-02-28. Iowa does not presently have a renewable energy objective or mandate.

<sup>3</sup> MRES also purchases the output of two 750 kW turbines owned by member Moorhead Public Service (MPS) and located in Moorhead, Minnesota. The output of the MPS turbines is sold back to MPS, and MPS uses that renewable energy to supply its Capture the Wind<sup>®</sup> green pricing program required by Minn. Stat. Ann. §216B.169. This transaction results in a net zero purchase to MRES, and thus, MPS generation is not used by MRES for REO compliance purposes.

<sup>4</sup> Minnesota's green pricing statute, which previously required distribution utilities to offer customers the option to purchase renewable and high-efficiency energy at the utility's cost of acquiring the resources, is now a voluntary program, and MRES continues to provide its members in all states with this option through the MRES RiverWinds<sup>SM</sup> program. See Minn. Stat. §216B.169. The renewable energy generation that MRES supplies through its RiverWinds program is excluded from the generation available to meet other renewable energy program requirements such as the REO.

utilizing the contracted wind generation, associated renewable attributes, and conserved/recycled energy to meet the MRES SD RRCEO benchmark for each year.

The following Table 1 identifies the projections of MRES relating to compliance with the South Dakota RRCEO goal. Specifically, the table identifies the benchmarks that MRES will use in its efforts to progressively ramp up its renewable resources in the state to meet the statutory goal of 10% by 2015 for its South Dakota municipal utility members.

**Table 1: Projected MRES SD RRCEO Goals**

<b>Year<sub>1</sub></b>	<b>MRES SD S-1 Sales<sub>2,3</sub></b>  (MWh)	<b>SD RRCEO annual benchmark</b>  (%)	<b>MRES SD RRCEO</b>  (MWh)
2010	615,005	2	12,300
2011	634,463	3	19,034
2012	646,927	4	25,877
2013	662,788	6	39,767
2014	678,447	8	54,276
2015	693,696	10	69,370

Note 1 12 month period ending December 31

Note 2 Year 2010 lists actual sales; Years 2011-2015 list projected sales

Note 3 Town gate sales

The total actual retail sales of MRES to South Dakota customers in 2010 was 615,005 MWh, as set forth in the report attached as Exhibit A – “MRES SD RRCEO PROGRESS REPORT.” MRES established an M-RETS REO retirement subaccount to demonstrate compliance with the RRCEO requirements of SDCL 49-34A-101. In order to comply with those requirements, MRES transferred 12,300 RECs to its 2010 South Dakota REO subaccount.

MRES continues to evaluate opportunities for additional renewable resources to ensure continuing compliance with the REO goals of Minnesota, North Dakota, and South Dakota, and the future requirements of the Minnesota RES. In 2011 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.

In addition, MRES is in its fourth year with the Bright Energy Solutions<sup>®</sup> program which offers commercial, industrial and residential energy efficiency programs to MRES member communities. The Bright Energy Solutions programs are being implemented in South Dakota with the results for 2010 of MRES South Dakota members described in Table 2.

**Table 2: 2010 MRES SD  
Recycled/Conserved Energy Savings**

<b>Savings (MWh)</b>	<b>Savings (MW)</b>	<b>Incentives to Customers</b>
4,829	1.18	\$430,293.00

Obstacles to meeting the RRCEO

While MRES has expanded its renewable portfolio, and continues to pursue opportunities for additional resources, known obstacles to development continue to exist and new challenges often arise. MRES has experienced several challenges in obtaining additional renewable energy generation to serve its member municipal utilities. In the efforts of MRES to meet South Dakota’s renewable good faith effort over the past several years, the following major obstacles to additional development of renewable resources have been identified:

- a) Economic barriers. The additional, pancaked transmission cost imposed to deliver wind generated outside of the Midwest Independent Transmission System Operator (MISO) market footprint across the seam and into the MISO market continues to create a major economic barrier to development of the excellent wind resources located in North Dakota and South Dakota.
- b) Lack of transmission. The transmission infrastructure in the region needs to be significantly updated to support new generation, particularly intermittent wind generation. The cost to construct such facilities in relation to the typical size of renewable energy projects continues to make construction of needed facilities on a project-by-project basis cost prohibitive.
- c) Lack of incentives. Public Power entities face difficult financial challenges in owning renewable resources. The fact that the federal Production Tax Credit (PTC), Investment Tax Credit (ITC), and accelerated depreciation are not available to Public Power entities provides other utilities and developers advantages that are not available to MRES.

Efforts to Overcome Obstacles

MRES is employing alternatives to overcome some of the obstacles described above. To mitigate some of the economic barriers, MRES has executed power purchase agreements with developers for wind generation as one way to overcome the financial disincentive created by the unavailability of the federal PTC to Public Power entities. MRES continues to investigate

potential investments in renewable energy projects that will provide an adequate and reliable supply of energy to our members.

MRES is pursuing opportunities to address transmission limitations. MRES is actively involved in the CapX 2020 project to expand transmission infrastructure in the region. Officials broke ground in November, 2010 on the first of four CapX construction projects. MRES is participating in two of the four CapX Group 1 projects. This investment will improve electric-service reliability and expand access to renewable energy.

In addition, MRES continues to advocate for transmission policies that address the existing transmission barriers that currently deter development of wind resources in North Dakota and South Dakota. This includes actively communicating with those who operate the transmission systems (e.g. MISO, WAPA, etc.), and state and federal policymakers (e.g. Federal Energy Regulatory Commission, state legislatures, Congress, state utility commissions, Midwest Governor's Association, etc.).

#### Conclusion

MRES has developed a plan to meet the South Dakota Renewable, Recycled and Conserved Energy Objective 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 has committed to continue to pursue renewable energy as part of its balanced portfolio to supply its member communities with reliable and cost-effective power supply.

Respectfully submitted this 29th day of June, 2011.

MISSOURI RIVER ENERGY SERVICES



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Mrg Simon, Director, Legal  
Missouri River Energy Services  
3724 West Avera Drive  
PO Box 88920  
Sioux Falls, SD 57109-8920  
(605) 338-4042  
mrgsimon@mrenergy.com

**EXHIBIT A, MRES SD RRCEO PROGRESS REPORT JUNE 29 2011, Calendar Year 2010**

Please provide a value in each of the boxes below with an "X" in it.

