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Via Electronic Mail

Trevor Graff
Research Analyst
Montana Legislative Environmental Policy Office
PO Box 201704
Helena, MT59620-1704

Dear Mr. Graff,

Attached is the response from Montana Dakota Utilities to the questions detailed in the Energy and Telecommunications Interim Committee's information request for its study of Natural Gas Consumer Choice in Montana. As you can see, we have also provided some prefatory background information we believe will be helpful to the Committee members in their consideration of these issues.

We appreciate the one day extension you provided for us to respond, and we understand your team will review this submission in cooperation with the Public Service Commission prior to discussion at the January 16, 2018, ETIC meeting.

Thank you for your assistance in this effort to provide information for this study. Please do not hesitate to contact me, Aimee Grmoljez, or Gary Forrester with any further questions.

Sincerely,

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Enclosure

cc: MDU

Montana-Dakota Utilities Co.

Information Provided to the Energy and Telecommunications Interim Committee House Joint Resolution No. 28 – The Study of Natural Gas Consumer Choice in Eastern Montana

Background

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. (MDU) or (Company) serves approximately 84,000 customers in 24 communities in eastern Montana and the Billings area. MDU also provides service to approximately 270,000 customers located in portions of North Dakota, South Dakota and Wyoming as shown on the attached map. MDU is a local distribution company which does not own or operate natural gas production, storage or transmission facilities serving its customers, which means MDU does not own (so does not earn a profit on) any gas supply, transmission or storage rate base assets.

MDU purchases gas on a competitive bid basis from approximately 20 third-party suppliers through a combination of fixed price and indexed price contracts. MDU also contracts for transmission and gas storage services from third parties under tariffs regulated by the Federal Energy Regulatory Commission, or the Montana Public Service Commission. Natural gas purchases have been deregulated since the early 1990's with the passage of FERC Order 636. The natural gas system is interconnected via the contracted transmission and storage systems allowing MDU the opportunity to purchase gas supplies throughout the region and operate the system as an integrated natural gas system to ensure the reliable delivery of low cost natural gas supply to its customers.

In 1997 the Legislature recognized the differing economic and market factors affecting Montana Power Company (which had substantial gas supply and transmission rate base assets) and MDU, (which did not). As a result, the Legislature recognized that offering gas choice might not be the most costeffective system for all utility customers when it considered gas utility restructuring. The fact that adoption of gas choice was voluntary under the "Natural Gas Utility Restructuring and Customer Choice Act" (69-3-1401, et seq., MCA) allowed MDU to continue to procure natural gas on an integrated basis. This integration provides MDU substantial purchase power, and allows it to spread its fixed costs among all customers on a consistent basis.

MDU's customer base in Montana is comprised of primarily residential and commercial customers that are served on a firm (or uninterruptable) basis, meaning MDU has an obligation to meet all firm customer's demand without interruption. MDU cannot ask its firm customers to reduce or interrupt their service at times of higher need or use, so MDU's entire system (including supply and transmission arrangements) is designed to meet its customers' needs on even the coldest days or periods of highest use. As a result, upstream contracts must be structured to ensure delivery to the town border stations on a firm basis throughout the year through MDU's distribution system. These service requirements require MDU to purchase certain firm commitments from its transmission and storage providers, which increase the fixed costs that do not vary based on actual usage. Put another way, there are substantial costs that MDU will incur regardless of the amount of gas its customers actually use in any particular year. Currently, however, those fixed costs are spread over MDU's entire firm customer base. MDU

manages 224 delivery points across its system on a daily basis to ensure gas is available and delivered to its customers and to efficiently utilize the contracted capacity. 68 of those delivery points (or city gate stations) are located in Montana.

MDU also currently provides interruptible sales service to approximately 20 customers and interruptible transportation service to approximately 32 customers in Montana. The interruptible service customers are typically large or specialized customers that have a backup system or have the ability to stop using natural gas service upon notice by the Company. MDU does not contract for firm capacity on the transmission system for the interruptible and does not provide backup service for the interruptible transportation service customers. In other words, if the transportation service customer's gas is not delivered to the Company's city gate the Company is not obligated to supply natural gas to the customer, and these customers are not required to pay any of MDU's fixed costs.

