MONTANA-DAKOTA
UTILITIES CO.
A Division of MDU Resources Group, Inc.

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

October 2, 2012

Ms. Kate Whitney, Administrator
Utility Division
Montana Public Service Commission
1701 Prospect Avenue
Helena, MT 59620

Re: Direct Testimony
Docket No. 2012.3.24

Dear Ms. Whitney:

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc. herewith submits an original and ten (10) copies of the direct testimony and exhibits of Ms. Theresa L. Addison and Mr. Darcy J. Neigum pursuant to the Commission's Procedural Order issued on September 10, 2012 in the above-referenced Docket.

Please acknowledge receipt by stamping or initiating the duplicate copy of this letter attached hereto and returning the same in the enclosed self-addressed, stamped envelope.

Sincerely,

Tamie A. Aberle
Director of Regulatory Affairs

Cc: Certificate of Service

CERTIFICATE OF SERVICE

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. Certification of Eligible Renewable Resources and Community Renewable Energy Resources	))))	**Docket No. D2012.3.24**

I, Sara J. Graf, being first duly sworn on oath, deposes and says: that on the 2nd day of October, 2012, I served the attached direct testimony, on the Montana Public Service Commission by electronic filing and FedEx and to all other persons listed below by mail.

Ms. Kate Whitney, Administrator
Utility Division
Montana Public Service Commission
1701 Prospect Avenue
Helena, MT 59620
kwhitney@mt.gov

Robert Nelson
Montana Consumer Counsel
111 North Last Chance Gulch
Suite 1B
Helena, MT 59601
robnelson@mt.gov

Sara J. Graf

Subscribed and sworn to before me this 2 day of October, 2012.

LAURIE LARSON
Notary Public
State of North Dakota
My Commission Expires May 17, 2018

Laurie Larson, Notary Public
Burleigh County, North Dakota
My Commission Expires: 05/17/2018

MONTANA-DAKOTA UTILITIES CO.
A Division of MDU Resources Group, Inc.

Before the Public Service Commission of Montana

Docket No. D2012.3.24

Direct Testimony
of
Theresa L. Addison

Q. Please state your name and business address.

A. My name is Theresa L. Addison and my business address is 400 North Fourth Street, Bismarck, North Dakota 58501.

Q. What is your position with Montana-Dakota Utilities Co.?

A. I am the Power Production Financial Analyst with Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc.

Q. Please provide your educational and professional background.

A. I received my Bachelor of Science Degree in accounting from Dickinson State University in 2005. I received my Masters of Business Administration from the University of Mary in 2010. I have been licensed as a Certified Public Accountant since 2010.

Q. Why are you testifying in this case?

A. In my current position I am the M-RETS administrator for Montana-Dakota.

Q. Have you ever testified before?

A. No I have not.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the Commission's assertion in its Order 7221 that Diamond Willow 1 and Diamond Willow 2 are one single wind farm under Montana law, and its use of a November 23, 2010, email I wrote to the administrator of the M-RETS tracking system to support that assertion. I will explain how my email to the administrator of the M-RETS tracking system has nothing to do with whether Diamond Willow 1 and Diamond Willow 2 are one or two wind farms under Montana law, and explain why I was asking the administrator of the M-RETS tracking system to update the M-RETS database to show Diamond Willow as a 30 megawatt source of renewable energy for tracking purposes. The referenced email is my Exhibit No. __(TLA-1).

Q. Please describe M-RETS, and explain what it does.

A. M-RETS is the trade name for the Midwest Renewable Energy Tracking System, a program for tracking renewable energy generation in participating states and Canadian provinces. M-RETS creates a Renewable Energy Credit (REC) in the form of a tradeable digital certificate for each megawatt hour using verifiable production data from participating generators. M-RETS was created to track the generation of renewable energy, largely within the MISO footprint, and its use to meet the renewable energy portfolio standards states and provinces were adopting to encourage the development of renewable energy. Although the nature of such portfolio standards vary from state to state, they typically rely upon the use of a digital certificate system. Renewable energy is reported at the point of generation (or delivery into the MISO

footprint) and its use tracked to prevent double counting for purposes of compliance with the appropriate portfolio standard. The tracking system is designed so that the generation and use of renewable energy can be verified and subject to audit. To provide such transparency, it is designed to use the digital data that MISO itself uses to govern generation dispatch and transmission within the MISO footprint.