**Company:**

Missouri River Energy Services on behalf of MRES municipal electric utility members in South Dakota: Beresford, Big Stone City, Brookings, Burke, Faith, Flandreau, Fort Pierre, Pickstown, Pierre, Vermillion, Watertown and Winner

<b>Calendar Year 2010 RRCEO Report</b>	<b>Value</b>	<b>Comments</b>
<b>Retail Sales</b>		
Total - All States (MWh)	2,050,157	(MRES portion only. Does not include WAPA.)
SD (MWh)	615,005	(MRES portion only. Does not include WAPA.)
<b>Generation Capacity Owned</b>		
Total - All States (MW)	625.7	Laramie River Station (282), Exira Iowa Peaking (138.9), Watertown Power Plant (47.2), Wind (includes Worthington MN--owned by WMMPA/MRES; Odin MN--PPA, and Marshall MN--PPA) (42.4), Municipal member generation (115.2). This does not include WAPA Power.
SD (MW)	57.2	Watertown Power Plant and municipal member generation
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)	82.4	Wind (includes Worthington MN--owned by WMMPA/MRES; Odin MN--PPA, Marshall MN--PPA and Rugby ND--PPA)
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	339	Per request of the SD PUC, MRES is reporting here the approximate MW received by our MRES members. MRES/WMMPA does not own the hydro-electric allocation rights. Also, per statute, WAPA power is not considered part of the baseline calculations for determining REO compliance.
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
<b>Total - All States (MW)</b>	<b>421.4</b>	
<b>SD (MW)</b>		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	100	Per request of the SD PUC, MRES is reporting here the approximate MW received by our MRES members. MRES/WMMPA does not own the hydro-electric allocation rights. Also, per statute, WAPA power is not considered part of the baseline calculations for determining REO compliance.
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
<b>Total SD (MW)</b>	<b>100</b>	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)	12,300	SD REO
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
<b>Total - All States (MWh)</b>	<b>12,300</b>	
<b>Generated in SD (MWh)</b>		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)	79,221	Minnesota REO (76,644), ND REO (1,373) and Green Pricing in all states (1,204)
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
<b>Total - All States (MWh)</b>	<b>79,221</b>	
<b>Generated In SD (MWh)</b>		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States	26,494 MWh	
SD	4,829 MWh	
<b>Conserved Capacity (MW)</b>		
Total - All States	5.25 MW	
SD	1.18 MW	



**MONTANA-DAKOTA**

**UTILITIES CO.**

*A Division of MDU Resources Group, Inc.*

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

June 30, 2011

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

Re: 2010 Annual Renewable Energy Objective

Dear Ms. Van Gerpen:

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., hereby submits its 2011 report regarding South Dakota's renewable energy objective as required by SDCL 49-34A-105.

Sincerely,

Tamie A. Aberle  
Regulatory Affairs Manager

**Montana-Dakota Utilities Co.  
Renewable Energy Objective  
Annual Report to the South Dakota Public Utilities Commission  
July 1, 2011 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**

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 demand side management programs, Company owned generation comprised of coal fired resources, natural gas peaking capacity, renewable resources and purchased power contracts. The states comprising Montana-Dakota's integrated electric system all have adopted either a renewable energy objective or renewable energy standard.

The Company's electric retail sales in the State of South Dakota for the twelve month period ending December 31, 2010 were 146,693 MWh, representing approximately 6 percent of the Company's integrated system retail sales. As described further below, Montana-Dakota's generating resources produced 135,651 renewable energy credits (REC's) in 2010 with 8,243 REC's applicable to South Dakota. This resulted in 5.6 percent of the South Dakota retail load served from renewable resources. Montana-Dakota is disposing of the REC's allocated to South Dakota when prudent to do so.

Montana-Dakota has installed a number of renewable energy projects since the Company commenced commercial operation of its first wind farm in early 2008. The Company will continue to evaluate wind and other renewable resources in support of the objective in South Dakota and will incorporate such resources as part of its generation portfolio when reasonable and economic to do so.

Following is a description of the generating resources that supplied the REC's in 2010.

## Renewable Resources

- In February 2008, Montana-Dakota commenced commercial operation of Diamond Willow, a 19.5 MW wind farm near Baker, Montana. An additional 10.5 MW Diamond Willow expansion project commenced commercial operation on June 28, 2010. In calendar year 2010, Diamond Willow produced 67,957 REC's. 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 2010, the Glen Ullin facility produced 37,165 REC's. 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 MW wind farm near Rhame, North Dakota. In calendar year 2010, Cedar hills produced 30,529 REC's. This wind resource is registered on the M-RETS system with a designated identifier of "M-584".

## Conserved Energy

In calendar year 2010, Montana-Dakota's conservation programs resulted in savings of 520 MWh.

The Commission's Reporting form is attached.



**Company:**

Montana-Dakota Utilities Co.

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	2,467,186	Montana-Dakota's Integrated System
SD (MWh)	146,693	
<b>Generation Capacity Owned</b>		
Total - All States (MW)	541.0	Montana-Dakota's Integrated System
SD (MW)	107.8	
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		
Wind	49.5	
Solar		
New Hydro		
Old Hydro		
Hydrogen		
Biomass		
Geothermal		
Recycled		
Other	7.5	Waste heat recovery unit
<b>Total - All States (MW)</b>	<b>57.0</b>	Montana-Dakota's Integrated System
<b>SD (MW)</b>		
Wind		
Solar		
New Hydro		
Old Hydro		
Hydrogen		
Biomass		
Geothermal		
Recycled		
<b>Total SD (MW)</b>	<b>0.0</b>	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind		
Solar		
New Hydro		
Old Hydro		
Hydrogen		
Biomass		
Geothermal		
Recycled		
<b>Total - All States (MWh)</b>	<b>0.0</b>	
<b>Generated in SD (MWh)</b>		
Wind		
Solar		
New Hydro		
Old Hydro		
Hydrogen		
Biomass		
Geothermal		
Recycled		
<b>Total SD (MWh)</b>	<b>0.0</b>	

**Company:**

Montana-Dakota Utilities Co.

Calendar Year 2010 RREO Report	Value	Comments
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)		
Wind	70,039	
Solar		
New Hydro		
Old Hydro		
Hydrogen		
Biomass		
Geothermal		
Recycled		
<b>Total - All States (MWh)</b>	<b>70,039</b>	
<b>Generated In SD (MWh)</b>		
Wind		
Solar		
New Hydro		
Old Hydro		
Hydrogen		
Biomass		
Geothermal		
Recycled		
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States	520	Montana-Dakota's Integrated System
SD	0.0	
<b>Conserved Capacity (MW)</b>		
Total - All States	7.1	Montana-Dakota's Integrated System
SD	0.0	



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August 31, 2011

Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities Commission  
523 E. Capitol  
Pierre, SD 57501

RE: NorthWestern Energy - Renewable, Recycled and Conserved Energy Objective 2010 Annual Report

Dear Ms. Van Gerpen:

NorthWestern Corporation, d.b.a. NorthWestern Energy (NorthWestern), is pleased to submit its 2010 Renewable, Recycled and Conserved Energy Objective (RREO) Annual Report in accordance with SDCL 49-34A-105.

NorthWestern continued to explore additional renewable energy resources during 2010 while evaluating their cost effectiveness for our customers. In early 2010, NorthWestern released a RFI to investigate the addition of another 25 MW of wind energy to our South Dakota portfolio. Unfortunately, the economic downturn of 2010 had a negative effect on NorthWestern's need for any additional generation. As a result, we were forced to withdraw the RFI as we could not justify the additional expense to our customers of adding a generation resource that was not needed. However, NorthWestern will continue to evaluate potential renewable resources for cost effectiveness and customer benefit as we work towards reaching the 10% by 2015 RREO goal.

