



UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

January 30, 2017

Ms. Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities Commission  
State Capitol Building  
500 East Capitol  
Pierre, SD 57501-5070

Re: Conservation Program Tracking Mechanism Rate 90  
Docket No. NG17-\_\_\_\_\_

Dear Ms. Van Gerpen:

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc. herewith electronically submits for Commission approval its Conservation Tracking Adjustment (CTA), pursuant to the terms of the Company's Conservation Program Tracking Mechanism Rate 90 tariff to be effective March 1, 2017.

The proposed CTA rate, applicable to service under Rates 60, 70, and 72, equates to \$0.028 per dk or an increase of \$0.004 per dk from the currently authorized CTA rate.

Montana-Dakota is requesting approval of the following tariff changes, attached hereto as Exhibit 1, to Montana-Dakota's natural gas tariff to be effective March 1, 2017:

- 12<sup>th</sup> Revised Sheet No. 31

The Rate Summary sheet (Sheet No. 1) will be submitted as part of the compliance filing in this docket to reflect the Cost of Gas effective at the time of approval.

### **Background**

On October 3, 2014, Montana-Dakota requested approval for a three year natural gas portfolio for the years 2015 – 2017. The Commission approved the three year portfolio in its Order dated December 31, 2014 in Docket No. NG14-007 as modified in Docket No. NG15-007. The Company offered the following programs in 2016:

### **Residential Programs:**

- High-Efficiency Furnace (95+%). Available to customers, for new construction and existing dwellings, that convert to natural gas heating or replace an existing furnace. The new furnace requires an AFUE of 95 percent minimum in order to qualify for the

\$300 cash rebate. Participation levels by builders for the new construction was limited to a maximum of 25 rebates per builder.

- Programmable Thermostats. Montana-Dakota offers a \$20 incentive for the purchase of a programmable thermostat that meets the guidelines formerly required by ENERGY STAR. The thermostat must be installed by a contractor in conjunction with the installation of a high efficiency furnace.

#### Energy Audits

Montana-Dakota offers energy audits to customers for a \$50.00 assessment fee. Montana-Dakota has contracts with Western South Dakota Community Action and North Eastern South Dakota Community Action to perform energy audits throughout Montana-Dakota's South Dakota natural gas service territory. In addition, Montana-Dakota and Black Hills Power share equally the costs of energy audits for customers that use natural gas as their primary source of space heating and are customers of both Black Hills and Montana-Dakota within the communities of Belle Fourche, Deadwood, Lead, Rapid City, Summerset, Spearfish and Sturgis.

#### Commercial Programs:

- High-Efficiency Furnace (95+%). Available to customers, for new construction and existing dwellings, that convert to natural gas heating or replace an existing furnace. The new furnace requires an AFUE of 95 percent minimum in order to qualify for the \$300 cash rebate.
- Custom program. Qualifying customers receive an incentive for energy efficiency measures. Each project is individually reviewed by the Company and a cash incentive is issued based upon the energy savings provided by the measure.

#### **2016 Program Results – Exhibit 2**

Montana-Dakota experienced overall success with participation close to the budgeted level and expenses less than the budgeted level, with dk savings above the budgeted level. The Company's portfolio of natural gas conservation programs in 2016 are summarized below and shown in Exhibit 2 in detail.

	2016			
	Actual	Budget	Difference	% Budget
Participants	649	685	(36)	94.7%
Expense	\$149,295	\$180,800	(31,505)	82.6%
Dk Savings	5,135	5,048	87	101.7%



The annual savings of 5,135 dk from the 2016 programs equates to 97,020 dk over the project life of the installed equipment. The results of the 2016 program are provided in the table below:

Programs	2016			Lifetime	
	Participants	Cost	Dk Savings	Cost/Dk	Dk Savings
<u>Residential Program</u>					
Furnaces - 95+% AFUE - New	184	\$58,004	1,435	\$40.42	28,700
Furnaces - 95+% AFUE - Repl.	229	72,189	2,950	24.47	59,000
Programmable Thermostats	196	4,119	568	7.25	5,680
Energy Audits	31	12,146			
Total Residential	640	\$146,458	4,953	\$29.57	93,380
<u>Commercial Program</u>					
Furnaces - 95+% AFUE - New	2	\$630	20	31.50	400
Furnaces - 95+% AFUE - Repl.	7	2,207	162	13.62	3,240
Custom Efficiency	0	0	0		0
Total Commercial	9	\$2,837	182	\$15.59	3,640
Total Programs	649	\$149,295	5,135	\$29.07	97,020

The residential programs had slightly less participation than budgeted while the dk savings achieved 103.9 percent of budgeted dk savings with expenses only 89.9 percent of budget.

Participation in the commercial programs was lower than anticipated, and the custom program did not have any participants; however the commercial programs achieved 65.2 percent of budgeted dk savings with 56.3 percent of budgeted expense. While there was interest from customers in the custom program in 2016, the projects did not move forward with implementation. Montana-Dakota's customer energy consultants will continue to promote the program with commercial customers. The custom projects generally take time due to the size and cost of the projects for the customer, the specificity of each project, and the measurement and verification process.

The Company promoted the programs through bill inserts, homebuilder publication advertising and billboards. Montana-Dakota personnel also provided area dealers/builders with information regarding the Company's program and rebates available to customers.

Montana-Dakota has surveyed participants since the start of the current programs on January 1, 2010 and provides both the current portfolio questionnaires and results in Exhibit 6. Pursuant to Staff's request, the survey is sent to each participating customer after the project is complete and the customer has received the rebate. The rebates

continue to influence customer decisions to purchase energy efficient equipment as shown in question three. Question number seven of the survey shows the need to continue to build upon relationships with the dealers and builders in the area as they greatly influence the customer's decision to purchase energy efficient equipment.

Montana-Dakota analyzed the cost-effectiveness of its natural gas portfolio using a 2017 estimated cost of natural gas and determined the overall portfolio passed the Benefit/Cost Tests, particularly the Total Resource Cost Test (TRC), including all individual programs with a ratio of 1.00 or greater.

Montana-Dakota performed the following Benefit/Cost tests: the Ratepayer Impact Test (RIM), Utility Cost Test, Societal Test, Participant Test, and the Total Resource Cost Test (TRC).

- The RIM includes quantifiable benefits and costs of the programs and considers the impact on ratepayers.
- The Utility Test considers the impact of the programs on the utility.
- The Societal Test includes environmental externalities and considers the impact on the society for both participating and non-participating customers.
- The Participant Test considers the economic impact of programs on the participating customers.
- The TRC reflects the total benefits and costs to all customers (participants and non-participants) in the utility service area. The key difference between the TRC and the utility test is that the TRC does not include program incentives in its calculation, which are considered zero net transfers in a regional perspective.

The benefit/cost test results for 2016 are provided in the table below:

Program	Customer Class	RIM	Utility	Societal	Participant	Total Resource Cost
Total Portfolio		1.33	2.23	2.72	5.05	1.92
Furnace (95+%) - New	Residential	1.04	1.54	3.57	7.68	2.51
Furnace (95+%) - Replacement	Residential	1.42	2.54	2.39	4.23	1.67
Programmable Thermostats	Residential	2.02	5.17	2.24	3.00	1.79
Furnace (95+%) - New	Commercial	1.50	1.97	4.20	7.69	2.94
Furnace (95+%) - Replacement	Commercial	2.63	4.55	3.78	5.04	2.62
Custom Efficiency	Commercial					

### Conservation Tracking Adjustment – Exhibit 3

The proposed CTA rate to be effective March 1, 2017 shown on Exhibit 3, page 1 consists of the three components: the true-up balance in the CTA account, the DSM



incentive established in Docket No. NG09-001, and the proposed portfolio budget for the 2017 program year as discussed above. As stated above, the CTA rate equates to \$0.028 per dk and will be effective for rate schedules 60, 70, and 72.