Q. Would you please describe the process that Montana-Dakota goes through to register facilities with M-RETS?

A. To register a generating facility with M-RETS the Administrator fills out the M-RETS Generator Information online form. The data in the form includes the Facility ID, Name & Location, Engineering Information, Company Information, Reporting Entity Information, and other information. After the form is submitted, M-RETS reviews the information and approves the generating facility registration.

Q. Why were Diamond Willow 1 and Diamond Willow 2 registered under a single reporting entity ID?

A. M-RETS protocol requires such registration. As explained by Mr. Neigum, both Diamond Willow 1 and Diamond Willow 2 are behind what is referenced by MISO as a commercial pricing node, or CPNode. M-RETS' protocol require all generation behind a MISO CPNode to be identified as the MISO CPNode[1]:

> REPORTINGENTITY ID - Unique identifier for the unit assigned by its Control Area or Reporting Entity. If MISO is the QRE, the CPNODE shall be used.

[1] M-RETS Interface Control Document, pg 6, Table 2-1, Exhibit No.___(TLA-2).

Since Montana-Dakota is within the MISO footprint, MISO is the QRE, and the renewable energy from Diamond Willow 1 and Diamond Willow 2 is identified and tracked as a single source. As explained by Mr. Neigum, the MISO data stream from the CPNode is the same regardless of whether there is one or two wind farms behind the CPNode. However, that has nothing to do with whether Diamond Willow 1 and Diamond Willow 2 are treated as one or two wind farms under Montana law.

Q. What is your basis for asserting that the M-RETS protocols have nothing to do with whether Diamond Willow 1 and Diamond Willow 2 are treated as one or two wind farms under Montana law?

A. M-RETS is simply a tracking system. M-RETS does not determine whether a particular generation source is or is not a renewable resource, or a particular kind of renewable resource under state law. M-RETS makes it very clear that it is not responsible for making such determinations:

> All data in M-RETS is verified. M-RETS will not determine eligibility for state or voluntary programs. Each individual state will be responsible for determining whether or not a particular generating unit qualifies for a state program or not.[2]

Q. Why did you send an email on November 23, 2010, to the administrator of M-RETS asking him to increase the nameplate capacity for Diamond Willow from 19.5 to 30 megawatts?

[2] *About M-RETS*, Exhibit No.__(TLA-3).

A. Once Diamond Willow 2 was completed and placed in service, Montana-Dakota needed to track its renewable energy through M-RETS. As Montana-Dakota's Administrator for M-RETS, the only way I can accomplish that necessary task is to ask that the generation capacity at the CPNode be increased from 19.5 to 30 megawatts, to reflect that Diamond Willow 2 had come on line. I am neither an engineer nor a lawyer. I am not responsible for designing and implementing Montana-Dakota's compliance with Montana's Renewable Portfolio Standards. My sole frame of reference in this matter was the M-RETS protocols, under which I was required to treat the two Diamond Willow wind farms, for M-RETS tracking purposes, as a single reporting entity.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Addison, Theresa

From: Bryan Gower [BGower@apxenv.com]
Sent: Wednesday, November 24, 2010 10:57 AM
To: Addison, Theresa
Subject: RE: MRETS

Theresa

Your asset has been updated.

Please feel free to contact me anytime if you need any assistance.