The cost effectiveness of new generation resources, including renewables, must be carefully evaluated to ensure adequate cost protection for our customers. NorthWestern will continue to carefully evaluate available energy generation resources with an eye towards meeting our current supply demands, identifying how the cost of these resources will impact our customers, and meeting the RREO by 2015.

Thank you.

Sincerely,

A handwritten signature in black ink that reads "Pamela A. Bonrud".

Pamela A. Bonrud  
Director – SD/NE Government and Regulatory Affairs

CC: Brian Rounds, Staff Analyst  
Dennis Wagner, Manager - SD Wholesale Operations

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	7,221,115	Montana default supply sales plus South Dakota sales.
SD (MWh)	1,469,995	
<b>Generation Capacity Owned</b>		
Total - All States (MW)	535.54	Includes Coaststrip Four Unit in Montana added to summer SD rating.
SD (MW) Summer Rating	313.54	
SD (MW) Winter Rating	335.15	
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)	0	
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MW)	0	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated in All States (MWh)	0	
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MWh)	0	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated in All States (MWh)	583,403	Montana REC's retired to meet 2010 RPS-all based on Judith Gap wind production.
Wind	583,403	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MWh)	583,403	
<b>Generated in SD (MWh)</b>		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass	0	
Geothermal	0	
Recycled	0	
Total - All States (MWh)	0	
<b>Conserved Energy &amp; Capacity</b>		
Total - All States (MWh)	80,395	Montana DSM program results in 2010.
SD	0	
Conserved Energy (MWh)	80,395	
Total - All States	0	
Conserved Capacity (MW)	9.2	
SD	0	
Total - All States	0	

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June 27, 2011

Ms. Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities Commission  
Capitol Building, 1st floor  
500 East Capitol Avenue  
Pierre, SD 57501-5070

**Re: In the Matter of Otter Tail Power Company's Renewable, Recycled, and Conserved Energy Objective Compliance Report to the South Dakota Public Utilities Commission**

Dear Ms. Van Gerpen:

Enclosed you will find the report of Otter Tail Power Company, to the South Dakota Public Utilities Commission on the Company's efforts and status on compliance with the South Dakota Renewable, Recycled, and Conserved Energy Objective contained in Statutes §49-34A-94 through §49-34A-96 and §49-34A-101 through §49-34A-106. This report is required annually commencing on July 1, 2009 and continuing through July 1, 2017.

If you have any questions regarding this filing, please contact me at 218-739-8693 or [kkaseman@otpc.com](mailto:kkaseman@otpc.com).

Sincerely,

/s/ KERRY KASEMAN  
Kerry Kaseman  
Resource Planner

wao  
Enclosures  
By electronic filing

**Renewable, Recycled, and Conserved Energy  
Objective Compliance Report  
to the  
South Dakota Public Utilities Commission**



**Report RP11-04  
Resource Planning Department  
June 2011**

**By: Kerry Kaseman**

## **PREFACE**

This document is the report of Otter Tail Power Company, to the South Dakota Public Utilities Commission on the Company's efforts and status on compliance with the South Dakota Renewable, Recycled, and Conserved Energy Objective contained in Statutes §49-34A-94 through §49-34A-96 and §49-34A-101 through §49-34A-106. This report is required annually commencing on July 1, 2009 and continuing through July 1, 2017.

Questions and comments regarding the information and data contained herein should be addressed to Kerry Kaseman at 218-739-8693 or [kkaseman@otpc.com](mailto:kkaseman@otpc.com).

## TABLE OF CONTENTS

PREFACE .....	2
TABLE OF CONTENTS .....	3
INTRODUCTION.....	4
JURISDICTIONAL REQUIREMENTS.....	5
Minnesota.....	5
North Dakota.....	6
South Dakota.....	6
MIDWEST RENEWABLE ENERGY TRACKING SYSTEM .....	7
RENEWABLE AND RECYCLED ENERGY RESOURCES .....	8
SOUTH DAKOTA RENEWABLE AND RECYCLED ENERGY .....	9
FORECAST OF FUTURE REO/RES COMPLIANCE .....	11
BARRIERS TO REO/RES COMPLIANCE.....	13
SUMMARY .....	15
APPENDIX A – RENEWABLE AND RECYCLED ENERGY RESOURCES.....	16
APPENDIX B - CALENDAR YEAR 2010 RREO REPORT .....	18



## INTRODUCTION

Pursuant to South Dakota Codified Laws §49-34A-105, Otter Tail Power Company (Otter Tail or Company), makes this information filing electronically to the South Dakota Public Utilities Commission. This filing is the Company's third annual report on efforts to meet the state renewable, recycled, and conserved energy objective that 10% of all electricity sold at retail be obtained from renewable, recycled, and conserved energy sources by 2015.<sup>1</sup>

As the following pages of this report demonstrate, Otter Tail is well on the way to implementing renewable resources as part of its diverse resource portfolio and expects to be in full compliance of any and all renewable energy objectives and standards within all three state jurisdictions in which Otter Tail serves.

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<sup>1</sup> South Dakota Codified Law §49-34A-101.

## JURISDICTIONAL REQUIREMENTS

Otter Tail serves retail load in Minnesota, North Dakota, and South Dakota. All three state jurisdictions have some sort of renewable energy objective (REO) or renewable energy standard (RES). Discussion of compliance efforts with any single jurisdiction also requires a discussion of the other two jurisdictions so that a complete understanding of the Company's compliance efforts can be obtained. The following sections describe the requirements in each of the state jurisdictions.

### Minnesota

Otter Tail is required to make a good faith effort to comply with the state REO through 2011. Beginning with 2012 the requirement switches to an RES. The state requirements<sup>2</sup> increase in a step-wise fashion, consisting of:

- 2005 – 1% of retail sales
- 2010 – 7% of retail sales
- 2012 – 12% of retail sales
- 2016 – 17% of retail sales
- 2020 – 20% of retail sales
- 2025 – 25% of retail sales.

Eligible energy technologies for compliance include solar, wind, hydroelectric with a capacity of less than 100 MW, hydrogen,<sup>3</sup> or biomass. Biomass includes landfill gas, anaerobic digestion, and mixed municipal solid waste or refuse-derived-fuel from mixed municipal solid waste as a primary fuel. Electricity generated by the combustion of biomass through co-firing with other fuels counts up to the percentage amount of biomass fuel relative to total fuel, only if the generating facility was constructed in compliance with new source performance standards promulgated under the federal Clean Air Act or if the facility employs the maximum achievable or best available control technology for that type of facility.

---

<sup>2</sup> These REO and RES requirements only apply to utilities without nuclear generating assets. Utilities with nuclear generating assets have a more aggressive standard as detailed in Minn. Stat. §216B.1691.

<sup>3</sup> Provided that after January 1, 2010 the hydrogen must be generated from the other eligible energy technologies listed.

