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June 30, 2009

Illona Jeffcoat-Sacco, Director  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

RECEIVED

JUL 02 2009

PUBLIC SERVICE COMMISSION

RE: MRES Renewable Energy Objective Progress Report

Dear Ms. Jeffcoat-Sacco:

Missouri River Energy Services (MRES) submits this Renewable Energy Objective (REO) Progress Report on behalf of its six North Dakota municipal utility members, pursuant to NDCC 49-02-28 thru 49-02-34. This initial report covers the twelve month period from January 1, 2008 through December 31, 2008. This report is filed on behalf of the following MRES member electric utilities in North Dakota: Cavalier, Hillsboro, Lakota, Northwood, Riverdale and Valley City.

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

Sincerely,

Mrg Simon, Attorney at Law  
Director, Legal

Copy:

Ken Wolf, Cavalier Municipal Utilities  
Lesley Connelly, Hillsboro Municipal Utilities  
Norris Severtson, Lakota Municipal Light Plant  
Marcy Douglas, Northwood Municipal Utilities  
Tim Lingelbach, City of Riverdale  
Wayne Nelson, Valley City Public Works

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**2008 Renewable Energy Objective Annual Report**

Valley City Public Works

Missouri River Energy Services

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**2008 Renewable Energy Objective Annual Report**

City of Riverdale

Missouri River Energy Services

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Northwood Municipal Utilities

Missouri River Energy Services

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Hillsboro Municipal Utilities

Missouri River Energy Services

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Lakota Municipal Utilities Light Plant

Missouri River Energy Services

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**2008 Renewable Energy Objective Annual Report**

Cavalier Municipal Utilities

Missouri River Energy Services

# **Missouri River Energy Services North Dakota Renewable Energy Progress Report**

June 30, 2009

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 2007 North Dakota Legislature passed a voluntary REO which provides 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," and allows municipal utilities to aggregate their REO through their municipal power agency. NDCC 49-02-28. 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. The REO also requires that reports be filed with the Public Service Commission (Commission) that detail energy sales during the previous twelve-month period, and efforts to meet the REO goal through 2015. NDCC 49-02-34. As with the REO itself, municipal utilities are permitted to aggregate their reporting requirements through their municipal power agency.

Given the power supply relationship between MRES and its members, MRES has assumed responsibility for the renewable energy objective and the associated reporting requirements, on behalf of all of its North Dakota member communities. The following six North Dakota municipal electric 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. NDCC 49-02-30. 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.

- Cavalier
- Hillsboro
- Lakota
- Northwood
- Riverdale
- Valley City

In order to meet the North Dakota REO, MRES will integrate the North Dakota objective into its resource planning in conjunction with similar requirements in Minnesota and South Dakota.<sup>2</sup> MRES will allocate its renewable energy generation and renewable energy credits (RECs) based on MRES S-1 energy sales on a pro rata basis by state, beginning in calendar year 2009.<sup>3</sup> Going forward from January 1, 2009, MRES renewable resources (generation and credits) will be allocated 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>4</sup>

- Worthington (MN) Wind Project, 3.7 MW
- Marshall (MN) Wind Farm, 18.7 MW
- Odin (MN) Wind Farm, 20.0 MW
- Rugby (ND) Wind LLC, 40 MW (Commercial Operation 2010)

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>5</sup> MRES intends to meet its REO goals by

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<sup>2</sup> Minnesota's REO goal is 1% by 2005, and 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. South Dakota's REO is nearly identical to that of North Dakota, imposing a voluntary goal of 10% by 2015. NDCC 49-02-28. South Dakota's definition of "renewable" energy for compliance is slightly different than that of North Dakota. SDCL 49-34A-101. Iowa does not presently have a renewable energy objective or mandate. NDCC 49-02-28.

<sup>3</sup> The MRES Board of Directors approved this allocation strategy at their November 13, 2008, meeting. This decision allows MRES to complete the 2008 calendar year REO reporting for Minnesota in a manner consistent with previous reports filed in Minnesota. As a consequence, the initial reports filed in North Dakota and South Dakota will indicate zero (0) qualifying renewable sales during 2008, and will identify the projected plans to meet the REO goals of North Dakota and South Dakota going forward. MRES does not charge its members a separate rate for including renewable energy as part of its balanced power supply portfolio.

<sup>4</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 (West 2007). This transaction results in a net zero purchase to MRES, and thus, MPS generation is not used by MRES for REO compliance purposes.

<sup>5</sup> The Minnesota green pricing statute requires distribution utilities to offer customers the option to purchase renewable and high-efficiency energy at the utility's cost of acquiring the resources. Minn. Stat.

utilizing the contracted wind generation and associated renewable attributes to meet the MRES ND REO benchmark for each year.

The following Table 1 identifies the projections of MRES relating to compliance with the North Dakota REO 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 North Dakota municipal utility members.