Thank you
Bryan Gower
Program Administrator
Renewable Energy Infrastructure Division
APX, Inc

Please update your records with my new email address: bgower@apxenv.com

Office: 408-517-2118
Cell: 925-980-9281
Fx: 408-517-2985
224 Airport Parkway, Suite 600
San Jose, CA 95110

From: Addison, Theresa [mailto:Theresa.Addison@mdu.com]
Sent: Tuesday, November 23, 2010 6:33 AM
To: Bryan Gower
Subject: MRETS

Bryan,

I noticed in our Diamond Willow Generating Facility that the Nameplate Capacity is still 19.5. However we expanded this windfarm and it was completed this summer. That nameplate capacity should now be 30.0. How do we go about changing this?

Theresa Addison
Financial Analyst
Power Production
Montana-Dakota Utilities Co.
(701) 222-7654

M-RETS

INTERFACE CONTROL DOCUMENT

(GENERATOR DATA)

August 29, 2011

APX, Inc.
224 Airport Parkway, Suite 600
San Jose, CA 95110

Table 2-1 Generating Units file format

Field Name	Data Type	Description
MRETSID	Integer	Unique M-RETS Project identifier for the registered generator assigned by M-RETS upon approval
REPORTINGENTITYID	Character	Unique identifier for the unit assigned by its Control Area or Reporting Entity. If MISO is the QRE, the CPNODE shall be used
VINTAGE	Character (7)	Month and year of generation, formatted at MM/YYYY for any month in the current Reporting Period.
BEGINDATE	Character (10)	Begin month-day-year of generation output period formatted as MM/DD/YYYY
ENDDATE	Character (10)	End month-day-year of generation output period formatted as MM/DD/YYYY
TOTALMWh	Number	Total MWhs for the Reporting Month

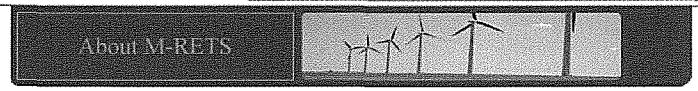
5 File Loading

All files will be loaded into M-RETS using a valid active M-RETS Login and password that is associated with an active Qualified Reporting Entity Account type.

5.1 Loading Generation Extract File for M-RETS Generating Units

Only Account Holders of type "Qualified Reporting Entity" or "M-RETS Administrator" have the ability to load the Generating Extract File.

After logging into their M-RETS Account, this account holder should locate the Meter Data Loading module. To locate the desired generation output file, the reporting entity selects the Meter Data Loading module's "Browse" button to display a pop-up screen where the user can locate the desired file on computer or network drives. After selecting a file, the user selects the "Upload Now" button to upload the file.



About M-RETS®

About M-RETS®
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Why Use M-RETS®?
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About M-RETS®

M-RETS® tracks renewable generation located within the state and provincial boundaries of Illinois, Iowa, Manitoba, Minnesota, Montana, North Dakota, Ohio, South Dakota, and Wisconsin. It also tracks Renewable Resource Credits (RRCs) for the State of Wisconsin. Any generator located within the geographic footprint of M-RETS® may participate.

In addition, any generator outside of the geographic footprint of M-RETS® owned by a participating utility, or a generator with a contract with a participating utility to deliver energy into the M-RETS® footprint may participate in M-RETS®. Any other generator may participate at an adjusted fee schedule.

Renewable generation is defined as energy generated by a facility that is considered renewable as defined by any of the states or provinces listed above. The M-RETS® Administrator will issue one electronic M-RETS® Certificate for each MWh of energy that is generated by registered generators. To prevent double-counting, generators participating in M-RETS® track their generation output by M-RETS®. In addition, M-RETS® will consider tracking nonrenewable generation from any of these states in the future.

Participation in M-RETS® is voluntary although some states may designate MRETS as the tracking system to be used to meet State renewable energy standards. Any party, including non-generators, such as traders, marketers, and end-use customers may establish an account in the system.

All data in M-RETS® is verified. M-RETS® will not determine eligibility for state or voluntary programs. Each individual state will be responsible for determining whether or not a particular generating unit qualifies for a state program or not. However, the State Commissions may use the information collected and verified by M-RETS® to conduct this determination. M-RETS® will issue reports on activity within the system.