### North Dakota

The state REO is 10% of retail sales by the year 2015, and includes both renewable energy and recycled energy. The calculation contains a provision to reduce the amount of retail sales by any hydroelectric energy that cannot be counted toward the REO.<sup>4</sup> Renewable and recycled energy includes electricity generated from solar, wind, biomass,<sup>5</sup> geothermal, hydrogen,<sup>6</sup> hydroelectric (must be from a facility with an in-service date of no earlier than January 1, 2007 or from efficiency improvements to a facility existing as of August 1, 2007), and recycled energy systems producing electricity from currently unused waste heat resulting from combustion or other processes into electricity and which do not use an additional combustion process. Recycled energy does not include any system whose primary purpose is the generation of electricity.

### South Dakota

The state REO is 10% of retail sales by the year 2015, and includes renewable, recycled, and conserved energy.<sup>7</sup> The calculation contains a provision to reduce the amount of retail sales by any hydroelectric energy from a facility with an in-service date prior to July 1, 2008.<sup>8</sup> Renewable and recycled energy include electricity generated from solar, wind, biomass,<sup>9</sup> geothermal, hydrogen,<sup>10</sup> hydroelectric (statutes imply it must be from a facility with an in-service date of no earlier than July 1, 2008), and recycled energy systems producing electricity from currently unused waste heat resulting from combustion or other processes into electricity and which do not use an additional combustion process. Recycled energy does not include any system whose primary purpose is the generation of electricity. In the case of conserved energy, the objective will be measured by methods established by rules promulgated by the commission pursuant to chapter 1-26.

---

<sup>4</sup> North Dakota Century Code §49-02-30.

<sup>5</sup> Including agricultural crops and wastes and residues, wood and wood wastes and residues, animal wastes, and landfill gas.

<sup>6</sup> Provided that the hydrogen is generated from a source listed in this section of North Dakota Century Code §49-02-25.

<sup>7</sup> South Dakota Codified Laws §49-34A-101.

<sup>8</sup> South Dakota Codified Laws §49-34A-103.

<sup>9</sup> Includes agricultural crops and wastes and residues, wood and wood wastes and residues, animal and other degradable organic wastes, and landfill gas.

<sup>10</sup> Provided that the hydrogen is generated from a source listed in this section of South Dakota Codified Laws §49-34A-94.

## MIDWEST RENEWABLE ENERGY TRACKING SYSTEM

Otter Tail has registered almost all renewable energy resources within the Midwest Renewable Energy Tracking System (M-RETS). There is a number of small customer owned units, generally less than 50 kW each, which the Company has not registered. The customers self-serve a portion of their own load with Otter Tail receiving the remaining surplus energy. For 2010, the amount of energy from unregistered renewable energy resources was about 475 MWh.

Otter Tail has developed an account structure within M-RETS to help segregate Renewable Energy Certificates (RECs) by type and usage. For customer-owned facilities that self-serve customer load, all of the generation is reported within M-RETS. Otter Tail then transfers RECs associated with the energy used to self-serve load into an account in the customer's name, for their use as they deem appropriate. The RECs associated with energy purchased by Otter Tail will remain in the Otter Tail account unless the RECs are sold.

The Otter Tail M-RETS accounts include a retirement account by state jurisdiction by year. Thus it is easy to verify the amount of RECs retired annually for compliance with each state's requirements. RECs associated with **TailWinds**, the Company's green pricing program, are retired into separate state jurisdiction accounts to ensure proper accounting for the green pricing tracker balance.

Retired RECs will be tracked on a calendar basis. While Otter Tail began recording energy from renewable energy resources within M-RETS in the last half of 2007, when the M-RETS system first became operational, the Company began full use of the M-RETS system for reporting verification beginning with the first full calendar year commencing January 1, 2008.

Through 2010, Otter Tail did not purchase any RECs. All energy used for compliance was energy generated by Otter Tail or energy purchased by Otter Tail under power purchase agreements that include renewable energy attributes.

During 2010, Otter Tail sold 251,372 RECs. These RECs had a 2008, 2009, and 2010 vintage, and were created by wind facilities located in the state of North Dakota and owned by Otter Tail or obtained by Otter Tail through wind energy purchased power agreements that include renewable energy attributes.

## **RENEWABLE AND RECYCLED ENERGY RESOURCES**

The breakdown of existing and potential future renewable energy resources for Otter Tail, to the extent known, at the time of this report are shown in Appendix A. The data provided includes the name of the facility, kW rating, vintage, technology and energy source, whether owned or through a PPA, and state eligibility. Resources are listed in Appendix A if they are resources planned in Otter Tail's Integrated Resource Plan or are customer-owned. Customer-owned facilities are included in Appendix A if an interconnection agreement has been signed or there is agreement on key terms of a purchase power agreement. For some customer-owned facilities, the customer name is not provided in order to protect customer information.

## SOUTH DAKOTA RENEWABLE AND RECYCLED ENERGY

The following data is for the January 1, 2010 – December 31, 2010 time period. The data assumes that energy from renewable energy resources is allocated across the Otter Tail system based on retail sales kWh. The exception to this allocation methodology is that *TailWinds* energy is based on the amount of wind energy sold under the green pricing program in South Dakota. Pursuant to South Dakota Codified Law §49-34A-103, the hydroelectric energy shown in the table below does not count toward compliance, but can be subtracted from retail sales before calculating the percentage of compliance.

<b>South Dakota Renewable and Recycled Energy MWh January 1, 2010 – December 31, 2010</b>			
<b>Resource</b>	<b>Total kWh</b>	<b>ND Percentage<sup>11</sup></b>	<b>ND kWh</b>
FPLE ND Wind II	53,816,490	10.17%	5,472,951
Customer A	869,394	10.07%	87,561
FPLE Langdon	69,897,742	10.16%	7,103,695
OTP Langdon	141,152,441	10.15%	14,331,382
Ashtabula Wind	145,714,674	10.15%	14,795,605
Luverne Wind	166,665,118	10.16%	16,925,475
South Dakota <i>TailWinds</i>	190,015	100.0%	190,015
OTP Owned Hydro	25,631,489	10.13%	2,597,686
Manitoba Hydro	68,351,000	10.02%	6,851,294 <sup>12</sup>
WAPA Hydro	26,983,782	10.13%	2,734,649 <sup>13</sup>

<sup>11</sup> Energy is allocated to jurisdictions based on monthly jurisdictional retail sales.

<sup>12</sup> This hydroelectric includes only energy under the firm 50 MW On-peak contract which expired on April 30, 2010, which is specified as coming from hydro facilities.

<sup>13</sup> The WAPA hydroelectric energy is an allocation to five Native American tribes.

<b>South Dakota Renewable and Recycled Energy Compliance January 1, 2010 – December 31, 2010</b>	
South Dakota Retail Sales	433,665,031 kWh
Less Hydro Energy Adjustment	-12,183,628 kWh
Net SD Retail Sales for REO Compliance	421,481,403 kWh
South Dakota Renewable Energy	58,906,684 kWh
<sup>14</sup> SD REO Compliance Percentage Potential	13.88%

The data shows that Otter Tail is well positioned to comply with the South Dakota statute. The level of compliance will increase as the 2011-2025 Otter Tail resource plan includes the potential addition of 50 MW of nameplate wind generation capacity to be operational by the end of 2012. Otter Tail will sell excess RECs and/or bank RECs for future use.

