

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

Before the Public Service Commission of North Dakota

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

Direct Testimony
of
Robert C. Morman

1 **Q. Please state your name and business address.**

2 A. My name is Robert C. Morman and my business address is 400
3 North Fourth Street, Bismarck, North Dakota 58501.

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

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

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

9 A. As manager I am responsible for the day to day and long range
10 planning for the purchase of natural gas and obtaining transportation and
11 storage capacity to meet the demand of Montana-Dakota natural gas
12 customers.

13 **Q. Please outline your educational and professional background.**

14 A. I hold a Bachelor's Degree in Accounting and Business
15 Administration from the University of Mary. My work experience includes
16 eighteen years of experience with Williston Basin Interstate Pipeline
17 Company in areas of operations, measurement accounting and gas

1 control. I also have twelve years of experience with Montana Dakota
2 Utilities in the measurement and gas supply departments. For the past
3 seven years I have been the Manager of Gas Supply.

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

5 A. The purpose of my testimony is explain the natural gas supply and
6 pipeline requirements for the combustion turbine project identified as part
7 of Montana-Dakota's least cost generation expansion plan.

8 **Q. Please describe the natural gas requirements of Montana-Dakota's
9 combustion turbine project?**

10 A. The combustion turbine that was selected will require up to 25,000
11 decatherm (dk) per day of natural gas delivered to the project site at a
12 pressure of 500 pounds per square inch (psig). This amount of gas and
13 economic efficiencies for needed delivery pressure for the required supply
14 can only be supplied by large capacity, high pressure pipelines.

15 **Q. Please describe what types of service are available to provide the
16 supply of natural gas and what service Montana-Dakota chose.**

17 A. Generally speaking there are two type of service available to
18 provide natural gas to the combustion turbine. These services are firm
19 and interruptible. Firm service means the supply of natural gas will be
20 available anytime the supply of gas is needed and the only time natural
21 gas may not be available is when there are operational problems on the
22 pipeline. Interruptible service is exactly that; the service may be
23 interrupted and may not be available when the turbine is required to run.

1 As the combustion turbine is part of the electric supply to meet Montana-
2 Dakota's peak demand, firm service is required.

3 **Q. How will the natural gas be delivered to the combustion turbine?**

4 A. Because of the high pressure required to meet natural gas demand
5 for the combustion turbine, the gas will be delivered through a high
6 pressure steel pipeline versus a lower pressure system, for which a
7 compressor station would be also required. Montana-Dakota requested
8 pipeline proposals from the two interstate pipelines in the area of the
9 combustion turbine which are Williston Basin Interstate Pipeline (Williston
10 Basin) and Northern Border Pipeline (Northern Border). Montana-Dakota
11 also considered the option of constructing and owning a pipeline to
12 provide service to the combustion turbine.

13 **Q. What was the outcome of your analysis?**

14 A. While proposals were received from both Williston Basin and
15 Northern Border, Montana-Dakota's choice is to construct and own the
16 pipeline that connects with Northern Border. Northern Border is a large
17 diameter, high pressure pipeline with services and marketers that are
18 familiar with providing natural gas to electric peaking facilities similar to the
19 proposed combustion turbine. Williston Basin's existing system is not
20 capable of delivering the supply quantities and associated pressure
21 without substantial system upgrades at significantly higher costs than the
22 construction of a line from Northern Border. In fact, Williston Basin did
23 provide a proposal to construct a line from Northern Border which was

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19 proposed combustion turbine. Williston Basin's existing system is not
20 capable of delivering the supply quantities and associated pressure
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22 construction of a line from Northern Border. In fact, Williston Basin did
23 provide a proposal to construct a line from Northern Border which was

1 similar in cost to Montana-Dakota's self build project option however,
2 service and cost guarantees could only be made for a maximum of a
3 seven year period and thereafter Montana-Dakota would be subject to
4 potentially maximum pipeline rates and/or a deterioration of the quality of
5 service that could be provided.

6 **Q. Would you please describe the scope and cost of the pipeline**
7 **proposed for the combustion turbine?**

8 A. To provide the natural gas required Montana-Dakota will construct
9 a pipeline 24 miles in length that runs from Northern Border near St.
10 Anthony, ND to the Heskett site near Mandan, ND. The cost of the
11 pipeline will be approximately \$18.4 million and deliver gas at the required
12 minimum pressure of 500 psig. The proposals from Northern Border and
13 Williston Basin essentially mirrored the self build project evaluated by
14 Montana-Dakota without the benefit of long term rate and service
15 guarantees.

16 **Q. How will Montana-Dakota purchase the gas to be delivered to the**
17 **turbine?**

18 A. Montana-Dakota requested gas pricing proposals from numerous
19 marketers that have contracted capacity on Northern Border. Four
20 responses were received and the cost of providing natural gas service by
21 the respondents was substantially less than Montana-Dakota obtaining
22 firm transportation capacity on Northern Border. The quotes that were

1 received were from reputable marketers that Montana-Dakota is currently
2 or has done business with in the past.

3 **Q. Why is Montana-Dakota proposing to purchase the required natural**
4 **gas supplies for the turbine from a marketer on Northern Border?**

5 A. By purchasing gas from a marketer Montana-Dakota does not have
6 to contract for firm transportation service on Northern Border. The
7 marketer has contracted for capacity on Northern Border and will provide
8 the required firm service to Montana-Dakota for a reservation fee that will
9 entitle Montana-Dakota to have "on-call" access to the gas on short-term
10 notice that is required for the electric peaking service of the Combustion
11 Turbine. The estimated reservation cost is between \$375,000 and
12 \$400,000 annually as compared to an annual cost in excess of \$2.0
13 million dollars if Montana-Dakota were to separately contract for firm
14 transportation capacity on Northern Border. This recognizes the ability of
15 the marketer to manage the required supply and service in conjunction
16 with an overall portfolio, thus enabling the marketer to offer a more
17 economically attractive alternative. The services offered by the marketer
18 include imbalance management with plant usage swings, nomination,
19 confirmation and accounting functions. Finally, there currently is no
20 incremental firm transportation service available on Northern Border.

21 **Q. Given your experience in the natural gas supply business is it your**
22 **recommendation that new electric generation needs consider natural**
23 **gas as a supply source?**

1 A. Yes. With the advancement in drilling technologies over the past
2 five to ten years the U.S. has discovered oil and natural gas shale plays
3 that only a short time ago were thought to be uneconomical to produce.
4 Not only are they economical to produce but the amount of gas and oil
5 being discovered is substantial. Estimates of potential reserves have
6 been reported to be in excess of 50 years of supply at the current usage.
7 These large volumes of reserves should provide price stability for years to
8 come. In addition, natural gas is cleaner burning and more
9 environmentally friendly than alternative supply sources for electric
10 generation.

11 **Q. Are the commodity price projections that were used in the model**
12 **representative of today's current market and projected prices?**

13 A. The commodity price used in the base scenario was at \$5.05 per dk
14 for the, at that time, current price of natural gas. Since that time the
15 commodity price of natural gas has decreased and the Energy Information
16 Administration, Bentek Energy and NYMEX futures project the Henry Hub
17 price for calendar year 2012 will be in the range of \$4.25 to \$4.50 per dk.

18 **Q. Does this conclude your direct testimony?**

19 A. Yes, it does.