There are five types of public reports:

- Directory of Account Holders
- Directory of Registered Generators
- Report on Aggregated MRETS Activity
- RRCs Offered by Providers
- RRC Program Report

Public reports are accessible to anybody via the public page on the M-RETS® website.

M-RETS® Bylaws

The Age of Substantiation for Environmental Commodities

MONTANA-DAKOTA UTILITIES CO.
A Division of MDU Resources Group, Inc.

Before the Public Service Commission of Montana

Docket No. D2012.3.34

Direct Testimony
of
Darcy J. Neigum

Q. Please state your name and business address.

A. My name is Darcy J. Neigum and my business address is 400 North Fourth Street, Bismarck, North Dakota 58501.

Q. By whom are you employed and in what capacity?

A. I am the System Operations and Planning Manager of Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc.

Q. Please describe your duties and responsibilities with Montana-Dakota.

A. I have manager responsibility for the day-to-day operations of the Company's electric control center and system operations planning department. The system operations planning department is responsible for electric resource planning and transmission expansion studies for the Company.

Q. Please outline your educational and professional background.

A. I hold a Bachelor's Degree in Electrical and Electronics Engineering from North Dakota State University as well as a Masters of

Business Administration from the University of Mary. My work experience includes four years as a nuclear plant operator for Westinghouse Electric, three years as a plant engineer for a coal-fired plant in North Dakota, and fourteen years of generation and transmission development and operational responsibilities.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to address the Commission's assertion in its Order 7221 that the Diamond Willow 1 and Diamond Willow 2 wind farms must be treated as a single wind farm for purposes of complying with Montana's Renewable Portfolio Standard, specifically the metric for acquiring power from a Community Renewable Energy Project ("CREP"). In my testimony, I will:

(1) Provide a brief history of Montana-Dakota's compliance with Montana's Renewable Portfolio Standards;

(2) Explain why Diamond Willow 1 and Diamond Willow 2 were constructed as two separate wind farms, almost two years apart;

(3) Explain why MISO treats Diamond Willow 1 and Diamond Willow 2 as interconnecting at a single interconnection point and commercial pricing node on the MISO system;

(4) Explain how MISO data streams are used by the M-RETS tracking system to verify the generation and use of renewable energy generation and

(5) Explain the adverse impact upon customers of the Commission's position that Diamond Willow 1 and Diamond Willow 2 are not CREPs.

Q. Please provide a brief history of Montana-Dakota's compliance with the Montana Renewable Portfolio Standard (RPS) and North Dakota and South Dakota Renewable Objectives (REO).

A. Montana-Dakota developed a cost effective program for meeting the statutory requirements set forth in the RPS and progress towards the REO. The Montana RPS, approved in 2005, requires that fifteen per cent of Montana-Dakota's energy load in Montana must be met from renewable resources by 2015. The fifteen per cent requirement is being phased in through three steps: (1) five per cent beginning in 2008; (2) ten per cent beginning in 2010; and (3) fifteen per cent beginning in 2015.

North Dakota approved an REO in 2007 and South Dakota approved a similar REO in 2008, which establishes objectives that ten percent of all retail electricity sold in those states be obtained from renewable energy and recycled energy by 2015.

Included within the Montana RPS is a percentage of energy load requirements in a separate standard for what are defined as Community Renewable Resource Project, or CREPs. As originally envisioned in 2005, when the RPS was first statutorily adopted, CREPs were supposed to be small projects, five megawatts or less, developed by what were supposed to be local community developers. The CREP requirement was expressed as a fixed amount of generating capacity (50 megawatts in

2012 and 75 megawatts in 2015) which is then prorated between the Montana utilities subject to the RPS in proportion to total energy load in Montana. Under the statutory proration, it is NorthWestern Energy which is primarily responsible for meeting the statutory CREP requirement. Montana-Dakota's CREP requirement for this year (2012) is approximately 5 megawatts, and we estimate that Montana-Dakota's CREP requirement in 2015 will likely be 8 megawatts.