---

<sup>14</sup> OTP may sell RECs to third parties. RECs sold to third parties would not be eligible for regulatory compliance.

## **FORECAST OF FUTURE REO/RES COMPLIANCE**

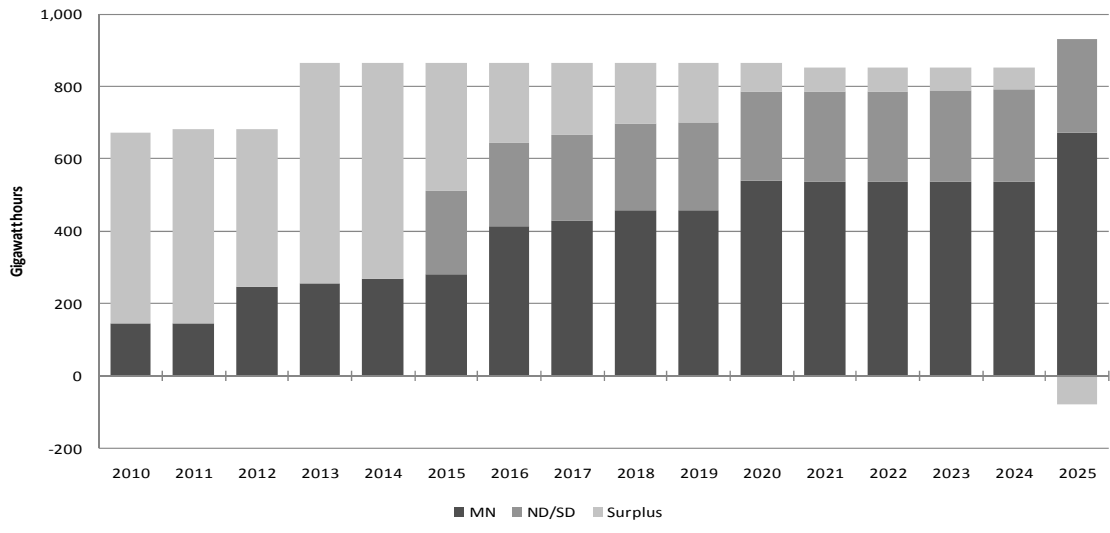
Combined with energy output from the 49.5 MW Luverne Wind Farm, the 48 MW the Company owns at the Ashtabula Wind Farm, energy output from the 60 MW the Company owns or purchases from the Langdon Wind Farm, and an additional 50 MW planned to be operational at the end of 2012, Otter Tail is well positioned to comply with the renewable energy objectives and standards in all three states.

The following graph shows the Company's expected available energy from renewable energy resources compared to the REO/RES requirements going out to 2025. The graph assumes that all RECs are counted for compliance in the year they are generated and are not banked for future compliance use. The graph includes 50 MW planned to be operational at the end of 2012. The graph does not include new customer-owned facilities that may be developed. Otter Tail is seeing significant customer interest in owning wind generation.

The North Dakota and South Dakota requirements are very similar and are lumped together in the graph. As demonstrated in the graph, Otter Tail expects by 2013 to have sufficient energy from renewable energy resources available to comply with state REO/RES requirements until beyond 2024.



**Graph I**  
**Renewable Energy Available vs REO/RES Requirements**  
**Does Not Include Any Banking of Allowances**  
**As of July 1, 2010**



## **BARRIERS TO REO/RES COMPLIANCE**

At this time, Otter Tail Power Company does not see any substantial obstacles to meeting the South Dakota Renewable, Recycled, and Conserved Energy Objective. The Company has been and continues to be well ahead of the current objective. Rate impacts or reliable integration of higher levels of intermittent resources could influence achievement of the objective.

Looking ahead, the most significant potential obstacles from our perspective fall into three basic categories, including:

- **Transmission**
  - **Interconnection queue** - The Midwest Independent Transmission System Operator (MISO) interconnection queue has been a major impediment to the development of any resource because interconnection queue process timelines don't match up well with project development timelines.
  - **Transmission Congestion** - As more and more wind generation is developed in the upper Midwest, the transmission system continues to become more and more congested. This congestion creates issues with both economic dispatch of wind generation and the siting of new wind farms.
  
- **Economic and financing issues** - The recent economic downturn is hampering the development of renewable resources because there is less capital available at a higher cost than before the downturn.
  
- **Retail Sales Uncertainty** - Planning for the REO-RES requirements requires forecasting retail sales since the requirements are based on a percentage of retail sales. There are many factors that go into forecasting retail sales and there is some uncertainty surrounding those factors. One such factor is energy efficiency and conservation. The 2011-2025 Otter Tail integrated resource plan selects significant levels of economic and achievable energy efficiency and conservation over the planning horizon. Energy efficiency, by reducing load, can reduce the amount of renewable energy credits that must be secured for compliance with REO-RES requirements in each of the Company's respective jurisdictions. If the conservation levels are not realized as planned, the annual REO-RES requirements will be greater and consume more of the Company's

banked renewable energy certificates and/or annual generation. Therefore, the barriers to REO-RES compliance are tied to any barriers in achieving energy efficiency objectives.

Potential solutions under consideration by OTP to the obstacles described:

- Transmission - OTP is a part of the CAPX 2020 group proposing new major high voltage transmission. If approved and constructed, the CAPX 2020 transmission additions will not alone resolve transmission congestion. CAPX 2020 is studying the situation to determine what other new transmission resources are likely to be required. OTP also is following MISO's Multi-value Projects ("MVP"). One criteria to being designated as an MVP project is to help meet states renewable objectives and standards. Some projects in this region may get MVP status and result in a greater build-out of renewable resources that could be used to meet renewable energy objectives and standards.
- Economic and financing issues – OTP has taken steps to maintain or improve its external credit ratings, such as forming a holding company effective July 1, 2009, which may foster lower financing costs for the utility. Other items that the Company pursues are timely cost recovery on investments in order to match revenues with the capital investment.
- Retail Sales Uncertainty – OTP continually updates its load forecast which will allow it to adapt should load or conservation levels change materially from forecast.
- Early Adaptor - OTP has added large quantities of renewable energy resources over the past few years. OTP is well ahead of REO-RES compliance deadlines in all three jurisdictions it serves. With the expected addition of a 50 MW wind farm in 2012/2013, OTP expects to have sufficient renewable energy resources available to comply with state REO-RES requirements until beyond 2024.

## SUMMARY

Otter Tail has stepped forward with its development of renewable energy resources for a variety of reasons and is completing new renewable energy resources ahead of REO/RES requirements. The 2006-2020 Otter Tail integrated resource plan called for 160 MW of new wind generation. Otter Tail has completed that amount of wind generation addition to the system. The 2011-2025 Otter Tail integrated resource plan calls for an additional 50 MW of new wind generation to be operational at the end of 2012. All of these wind additions have been part of an economic least cost mix of resources and have not been added for the sole purpose of complying with renewable energy objectives or standards.