MDU's residential and firm commercial rate structure consists of the following components.

1) Cost of Gas

- o MDU purchases gas supplies from various providers, including directly from natural gas producers, from a natural gas processing facility or from marketers that buy and sell gas in the open market. The cost of the gas that is purchased is passed through to MDU customers on a dollar for dollar basis with no markup of the gas. The gas supplies are available from regional Bakken gas production where MDU purchases directly from the processing facilities, eliminating the middle man or marketer as well as from marketers with access to regional supplies from the Colorado Interstate Gas Company(CIG)south of Billings, Montana, the Northern Border Pipeline(NBPL) which runs through the Bakken area of North Dakota. NBPL allows access to additional Bakken reserves as well as natural gas imported from Canadian suppliers.
- As noted above, MDU does not own the upstream high-pressure transmission lines that deliver natural gas from the processing plants to MDU's city gate, which is the point where the gas is delivered into MDU's lower pressure local distribution system. MDU contracts for firm capacity on the upstream pipeline to ensure natural gas is delivered to the city gate every day of the year. MDU passes 100% of these costs onto its customers with no markup.
- O MDU leases and utilizes underground natural gas storage capacity from a third party to ensure deliverability of natural gas during extremely cold weather conditions. The storage is also used as a price hedge for the cost of the natural gas as the gas is injected into storage during the summer months, when the price of gas is normally less expensive, and withdraws the gas during the colder months when the cost of purchasing the natural gas is normally higher. The costs associated with the storage is also passed onto customers with no markup.

2) Distribution

 MDU owns the distribution systems that are downstream of the upstream transmission lines. MDU charges a fee that is set by the Montana Public Service Commission, to operate and maintain the distribution system necessary to deliver the gas from the city gate to the end use customer. MDU also owns and operates the necessary regulation, metering and billing systems.

Given the nature of the firm demand of potential gas choice customers, MDU does not expect material, if any, reductions to its peak day requirements. As a result, unless the Legislature were to clearly release MDU from an obligation to provide emergency or default supply to gas customers or otherwise make gas choice customers interruptible customers, MDU would not be able to reduce its fixed or firm upstream costs. As a result, the only component of MDU's current rates that would be eliminated for gas choice customers would be the actual cost of the gas commodity and the minimal volumetric transmission charges attributable to that customer's usage. However, accomplishing this new rate structure, would require a complete revision of MDU's current tariffs and rates through a PSC proceeding.

Responses to October 4, 2017 questions

- 1. Detail the potential costs incurred by integrating customer choice with MDU's natural gas infrastructure in Montana. What are the contributing factors to the projected costs?
 - a. Total costs:
 - i. Implementation costs: \$2,085,000 (see detail below)
 - ii. Ongoing annual expenses: \$1,000,000 (see detail below)
 - b. CIS Enhancements:
 - i. Development and deployment of new rate schedules for customer electing to participate in a customer choice program.
 - ii. Bill print enhancements
 - iii. Estimated implementation costs: \$385,000
 - iv. Estimated annual expenses: \$275,000
 - c. Measurement Management
 - i. Development and deployment of measurement system including interfacing with existing systems
 - ii. Estimated implementation costs: \$1,000,000
 - iii. Estimated annual expenses: \$425,000
 - d. PSC case to create tariff language to implement a new rate class;
 - i. Estimated implementation costs: \$100,000
 - ii. Estimated annual expenses: minimal
 - e. Customer Service Center
 - i. Development and deployment of information for and addition of Customer Service Representatives
 - ii. Estimated implementation costs: \$600,000
 - iii. Estimated annual expenses: \$300,000

f. Dependent on the location of and quantity of customers electing to participate in a customer choice program, infrastructure costs would range from zero to an estimated \$125,000. A given customer's proximity to existing fixed network collectors will determine the need to purchase and install new collectors for that customer. If that customer's location is not within existing collector range, new equipment costs will be incurred.

