

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

Before the Public Service Commission of North Dakota

Case Nos. PU-11-395 & PU-11-396

Direct Testimony
of
Andrea L. Stomberg

1 **Q. Would you please state your name and business address?**

2 A. Yes. My name is Andrea L. Stomberg, and my business address is
3 400 North Fourth Street, Bismarck, North Dakota 58501.

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

5 A. I am the Vice President of Electric Supply for Montana-Dakota
6 Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc.

7 **Q. What are your responsibilities as the Vice President of Electric**
8 **Supply?**

9 A. My responsibilities include power production and transmission,
10 system operations and planning, environmental, compliance and electric
11 dispatch.

12 **Q. Would you please outline your educational and professional**
13 **background?**

14 A. I graduated from the University of Washington with a bachelor's
15 degree in Geology, from Oregon State University with a Master of Science
16 degree in Soils, and from the University of Mary, Bismarck, with a masters
17 in business management. I worked for the North American Coal

1 Corporation for ten years in surface mine permitting, reclamation planning
2 and oversight. I worked for Montana-Dakota for about 15 years in the
3 environmental field prior to my current position.

4 **Q. Have you testified in other proceedings before regulatory bodies?**

5 A. Yes, I have testified before this Commission and I have filed written
6 testimony with the Minnesota and South Dakota Public Utilities
7 Commissions.

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

9 A. The purpose of my testimony is to introduce Montana-Dakota's
10 proposal to construct an 88 MW simple cycle combustion turbine (Project)
11 near the R.M. Heskett Station in Mandan, North Dakota and provide
12 support for the Company's request for a determination that public
13 convenience and necessity will be served by the construction and
14 operation of the Project, that Montana-Dakota is fit, willing and able to
15 provide such service and that the Project is a prudent and reasonable
16 resource for Montana-Dakota's North Dakota electric customers. I will
17 also introduce other Company witnesses who will explain the project in
18 more detail.

19 **Q. What is the Project that Montana-Dakota is proposing?**

20 A. As will be described in more detail by Mr. Alan Welte, Generation
21 Manager for Montana-Dakota, the Project includes a simple cycle
22 combustion turbine which will be used primarily as a capacity and peaking
23 power resource. The Project will also include the facilities necessary to

1 interconnect the generator to the transmission system, and a 10-inch
2 natural gas pipeline to provide fuel for the turbine. Mr. Welte will discuss
3 the site selection as well as how Montana-Dakota determined the type of
4 combustion turbine to construct.

5 **Q. Would you please explain the need for the Project?**

6 A. Mr. Darcy Neigum, System Operations and Planning Manager for
7 the Company will provide a thorough discussion of Montana-Dakota's
8 need for the electric generation capacity, as well as the information
9 presented in the 2011 Integrated Resource Plan submitted to the
10 Commission on May 12, 2011 that provides the analysis that led to the
11 selection of the 88 MW combustion turbine as a prudent solution to
12 meeting the generation capacity requirements of its electric customers.
13 Mr. Neigum will also discuss the various sensitivity analyses conducted to
14 ensure the Project is a cost effective resource addition.

15 During 2010, Montana-Dakota relied on the Midwest Independent
16 System Operator, Inc. (MISO) energy market for 15 percent of the retail
17 customers' energy requirements, and purchased approximately 20 percent
18 of the retail customers' capacity resources from other entities. Two
19 significant events contributed to the capacity purchases and the
20 forecasted 150 MW deficit in meeting the capacity needs of customers:
21 the 2006 expiration of a 66 MW contract for capacity and energy with
22 Basin Electric Power Cooperative, and the abandonment of the Big Stone
23 II project which would have provided 116 MW of capacity and energy.

1 Additionally, Montana-Dakota's load continues to grow, particularly in the
2 northwest part of North Dakota, in response to the oil development in that
3 area.

4 Montana-Dakota asserts this level of reliance on the market and
5 others to provide generation capacity to customers results in long term
6 price and reliability risks to customers. Montana-Dakota seeks to mitigate
7 these risks by building a portion of the needed capacity. Montana-Dakota
8 plans to issue a request for proposals in 2012 to evaluate the ability of the
9 market to provide the remainder of the generation capacity requirements.

10 **Q. Did Montana-Dakota consider a baseload coal resource as a viable**
11 **means of meeting the total projected capacity deficit of 150 MW?**

12 **A.**Yes, as more fully discussed by Mr. Neigum, a coal-fired resource
13 was modeled in the IRP. However, there are a number of reasons why
14 building a baseload coal resource to meet our capacity and energy needs
15 is problematic at this time. Those reasons include: Montana-Dakota's
16 need for resources is about 150 MW and even encompassing reasonable
17 growth assumptions, the construction of a coal plant of this small size is
18 currently not cost effective. The Big Stone II plant, a nominal 600 MW
19 plant was estimated to cost around \$3,000/kw. Prior to Montana-Dakota's
20 involvement with Big Stone II, the Company was considering constructing
21 a coal fired plant at Gascoyne North Dakota. Several different sizes were
22 evaluated, but the smallest, a 175 MW plant, was estimated to cost
23 approximately 30 percent more than Big Stone II, because it lacked the

1 economies of scale that could be captured with a larger plant.

2 **Q. Have you considered the risk of gas price volatility?**

3 A. Yes. The combustion turbine was modeled with both increases and
4 decreases in gas pricing, and in each case was shown to be a least-cost
5 resource. Montana-Dakota will be seeking long-term gas supply contracts
6 to minimize price volatility and mitigate supply concerns, and believes that
7 natural gas resources are now much more robust than even a few years
8 ago. This will be discussed in more detail by Mr. Bob Morman, Gas
9 Supply Manager in his testimony.

10 **Q. Is Montana-Dakota fit, willing and able to construct, operate and**
11 **maintain the Project?**

12 A. Yes. Montana-Dakota has built and currently operates and
13 maintains similar, albeit somewhat smaller, combustion turbines at other
14 locations on its integrated system.

15 **Q. Would you please summarize your request before the Commission?**

16 A. Yes. For the reasons provided in Montana-Dakota's Application
17 submitted on July 7, 2011 and the testimony provided by Company
18 witnesses, the Company requests the Commission issue a Certificate of
19 Public Convenience and Necessity to construct the 88 MW gas turbine
20 and associated facilities and make a determination that the resource
21 addition is prudent and reasonable.

22 **Q. Does this complete your testimony?**

23 A. Yes, it does.