
**BASIN ELECTRIC
POWER COOPERATIVE**

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December 16, 2008

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 Amended Renewable Energy Objective Report

Dear Ms. Van Gerpen:

Enclosed please find Basin Electric Power Cooperative's Amended Renewable Energy Objective Report per SDCL 49-34A-105. This report is intended to replace the original filing made on November 14, 2008. This report is filed on behalf of the following members within South Dakota:

- Grand Electric
- Rosebud Electric
- Rushmore Electric and their distribution 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) 355-5413 or cjacobson@bepc.com.

Sincerely,

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

cc by e-mail:

South Dakota Rural Electric Association
Jerry Reisenauer, Grand Electric
Bart Birkeland, 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
James Pahl, West River Electric

**Basin Electric Power Cooperative
South Dakota Renewable Energy Objective Report**

December 16, 2008

I. Introduction

South Dakota Law, Chapter 49-34A-101 establishes 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 is measured by qualifying megawatt hours delivered at retail or by certificates representing credits purchased and retired to offset non-qualifying retail sales. The 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. Further, the law provides that any municipal or cooperative utility that receives wholesale electricity through a municipal power agency or generation and transmission (G&T) cooperative may aggregate its renewable and recycled energy objective resources to meet this objective.

South Dakota Law, Chapter 49-34A-105 establishes a requirement that annual reports concerning the REO commence on December 1, 2008 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 September thirtieth. As this law became effective July 1, 2008, Basin Electric REO activities for this report reflect the July 1, 2008 to September 30, 2008 time period.

Basin Electric Power Cooperative (Basin Electric) provides power to the following entities in South Dakota:

- East River Electric Power Cooperative G&T (East River Electric)
- Ellsworth Air Force Base (Ellsworth AFB)
- Grand Electric Cooperative (Grand Electric)
- Rosebud Electric Cooperative (Rosebud Electric)
- Rushmore Electric Power Cooperative G&T (Rushmore Electric)

Grand Electric, Rosebud Electric, Rushmore Electric and their distribution 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) elected to aggregate their REO resources and have Basin Electric report on their behalf. East River Electric will report the REO resource activities for their members and is not included in this report.

Table 1 reflects Basin Electric's MWh's in South Dakota to the entities listed above:

Table 1		7/1/2008 to 9/30/2008 Energy MWh's	Demand kW's
Grand Electric Cooperative		29,572	24,893
Rosebud Electric Cooperative		6,057	9,463
Rushmore Electric Power Cooperative		200,958	184,051
	Ellsworth Air Force Base	6,306	4,554
Total Listed South Dakota Member Sales		242,893	

II. REO Activities

Basin Electric is not "ramping up" per year to meet the renewable objective. However, Basin Electric is prepared to meet the voluntary objective that 10% of all electricity sold at retail by 2015 be obtained from statutorily defined renewable or recycled energy resources by developing and continuing to develop qualified resources.

III. Basin Electric Owned or Purchased Renewable Resources

Wind Generation

Basin Electric currently owns four wind turbines located near Minot, ND and Chamberlain, SD with a total of 5.2 MW and purchases 100 percent of the output and owns all the environmental attributes unless otherwise noted from:

- Florida Power & Light owned wind farm located near Edgeley, ND, 40 MW
- Florida Power & Light owned wind farm located near Wilton, ND, 49.5 MW
- Florida Power & Light owned wind farm located near and Highmore, SD, 40 MW
- Rosebud Sioux Tribe Wind Project in SD (attributes retained by owner), 0.75 MW
- Pipestone School Wind Project at Pipestone, MN, 0.75 MW

Along with renewable energy purchases from a number of very small consumer wind and solar projects, Basin Electric is developing the additional 270 MW of wind projects listed below:

PrairieWinds ND 1, Inc. (PWND1) a for-profit subsidiary of Basin Electric, was established on February 13, 2008, to build and operate wind generation in North Dakota. PrairieWinds will have two projects to begin with; (i) the PrairieWinds ND 1 wind farm will be located approximately 14 miles south of Minot along U.S. Highway 83. Construction on the 77 turbine wind farm is expected to begin in 2009 with commercial operation in early 2010 with a maximum wind output of 115.5 MW. (ii) The Minot 2 Wind Project consists of three additional turbines for a total of 4.5 MW that will be added to the current Minot, ND site. Construction is expected to begin in 2009 with commercial operation in early 2010.

PrairieWinds SD 1, Inc. (PWSD1) a for-profit subsidiary of Basin Electric, was established on February 13, 2008, to build and operate wind generation in South Dakota. Planning for the PWSD1

is progressing, with construction beginning in spring 2010 and commissioning in late 2010 or early 2011 with a maximum wind output of 150 MW.

Recycled Energy Generation

Basin Electric purchases the energy from four Recycled Energy Generation (REG) power plants “fueled” by hot exhaust off the Northern Border Pipeline compressor stations with one unit in North Dakota and three units in South Dakota, for a total generating capacity of about 22 MW. The natural gas fired compressor stations keep the gas moving inside the pipeline. These compressors are normally 35,000-40,000 horsepower gas turbines that release roughly 900 degree exhaust gases during operation. By installing a heat exchanger in the exhaust stream and using that recovered heat in an organic Rankine cycle attached to a turbine generator set, approximately 5.5 MW of electricity is available at each site. The generation is environmentally benign, using virtually no additional fuel and producing virtually zero emissions. Basin Electric has signed a 25-year contract with the developer for the output of these four sites. Basin Electric has signed an additional contract with the developer for four more sites to be operational in 2009. There will be one site each in Montana and Minnesota and two sites in North Dakota. In addition to the existing 22 MW of recovered energy, these additional sites add a combined output of 22 MW or 5.5 MW each, for a total of 44 MW of recovered energy.

IV. REO Obstacles Encountered

Transmission: Obtaining transmission service has been and continues to be a major obstacle in the development of renewable generation. For wind energy, transmission issues are compounded by the fact that wind’s intermittency and low capacity factor make those resources less able to bear the burden of transmission upgrades.

Costs: In the last five years, the cost of wind projects has increased by roughly 220 percent and costs are expected to continue to rise.

Procurement of turbines: Most turbine manufacturers are sold out through 2009 and well into 2010. Some larger manufacturers are not willing to work with developers looking to purchase less than 100 MW of turbines.

V. REO Potential Solutions

System wide average pricing across a broad region for existing and new transmission appears to be the most practical and feasible method for achieving significant transmission upgrades in the foreseeable future.