Exhibit 3, page 1, summarizes the activity for the period January 1, 2016 through December 31, 2016, with the monthly detail on page 2 and a summary by program on page 3. The beginning balance as of January 1, 2016 in the CTA account was an over recovery of \$34,361 and the balance as of December 31, 2016 is an over recovery of \$24,532.

#### **DSM Incentive – Exhibit 4**

Pursuant to Rate 90, Montana-Dakota has included DSM financial performance incentives in the amount of \$14,516 as part of the total costs to be recovered through the CTA as established in Docket No. NG09-001. The incentive is calculated by multiplying the total costs incurred by the authorized return, adjusted for taxes of 9.723 percent. Montana-Dakota incurred \$149,295 in program costs from January 1, 2016 through December 31, 2016 which equates to an incentive of \$14,516.

#### **2017 Portfolio and Budget – Exhibit 5**

The 2017 conservation budget is based on anticipated participation and is comprised of incentive costs, marketing and promotional costs and administration costs as authorized in Docket No. NG14-007 and Docket No. NG15-007.

Montana-Dakota analyzed the cost-effectiveness of its projected 2017 portfolio of programs and determined the portfolio to be cost-effective using projected gas costs for the year 2017. As stated above, Montana-Dakota utilizes the Benefit/Cost analysis where the cost of gas is one of the primary inputs that determine whether a portfolio is The Company provides in the tables below its anticipated participation levels for the 2017 program year from its three year portfolio authorized in Docket No. NG14-007 and Docket No. NG15-007.

	2017		
Programs	Participants	Cost	Dk Savings
<u>Residential Program</u>			
Furnaces - 95+% AFUE - New	190	\$57,000	893
Furnaces - 95+% AFUE - Repl.	275	82,500	3,905
Programmable Thermostats	220	4,400	462
Energy Audit Program	50	25,000	
Total Residential	735	168,900	5,260
<u>Commercial Program</u>			
Furnaces - 95+% AFUE - New	2	600	9
Furnaces - 95+% AFUE - Repl.	12	4,200	199
Custom Efficiency	1	600	100
Total Commercial	15	\$5,400	308
Administration and Promotion		24,000	
Total Programs	750	\$198,300	5,568

Montana-Dakota calculates its projected 2017 minimum incentive to be \$9,915 and its incentive cap at \$19,281 based on the projected 2017 budget above and Montana-Dakota's authorized rate of return in Docket No. NG15-005, adjusted for taxes.

### Summary

The proposed CTA rate applicable to service under Rates 60, 70 and 72 is \$0.028 per dk, or an increase of \$0.004 per dk from the currently authorized CTA for South Dakota customers. The estimated annual increase for a residential customer using 70 dk annually is \$0.28. Montana-Dakota requests Commission approval of the CTA to be effective with service rendered on and after March 1, 2017.

Included herein is a second set of the affected tariff on which Montana-Dakota has indicated the revisions requested by lining through the existing language which the Company proposes to delete and clearly highlighting the new language proposed.

Attached as Exhibit 7 is the South Dakota "Report of Tariff Schedule Change" form required pursuant to ARSD 20:10:13:26.

The Company will comply with ARSD 20:10:13:18 by posting the Notice shown in Exhibit 8 in a conspicuous place in each business office in its affected gas service territory in South Dakota.

Please refer all inquiries regarding this filing to:

Ms. Tamie A. Aberle  
Director of Regulatory Affairs  
Montana-Dakota Utilities Co.  
400 North Fourth Street  
Bismarck, ND 58501

Also, please send copies of all written inquiries, correspondence, and pleadings to:

Mr. Karl A. Liepitz  
Senior Attorney  
MDU Resources Group, Inc.  
P.O. Box 5650  
Bismarck, ND 58503-5650

This filing has been electronically submitted to the Commission in accordance with ARSD 20:10:01:02:05. Montana-Dakota respectfully requests that this filing be accepted as being in full compliance with the filing requirements of this Commission.

Sincerely,



Tamie A. Aberle  
Director of Regulatory Affairs

Attachments

cc: K. Liepitz