In the 2009 legislature, the size of a CREP was increased to 25 megawatts, and it was statutorily specified that a serving utility, such as NorthWestern Energy or Montana-Dakota, could be the developer and owner of the CREP.

Montana-Dakota has built three wind farms to comply with the Montana RPS, and the voluntary REOs established in North Dakota and South Dakota.

Diamond Willow 1 was Montana-Dakota's first wind farm. It is a 19.5 megawatt (MW) facility constructed in Fallon County, Montana, in 2007 and in full operation by February 2008. It was certified by the Commission as an eligible renewable resource in Docket D2007.2.23, in a decision dated March 7, 2007. It interconnects with the Montana-Dakota integrated system on Montana-Dakota's 57 kilovolt (kV) transmission line between Baker and Little Beaver, Montana.

Cedar Hills was Montana-Dakota's second wind farm. It is a 19.5 MW facility located in Bowman County, North Dakota, approximately 20 miles east of the border between Montana and North Dakota. Construction

was completed and the wind farm commenced commercial operation on June 6, 2010. Cedar Hills interconnects with the Montana-Dakota integrated system on Montana-Dakota's 57 kV transmission line between Bowman, North Dakota, and Baker, Montana, and delivers power into Montana.

Diamond Willow 2 was Montana-Dakota's third wind farm. It is a 10.5 MW facility located in Fallon County, Montana, adjacent to Diamond Willow 1. Construction of Diamond Willow 2 was completed and the wind farm commenced commercial operation on June 28, 2010.

All three wind farms are considered integrated system generation resources providing capacity and energy to customers in Montana, North Dakota and South Dakota. The costs associated with each facility are also allocated to each of the three jurisdictions.

Q. Please explain why Diamond Willow 1 and Diamond Willow 2 were constructed as two separate wind farms.

A. In September 2006, Montana-Dakota issued a request for proposal (RFP) of renewable energy resources up to 33 MW in size either through long-term power purchase agreement(s), a design-build-future transfer arrangement, or Montana-Dakota ownership upon full development. The purpose of this RFP was to provide additional electric generation resources for Montana-Dakota's integrated system customers in North Dakota, South Dakota, and Montana that would also qualify to meet the Montana RPS. With the results of the RFP process, Montana-Dakota concluded that the Diamond Willow 1 wind project was both the least cost

and best alternative presented and Montana-Dakota acquired the rights to the Diamond Willow site from a developer in 2007 as a result of this RFP. The site was in an advanced development stage with enough land leases and available transmission capability to support a 30 MW project. However, Montana-Dakota did not need a project of that size to meet its 2008 RPS requirement and decided to construct a smaller project. Montana-Dakota constructed the 19.5 MW Diamond Willow 1 project that was in full operation by February 2008. Montana-Dakota issued a request for proposals (2008 RFP) the end of 2008 for capacity and energy resources to meet Montana-Dakota's customer requirements. The 2008 RFP produced only one wind generation proposal and that proposal was more expensive than the forecasted 20 year levelized costs of Diamond Willow 2 and Cedar Hills. Diamond Willow 2 and Cedar Hills were then built to cost effectively serve customers and meet the increasing Montana statutory RPS requirements and progress towards the 2015 North Dakota and South Dakota REOs.

Q. Please explain why MISO treats Diamond Willow 1 and Diamond Willow 2 as interconnecting at a single interconnection point and commercial pricing node on the MISO system.

A. Although Diamond Willow 1 was designed and built as a 19.5 megawatt wind farm, Montana-Dakota deemed it prudent and cost effective to obtain MISO approval of a 30 MW interconnection at that location. It is no easy matter to obtain an interconnection on the MISO system. It is a very formal process, and at the time Diamond Willow 1 was

constructed, an applicant's priority in the queue for transmission interconnection had significant value both in terms of obtaining timely approval, and in terms of the cost of obtaining the required interconnection.