2. What are the projected additional costs to consumers if natural gas consumer choice is integrated in MDU's natural gas system in Montana?

MDU expects all of the costs identified above (implementation and ongoing) would be passed on to MDU's Montana customers because, those costs, as new legal obligations, would become part of MDU's recoverable costs of service.

3. Detail 2016 natural gas transmission and maintenance costs.

MDU does not own the transmission system. All transmission service is contracted from third party suppliers and MDU's costs for those services are included in the rate described in response to 4.

4. Detail the costs of natural gas transmission, supply and storage on MDU's system in Montana.

The costs of providing transmission, supply and storage to the city gate for MDU's bundled residential customers for the month of October 2017 was \$4.038 per Dth. Approximately \$1.489 per Dth is attributable to fixed costs.

5. What is required of MDU to service a customer who buys gas from an independent supplier in Montana if the law changes?

To accommodate a customer choice program, MDU would need to:

- enter into transportation agreement between MDU and independent supplier to deliver natural gas from city gate to an aggregation of choice customers on distribution system,
- ii. aggregate, daily, for each city gate, all energy consumed by choice customer to allocate those expenses to an independent supplier,
- iii. allocate total commodity, assess any incurred costs in the form of pipeline penalties, and deployment of cash in/cash out program to independent supplier
- iv. MDU would expect to retain all upstream capacity, storage and supply in the event the Consumer Choice gas fails to arrive at the gate station. MDU would not be able to turn back any upstream capacity as the consumer choice customers could return to MDU bundled service in the future.
- v. Additionally, MDU currently has an Automatic Meter Reading (AMR) system in place that handles most of its customers. This system; however, is not currently

designed to deliver measurement information daily. Therefore, a new meter data management system will need to be acquired and deployed to accommodate gas choice providers and customer billing.

6. What steps would MDU take to update current infrastructure to allow independent suppliers to deliver gas over the transmission system?

MDU does not own the upstream transmission system. MDU contracts for the upstream capacity from a third party. It would be the responsibility of the Consumer Choice provider to ensure adequate capacity is available to meet their customers' demand.

7. What technology is available to provide for that transition?

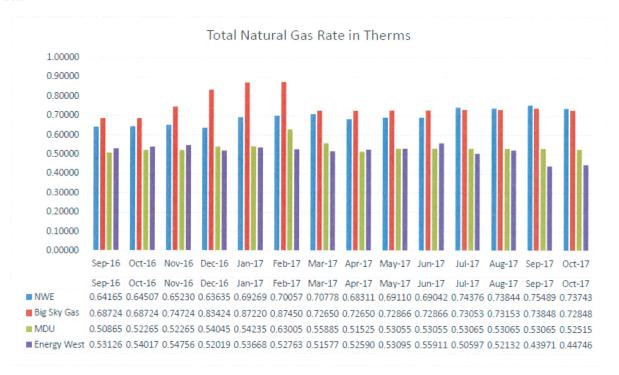
MDU cannot answer this question as the transmission requirements and "transitions" will depend on the requirements of the transmission services provider.

- 8. Describe MDU's natural gas procurement infrastructure. How do MDU procurement volumes compare to those of other Montana utilities and independent suppliers?
 - a. MDU procures its natural gas from marketers or from the tailgate of natural gas processing facilities in the region. The gas is transferred from the supply source to MDU's city gate stations by a third-party pipeline and MDU then transports the gas to its residential, commercial or industrial end-user over its distribution system. MDU utilizes third party storage to take advantage of seasonal pricing and ensure customer demand is met throughout the year.
 - b. For the 12 months ending March 31, 2016, MDU procured approximately 33.4 million Dth of gas, and for the period ending March 31, 2017, procured approximately 35.3 million Dth for all of its natural gas customers across the four states it operates. The Company does not have information available regarding other utilities purchases.
- 9. What are MDU's current rate structure and how might those rate structures change after integrating consumer choice?