Part of the reason why the capacity expansion modeling is showing wind additions as economic is because of the federal PTC and wind development incentives in North Dakota. The PTC reduces the cost of wind generation by about 33% and is currently set to expire after 2012. The wind development incentives in North Dakota also improve economics and have sunset provisions. OTP has a large portion of its energy needs met from market purchases and therefore adding low cost wind generation has allowed it to offset a portion of the market purchase costs.

With the current renewable resources and the 50 MW planned for 2012, additional resources for REO/RES compliance will likely not be needed until sometime after 2024. However, additional renewable resources may be added earlier if they are economic. There are many uncertainties going forward with all forecasts, including load growth, conservation efforts, and customer-owned renewable resources but Otter Tail remains well ahead of renewable requirements and therefore is positioned to be in compliance for many years to come.

**APPENDIX A – RENEWABLE AND RECYCLED ENERGY RESOURCES**

<b>Existing Renewable Energy Resources</b>							
<b>Name</b>	<b>State</b>	<b>kW Rating</b>	<b>Vintage</b>	<b>Technology</b>	<b>Power Source</b>	<b>Owned/PPA</b>	<b>State Eligibility</b>
TailWinds	MN and SD	1,890	2001-2003	Wind	Wind	PPA	TailWinds <sup>15</sup>
FPLE ND Wind II	ND	21,000	2003	Wind	Wind	PPA	MN, ND, SD
FPLE Langdon	ND	19,500	2007	Wind	Wind	PPA	MN, ND, SD
OTP Langdon	ND	40,500	2008	Wind	Wind	Owned	MN, ND, SD
Ashtabula Wind	ND	48,000	2008	Wind	Wind	Owned	MN, ND, SD
Luverne Wind	ND	49,500	2009	Wind	Wind	Owned	MN, ND, SD
Various Small Solar Producers	MN	7	2008-2010	Photovoltaic	Sun	PPA	MN, ND, SD
Various Small Wind Producers	MN	2,112	1997-2010	Wind	Wind	PPA	MN, ND, SD
Biogas Producer	MN	2,130	2010	Internal Combustion	Biogas	PPA	MN, ND, SD
Various Small Wind Producers	ND	730	1985-2008	Wind	Wind	PPA	MN, ND, SD
Various Small Solar Producers	SD	34	2010	Photovoltaic	Sun	PPA	MN, ND, SD
Various Small Wind Producers	SD	4	2009	Wind	Wind	PPA	MN, ND, SD

<sup>15</sup> Wind energy purchased from EMS in SD and Hendricks and Borderline in MN. At this time TailWinds energy counts in ND and SD, but not MN. TailWinds is the Company’s green pricing tariff and the energy is counted only as customers purchase the energy, not as it is generated.

<b>Existing Renewable Energy Resources (Continued)</b>							
Bemidji Hydro	MN	200	1907	Hydro	Water	Owned	MN
Taplin Gorge	MN	500	1925	Hydro	Water	Owned	MN
Hoot Lake	MN	800	1914	Hydro	Water	Owned	MN
Pisgah	MN	700	1918	Hydro	Water	Owned	MN
Wright	MN	500	1922	Hydro	Water	Owned	MN
Dayton Hollow	MN	1,000	1909	Hydro	Water	Owned	MN
WAPA Hydro	Several	5,566	Various	Hydro	Water	PPA	None
Manitoba Hydro	Manitoba	50,000	Various	Hydro	Water	PPA	None
<b>Planned and Expected Future Renewable Energy Resources</b>							
<b>Name</b>	<b>State</b>	<b>kW Rating</b>	<b>Vintage</b>	<b>Technology</b>	<b>Power Source</b>	<b>Owned/PPA</b>	<b>State Eligibility</b>
IRP Wind	Undetermined	50,000	Late 2012	Wind	Wind	Undetermined	MN, ND, SD
Customer B	MN	150	2011	Wind	Wind	PPA	MN, ND, SD
Customer C	MN	20	2011	Wind	Wind	PPA	MN, ND, SD
Customer D	MN	4,500	2011	Steam	MSW	PPA	MN
Customer A	MN	1,650	2011	Wind	Wind	PPA	MN, ND, SD

## APPENDIX B - CALENDAR YEAR 2010 RREO REPORT

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	4,283,920	
SD (MWh)	433,665	
<b>Generation Capacity Owned</b>		
Total - All States (MW)	805.7	Based on Net Dependable Capacity of owned generation facilities and does not count any contracted capacity.
SD (MW)	279.2	Based on Net Dependable Capacity of owned generation facilities and does not count any contracted capacity.
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		
Wind	138.0	
Solar	-	
New Hydro	-	
Old Hydro	3.7	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total - All States (MW)</b>	<b>141.7</b>	
SD (MW)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MW)</b>	<b>-</b>	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		No Renewable Energy Credits were Retired for SD for 2010.
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total - All States (MWh)</b>	<b>-</b>	
Generated in SD (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	<b>-</b>	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)		
Wind	147,584	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total - All States (MWh)</b>	<b>147,584</b>	
Generated In SD (MWh)		
Wind	-	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	<b>-</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States	35,581	
SD	2,472	
<b>Conserved Capacity (MW)</b>		
Total - All States	6.6	
SD	0.7	



500 West Russell Street  
Sioux Falls, South Dakota 57101-0988

June 30, 2011

**--Via Electronic Filing--**

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

Re: 2011 Report of Northern States Power Company on Meeting the  
Renewable, Recycled and Conserved Energy Objective

Dear Ms. Van Gerpen:

In accordance with South Dakota Codified Laws 49-34A-105, Northern States Power Company, a Minnesota corporation (“Xcel Energy” or the “Company”) provides the attached 2011 report on meeting the state’s renewable, recycled and conserved energy objective.

Based on using 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 is 5.5 million megawatt-hours. This represents the energy we provided to our customers in 2010 that was generated by renewable generation facilities as defined by South Dakota Codified Laws 49-34A-94.

After restricting the renewable energy from hydro resources to only those with an in-service date on or after July 1, 2008 and adjusting retail energy sales as provided in Chapter 49-34A-103, we calculate that approximately 10.7 percent of the energy provided to South Dakota customers in 2010 was from renewable energy resources. Thus percent reflects a reduction from the 2009 level of 11.3 percent due to the resolution of the assignment of “silent RECs” pertaining to those wind contracts that did not contain specific REC provisions. In 2009 we included all potential silent RECs in the REO calculation. This year, we no longer include in the calculation the silent RECs associated with PURPA contracts (and a few others) that were awarded



to the generator owners. We continue, however, to include those RECs from wind contracts that we have signed amendments for ownership of the RECs (Lake Benton and FibroMinn), but the amendments are pending approval with the MPUC.