Additionally, it would have not made sense for Montana-Dakota to incur the additional expense of a second transmission study to separately secure interconnection rights for a second wind farm at the Diamond Willow site. Montana-Dakota therefore submitted a large generator interconnection agreement (LGIA) request with MISO for 30 MW, to accommodate a likely second wind farm at the site.

As a result the Diamond Willow 1 and Diamond Willow 2 wind farms both interconnect under the same MISO interconnection agreement, 'LGIA G767'. As the Commission is aware the two wind farms have separate metering, circuit breakers, switches, transformers, and electrical connections to Montana-Dakota's transmission system.

Q. How does MISO treat the Diamond Willow 1 and Diamond Willow 2 windfarms?

A. MISO treats the Diamond Willow 1 and Diamond Willow 2 wind farms as a single project as they interconnect under the same 'LGIA G767'. The revenue meters from Diamond Willow 1 and Diamond Willow 2 are summed together for a single electric market generation value reported under a single MISO Commercial Pricing Node (CPNode).

Q. What is the Midwest Renewable Energy Tracking System (M-RETS)?

A. As described in Ms. Addison's testimony, M-RETS tracks renewable energy generation in participating states and assists in verifying compliance with individual state or voluntary Renewable Portfolio Standards (RPS) and objectives.

Q. Please explain how M-RETS receives generation data from Diamond Willow 1 and Diamond Willow 2 for the purpose of tracking the renewable energy credits they produce?

A. M-RETS receives its generation data from MISO. Because Diamond Willow 1 and Diamond Willow 2 have a single LGIA and CPNode within MISO, the generation data from both projects is summed together and provided to M-RETS as a single generation facility.

Q. Are Diamond Willow 1 and Diamond Willow 2 both CREPs?

A. Yes they are. Diamond Willow 1 and Diamond Willow 2 are two separate projects, each less than 25 MWs, constructed two years apart, and owned by the same serving utility, Montana-Dakota. Diamond Willow 1 and Diamond Willow 2 are separate and distinct projects and each is entitled to CREP designation. As already determined by this Commission in this Docket, Cedar Hills also meets the criteria and has been deemed a CREP.

Q. What would be the impact upon Montana-Dakota's customers in Montana if the Commission refuses to recognize Diamond Willow 1 and Diamond Willow 2 as CREPs?

A. Cedar Hills is a 19.5 MW wind project. The costs for Cedar Hills are jurisdictionally allocated among Montana-Dakota's customers in Montana,

North Dakota, and South Dakota. Montana's jurisdictional share of Cedar Hills is 27.4 percent or 5.3 MW. Therefore if only Cedar Hills is considered a CREP, Montana-Dakota will be unable to meet its 2015 public utility share of CREP requirement without acquiring additional CREP resources.

Q. What is the estimated cost of acquiring additional CREP resources if Diamond Willow 1 and Diamond Willow 2 are not designated as eligible Montana CREPs?

A. Montana-Dakota has issued two separate requests for proposals (RFPs) for Montana CREPs. The first CREP RFP issued in 2008 did not receive any responses.

Based on responses from the 2010 CREP RFP, which were not considered cost competitive compared to other generating resources, the estimated incremental cost to acquire 4 MW of Montana CREPs is $485,654 for all Montana customers.

Additional CREP MWs required	*4 MW*
Wind capacity factor	*40%*
Price of small wind from 2010 RFP	*$70 per MWh*
*Annual energy (4 MW * 40% * 8760 hrs)*	*14,016 MWh*
Marginal Cost of Energy (2012 Study)	*$35.35*

Incremental Cost to Montana Customers

*14,016 MWh * ($70/MWh - $35.35/MWh) =* ***$485,654***

Q. Does this conclude your direct testimony?

A. Yes, it does.