MDU's rate structure would need to change in order to unbundle the commodity cost of gas from the total cost of gas including transmission and storage costs as billed today. Further research and a better understanding of the intent of the legislature is required to determine how costs will be assessed to choice customers in the event Montana-Dakota will be the supplier of last resort. Currently Montana-Dakota's rate structure for gas sales to customers includes a distribution charge (fixed and variable) and a Cost of Gas component comprised of the services contracted from third parties plus the cost of gas supplies as denoted in Response No. 4.

10. How do MDU's natural gas rates compare to other utilities and suppliers in the state?

Below is a comparison compiled by the Montana Public Service Commission. The costs are all inclusive of commodity, transportation capacity, storage, distribution charges, etc.



11. Describe the possible billing processes for customer who might elect to buy gas from an independent supplier. At the customer level, how would billing be completed.

The billing process for consumer choice customers would be dependent on how the law is written. It is MDU's understanding that gas choice customers on NorthWestern Energy's (NWE) system currently receive separate bills from NWE and the gas choice provider. Alternatives would include MDU billing the gas provider for transportation, or an agreement for MDU to bill customers on behalf of the gas choice provider. Any of these options would require substantial changes to MDU's current customer billing system and the development of tariffed charges for the services provided.

12. What, if any, additional programming or staffing would MDU expect to administer a consumer choice program?

See response to question 1 above.

13. Are there structural differences between NorthWestern Energy and MDU that complicate consumer choice on the MDU system?

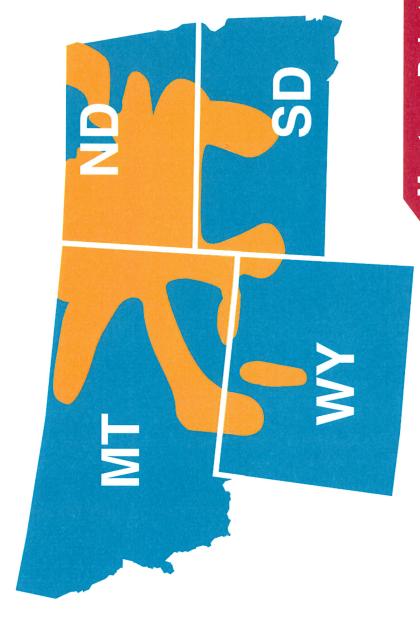
The major difference at this point is that NWE already offers choice, and MDU would have to develop a transition plan to implement consumer choice. If required to implement consumer choice, MDU anticipates a number of challenges as outlined above; but once implemented anticipates many of the same ongoing challenges NWE has experienced. The following, are some key additional differences between both the current structure of NWE as well as the historical Montana Power Company, which actually originally implemented deregulation and consumer choice on what became NWE's current Montana gas system.

- i. NWE owns and operates both the distribution and upstream high-pressure transmission pipeline which serve each town. MDU owns only the distribution system with the high pressure upstream transmission pipeline being owned by a third party. MDU anticipates that NWE's ownership of the transmission system, and the required open access to that system by a gas choice provider, may mitigate some of the duplicative transmission costs MDU expects for its customers.
- ii. Additionally, gas choice at Montana Power/NWE was implemented as part of the larger deregulation of its gas supply and transmission operations, and across its entire customer base. Since MDU divested its regulated supply and transmission assets decades ago, it will not have any of the economies of scale or efficiencies Montana Power/NWE may have benefitted from through its more comprehensive conversion. The fact that choice will only be available within part of MDU's service territory will require MDU to retain its legacy systems for its other states, so will further add costs.
- iii. Most importantly, the market and industry conditions currently affecting MDU are completely different than those affecting Montana Power in 1997 which drove the Legislature to approve gas utility restructuring and gas choice. As indicated above, all of MDU's customers receive market based gas supply pricing through MDU's sophisticated gas supply operation. They are not exposed to the type of cost of service rates Montana Power's customers faced at the time.

14. How do other states serviced by MDU's natural gas infrastructure approach consumer choice policies?

MDU does not offer consumer choice to the other states it provides natural gas.

Natural Gas Service Area



Montana-Dakota Utilities