Currently, transmission capacity and the MISO Generator Interconnection Process remain as challenges to interconnecting wind projects. However we do not believe that these issues will impact our ability to meet the REO going forward since enough renewable projects with available transmission have moved through the MISO Generator Interconnection Process. In addition, MISO continues to make improvements to the Generator Interconnection Process and to how costs of transmission upgrades are allocated which should allow renewable projects to interconnect in a more timely fashion. The ability to interconnect projects in a more timely manner should also benefit our ability to meet the REO going forward.

Note too that there is currently some slackness in the wind turbine market. However, we believe that the market for wind turbines will be cyclical going forward. For example, the Production Tax Credit is currently set to expire again in 2012. Thus, 2012 could potentially bring difficulties in turbine availability and pricing as developers rush to complete projects prior to the expiration of the credit.

Please note that no renewable energy credits (“RECs”) have been retired to date to comply with the South Dakota renewable energy objective (“REO”).

Attachment 1 includes the following information as requested by the Commission:

- Retail Sales (MWh) - Total & SD-based
- Generation Capacity Owned (MW) - Total & SD-based by technology<sup>1</sup>
- Renewable Generation Capacity Owned (MW) - Total & SD-based by technology<sup>1</sup>
- Renewable Generation with RECs Retired for SD (MWh)- Total & SD-based by technology<sup>1</sup>
- Renewable Generation with RECs Retired for other states/purposes (MWh)- Total & SD-based by technology<sup>1</sup>
- Conserved Energy (MWh) and Capacity (MW)

Attachment 2 presents the renewable energy calculations.

Since the Company does not currently have any energy efficiency programs approved in the state of South Dakota, the conserved capacity and energy as shown on Attachment 1 for the State of South Dakota are based on our demand side management programs.

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<sup>1</sup> As Defined in SDCL 49-34-94.

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. As of this report date, we have not made any REC sales.

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 and exceed 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 Kari Chilcott-Clark at (303) 571-6905.

SINCERELY,

A handwritten signature in cursive script, appearing to read "J C Wilcox".

JAMES C. WILCOX  
Manager, Government & Regulatory Affairs

ENCLOSURES

Company:  
Northern States Power

Calendar Year 2010 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	42,174,554	
SD (MWh)	2,000,289	
<b>Generation Capacity Owned/Purchased<sup>1</sup></b>		
Total - All States (MW)	12,400	
SD (MW)	460	Angus Anson - 406 MW; MinnDakota Wind (2) - 54 MW
<b>Renewable Generation Capacity Owned/Purchased</b>		
Total - All States (MW)		
Wind	1,460	Includes capacity for Windsource program
Solar	3	
New Hydro	3	Dells Upgrade of units 2 - 4, Dec 2008 - July 2009
Old Hydro	267	
Hydrogen	-	
Biomass/RDF/Landfill Gas	258	Capacity from all steam turbines is presented for mixed fuel plants; only the renewable generation creates RECs
Geothermal	-	
Recycled	-	
<b>Total - All States (MW)</b>	<b>1,990</b>	
<b>SD (MW)</b>		
Wind	54	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass/RDF/Landfill Gas	0	
Geothermal	0	
Recycled	0	
<b>Total SD (MW)</b>	<b>54</b>	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass/RDF/Landfill Gas	0	
Geothermal	0	
Recycled	0	
<b>Total - All States (MWh)</b>	<b>0</b>	
<b>Generated in SD (MWh)</b>		
Wind	0	
Solar	0	
New Hydro	0	
Old Hydro	0	
Hydrogen	0	
Biomass/RDF/Landfill Gas	0	
Geothermal	0	
Recycled	0	
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Renewable Energy Credits Retired for Other States<sup>3</sup></b>		
Total - Generated In All States (MWh)		
Wind	3,849,045	
Solar	-	
New Hydro	-	
Old Hydro	1,014,735	
Hydrogen	-	
Biomass/RDF/Landfill Gas	468,022	
Geothermal	-	
Recycled	-	
<b>Total - All States (MWh)</b>	<b>5,331,802</b>	
<b>Generated In SD (MWh)</b>		
Wind	279,604	
Solar	-	
New Hydro	-	
Old Hydro	-	
Hydrogen	-	
Biomass	-	
Geothermal	-	
Recycled	-	
<b>Total SD (MWh)</b>	<b>279,604</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)<sup>4</sup></b>		
Total - All States	472,259	
SD	13	Conserved Energy as a percent of retail sales is equal to 0.0006%
<b>Conserved Capacity (MW)<sup>5</sup></b>		
Total - All States	1,141	
SD	42	

Footnotes:

<sup>1</sup> Includes owned generation (nameplate capacity) and purchased generation (contracted summer capacity)

<sup>2</sup> "Silent" RECs are related to renewable energy purchases initiated prior to the renewable energy credits

market. Capacity from PPAs in which the RECs have been assigned to the generator owner through negotiated agreements or MPUC Docket E-002/M-08-440 are not included.

<sup>3</sup> RECs present demonstrate RECs retired for WI RPS and MN RES compliance. It does not include RECs retired on behalf of WI Wholesale Customers

Retired RECs are a combination of vintages 2007, 2008, 2009, and 2010

<sup>4</sup> Conserved Energy expressed as the annualized energy savings resulting from utility DSM program achievements in 2010.

<sup>5</sup> Conserved Capacity expressed as the available load management system peak reduction plus the annualized capacity savings resulting from utility energy-efficiency program achievements in 2010.

## South Dakota Renewable, Recyclable and Conserved Energy Objective 2010 Status Report

### System Total Generation (and Jurisdictional Allocator)

	<u>Energy (MWh)</u>	<u>Percentage</u>
1 MN	32,914,233	73.95964%
2 ND	2,341,743	5.26199%
3 SD	2,034,397	4.57137%
4 WI/MI	<u>7,212,592</u>	16.20699%
5 NSP System	44,502,965	

### System Renewable Generation<sup>1</sup>

<u>Source</u>	<u>M-RETS RECs</u>	<u>"Silent" RECs</u>	<u>Total</u>
6 Wind	3,186,750	250,467	3,437,216
7 Solar	778	-	778
8 Hydro	948,325	-	948,325
9 Biomass\Wood\Landfill Gas	505,352	409,575	914,927
10 Refuse-Derived Fuel (RDF)	<u>208,153</u>	-	<u>208,153</u>
11 NSP System	4,849,358	660,042	5,509,400

### SD RREO Renewable Energy

12 SD % of System Total Generation:	4.57137%	4.57137%	
13 System RECs allocated to SD:	221,681	30,173	251,854
14 Remove Old Hydro (per SD RREO):	<u>(43,350)</u>	-	<u>(43,350)</u>
15 SD RREO qualifying renewable energy:	178,331	30,173	208,504
16 SD retail sales:	2,000,289	2,000,289	2,000,289
17 Remove SD Hydro allocation (per SD RREO)	<u>(43,351)</u>	-	<u>(43,351)</u>
18 SD REO adjusted retail sales:	1,956,938	2,000,289	1,956,938
19 <b>SD REO renewable energy %:</b>	<b><u>9.1%</u></b>	<b><u>1.5%</u></b>	<b><u>10.7%</u></b>
20 <b>RECs retired for 2010 RREO compliance</b>			<b>0</b>

1 All of the renewable generation facilities owned by Xcel Energy have been registered in the Midwest Renewable Energy Tracking System ("M-RETS"). In addition, all of the RECs from the Company's purchased power agreements ("PPAs") for renewable energy that specify the Company's rights to the RECs are registered in M-RETS. "Silent" RECs included in this report are related to renewable energy PPAs signed prior to the establishment of the M-RETS market for which the Company has since negotiated the rights to, but are pending approval with the MPUC.