**Table 1: Projected MRES ND REO Goals**

<b>Year<sub>1</sub></b>	<b>MRES ND S-1 Sales<sub>2</sub></b>  (MWh)	<b>ND REO annual benchmark</b>  (%)	<b>MRES ND REO</b>  (MWh)
2008	71,356	0	0
2009	81,619	1	816
2010	121,495	2	2,430
2011	125,106	3	3,753
2012	127,406	4	5,096
2013	130,004	6	7,800
2014	132,587	8	10,607
2015	135,019	10	13,502

Note 1 Calendar year period

Note 2 Town gate sales

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. 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. MRES is currently considering additional wind generation projects that are geographically dispersed throughout MRES member states. We also evaluate other renewable and recycled energy generation opportunities as they arise.

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§216B.169 (West 2007). MRES Minnesota members are provided the renewable energy needed to meet this obligation through the MRES RiverWinds<sup>SM</sup> program, which is also available to MRES members in other states. 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. The green pricing statute has been repealed effective on January 1, 2010. Minn. Stat. Ann. §216B.169 (West 2007). After January 1, 2010, Minnesota utilities may still offer a green pricing program, but it is no longer mandatory that they do offer it.

## Obstacles to meeting the REO

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 Minnesota'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.** As not-for-profit entities, MRES and its members are very sensitive to rising power supply costs and the impact on our consumer-owners. It is our mission to provide our members with reliable, cost-effective long-term energy and energy services in a fiscally responsible and environmentally sensitive manner. The price to build or acquire renewable resources (or renewable energy credits) has the potential to substantially increase power supply costs at a time when the electric industry is facing major challenges to contain rising costs, build infrastructure and address climate change. MRES has evaluated countless renewable energy projects over the past eight years, involving a wide variety of fuels and technologies, and has found very few that could meet the goal of adding renewable energy to our resource portfolio without impact to existing rates. MRES has chosen projects that meet the goals of MRES while also minimizing cost impacts. The possible addition of feed in tariffs or renewable energy carve-outs (requiring a certain percentage of an REO to come from a particular renewable resource like solar) also have the potential of raising costs and consumer rates.
- b) **Lack of transmission.** The region lacks adequate transmission to facilitate the addition of new generation, particularly intermittent wind generation. The cost to construct such facilities in relation to the typical size of renewable energy projects makes construction of needed facilities on a project-by-project basis cost prohibitive. Furthermore, regulatory barriers in other states create significant uncertainty for expansion of the high voltage transmission system. Finally, the fact that an additional, pancaked transmission cost is imposed to deliver wind generated outside of the Midwest Independent Transmission System Operator (MISO) market footprint across the seam and into the MISO market creates a major economic barrier to development of the excellent wind resources located in North Dakota and South Dakota.
- 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. In addition, as it has developed, the federal Clean Renewable Energy Bonds (CREBs) program is managed such that it favors only the smallest projects. As a result, CREBs are not feasible for a wholesale utility-scale project. Finally, the lack of state incentives makes projects like the Western Minnesota Worthington Wind Project no longer viable.
- d) **Miscellaneous.** Throughout its efforts to develop wind projects over the past several years, MRES has found it difficult to find sufficiently knowledgeable and experienced developers for wind projects who understand the complexities of generation projects. Equally challenging is the persistent difficulty encountered in obtaining the wind

turbines, components, equipment, and spare parts necessary to not only construct but to properly operate and maintain a wind project. Also, the aging of the electric industry workforce and resulting decreasing availability of qualified employees is a growing issue in all areas of the electric industry.

### Efforts to Overcome Obstacles

MRES is employing alternatives to overcome some of the obstacles described above. For example, 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.

To address the transmission limitations, MRES continues its analysis to determine the best location in the region to construct additional wind resources, coordinating both transmission needs and wind resources in relation to MRES member needs. The Marshall Wind Farm is a perfect example of how such analysis was successful in identifying a viable solution. MRES was able to help the Marshall Wind Farm project become a reality by utilizing the transmission service for an existing combustion turbine, and working together with a member community and local developers to make this 18.7 MW project a success.

In terms of transmission barriers, MRES works on multiple fronts to address the need for additional transmission capacity and to eliminate artificial economic barriers. MRES actively advocates for transmission policies that will address the existing barriers, both with those who operate the transmission systems (e.g. MISO, WAPA, etc.), and before state and federal policymakers (e.g. Federal Energy Regulatory Commission, state legislatures, Congress, state utility commissions, Midwest Governor's Association, etc.). MRES is also actively involved in development projects to expand the transmission infrastructure in the region, including the Big Stone Transmission Project and the CapX 2020 Twin Cities to Fargo and Twin Cities to Brookings County projects. The expansion of the backbone transmission system is essential to utility efforts to expand renewable energy generation.

### Conclusion

MRES has developed a plan to meet the North Dakota Renewable 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 ND REO is being 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 30th day of June, 2009.

MISSOURI RIVER ENERGY SERVICES

A handwritten signature in black ink that reads "Mrg Simon". The signature is written in a cursive style and is positioned above a horizontal line.

Mrg Simon, Director

Legal

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