L3

L10 x L11  
-L7 x L11

FERC Form 1  
-L7 x L11

(L14/L17)

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**Appendix B**  
**Form Distributed to Utilities**

Please provide a value in each of the boxes below with an "X" in it.

Company:  
X

Calendar Year 2008 RREO Report	Value	Comments
<b>Retail Sales</b>		
Total - All States (MWh)	X	
SD (MWh)	X	
<b>Generation Capacity Owned</b>		
Total - All States (MW)	X	
SD (MW)	X	
<b>Renewable Generation Capacity Owned</b>		
Total - All States (MW)		
Wind	X	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total - All States (MW)</b>	<b>0</b>	
SD (MW)		
Wind	X	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total SD (MW)</b>	<b>0</b>	
<b>Renewable Energy Credits Retired for SD</b>		
Total - Generated In All States (MWh)		
Wind	X	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total - All States (MWh)</b>	<b>0</b>	
Generated in SD (MWh)		
Wind	X	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Renewable Energy Credits Retired for Other States</b>		
Total - Generated In All States (MWh)		
Wind	X	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total - All States (MWh)</b>	<b>0</b>	
Generated In SD (MWh)		
Wind	X	
Solar	X	
New Hydro	X	
Old Hydro	X	
Hydrogen	X	
Biomass	X	
Geothermal	X	
Recycled	X	
<b>Total SD (MWh)</b>	<b>0</b>	
<b>Conserved Energy &amp; Capacity</b>		
<b>Conserved Energy (MWh)</b>		
Total - All States	X	
SD	X	
<b>Conserved Capacity (MW)</b>		
Total - All States	X	
SD	X	

# **Appendix C**

## **Summarized Utility Responses**



	Black Hills Power	MidAmerican Energy	Montana-Dakota Utilities	NorthWestern Energy	Other Tail Power	Xcel Energy	Basin Electric Power Cooperative	East River Electric Power Cooperative	Missouri River Energy Services	Heartland Consumers Power District	Total
<b>Retail Sales</b>											
Total - All States (MWh)	2,172,029	21,711,926	2,467,186	7,221,115	4,283,920	42,174,554	16,522,428	3,136,435	2,050,157	886,254	102,626,004
SD (MWh)	1,442,669	215,867	146,693	1,469,995	433,665	2,000,289	1,069,784	2,739,613	615,005	203,179	10,336,759
% Retail Sales in SD	66.42%	0.99%	5.95%	20.36%	10.12%	4.74%	6.47%	87.35%	30.00%	22.93%	10.07%
<b>Generation Capacity Owned</b>											
Total - All States (MW)	491	6,974	541.0	535.54	805.7	12,400	2,998	0	625.7	55	25,426
SD (MW)	175	59	107.8	335.15	279.2	460	262	0	57.2	4	1,739
% Capacity in SD	35.64%	0.85%	19.93%	62.58%	34.65%	3.71%	8.74%	NA	9.14%	7.27%	6.84%
<b>Renewable Generation Capacity Owned</b>											
Total - All States (MW)											
Wind	35	1,284	49.5	274.018	138	1,460	551.5	See BEPC	82.4		3,874.418
Solar				0.01		3					3.01
New Hydro						3					3
Old Hydro	4	4			3.7	267			339		617.7
Hydrogen											
Biomass						258	0.4				258.4
Geothermal											
Recycled			7.5				44				51.5
<b>Total - All States (MW)</b>	<b>39</b>	<b>1,288</b>	<b>57.0</b>	<b>274.028</b>	<b>141.7</b>	<b>1,991</b>	<b>595.9</b>	<b>See BEPC</b>	<b>421.4</b>	<b>0</b>	<b>4,808.028</b>
<b>SD (MW)</b>											
Wind		11		25.018		54	142.5				232.518
Solar				0.01							0.01
New Hydro											
Old Hydro									100		100
Hydrogen											
Biomass							0.4				0.4
Geothermal											
Recycled							16.5				16.5
<b>Total SD (MW)</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>25.028</b>	<b>0</b>	<b>54</b>	<b>159.4</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>349.428</b>
<b>RECs Retired for SD</b>											
<b>Total - Generated In All States (MWh)</b>											
Wind		1,583							12,300		13,883
Solar											
New Hydro											
Old Hydro		52									52
Hydrogen											
Biomass		225									225
Geothermal											
Recycled											
<b>Total - All States (MWh)</b>	<b>0</b>	<b>1,860</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,300</b>	<b>0</b>	<b>14,160</b>
<b>Generated in SD (MWh)</b>											
Wind											
Solar											
New Hydro											
Old Hydro											
Hydrogen											
Biomass											
Geothermal											
Recycled											
<b>Total SD (MWh)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>RECs Retired for Other States</b>											
<b>Total - Generated In All States (MWh)</b>											
Wind	1,985	422,601	70,039	583,403	147,584	3,849,045	33,205	22,745	79,221	46,015	5,255,843
Solar											
New Hydro											
Old Hydro		6,165				1,014,735					1,020,900
Hydrogen											
Biomass		86,745				468,022					554,767
Geothermal											
Recycled											
<b>Total - All States (MWh)</b>	<b>1985</b>	<b>515,511</b>	<b>70,039</b>	<b>583,403</b>	<b>147,584</b>	<b>5,331,802</b>	<b>33,205</b>	<b>22,745</b>	<b>79,221</b>	<b>46,015</b>	<b>6,831,510</b>
<b>Generated In SD (MWh)</b>											
Wind						279,604		3,591		46,015	329,210
Solar											
New Hydro											
Old Hydro											
Hydrogen											
Biomass											
Geothermal											
Recycled											
<b>Total SD (MWh)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>279,604</b>	<b>0</b>	<b>3,591</b>	<b>0</b>	<b>46,015</b>	<b>329,210</b>
<b>Conserved Energy &amp; Capacity</b>											
<b>Conserved Energy (MWh)</b>											
Total - All States	NT	1,470,277	520	80,395	35,581	472,259	NT	NT	24,494	58	2,083,584
SD	NT	763	0	0	2,472	13	NT	NT	4,829	45	8,122
<b>Conserved Capacity (MW)</b>											
Total - All States	NT	606	7.1	9.2	6.6	1141	NT	789	5.25	64	2,628.15
SD	NT	0	0	0	0.7	42	NT	NT	1.18	52	95.88

NT = Not Tracked