
STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS
FROM: BRITTANY MEHLHAFF AND AMANDA REISS
RE: NG20-011 - In the Matter of the Filing by Montana-Dakota Utilities Co. for Approval of Its South Dakota Natural Gas Conservation Portfolio for 2021-2023
DATE: December 16, 2020

OVERVIEW

On October 29, 2020, Montana-Dakota Utilities Company (Montana-Dakota or Company) filed its proposed Natural Gas Conservation Portfolio Plan for the years 2021 through 2023. The Company's proposal updates its most recent plan approved in Docket NG17-016 for the years 2018 through 2020.

Montana-Dakota proposes to continue its current program offerings with minor changes and to discontinue one residential program. Montana-Dakota estimates the total cost of its portfolio for 2021-2023 to be \$470,925, with a savings of 560,558 dk over the life of the installed equipment. The Company proposes the plan be effective January 1, 2021.

Staff provides the following analysis and recommendation to the Commission regarding the proposed 2021-2023 plan.

ANALYSIS

2021-2023 PROGRAM PORTFOLIO

A. CONTINUED EXISTING PROGRAMS

Residential

Montana-Dakota proposes to continue its Residential Space Heating – High Efficiency Furnace and Residential Programmable Thermostats programs. The Company proposes minor modifications for the upcoming plan years regarding the high efficiency furnace program. Information regarding each program is provided below.

Residential Space Heating – High Efficiency Furnace

The High Efficiency Furnace program is available to residential customers installing a qualifying furnace in a new construction home and to customers with an existing home who convert to natural

gas heating or replace an existing furnace. To qualify, the new furnace installed must be rated at a minimum Annual Fuel Utilization Efficiency (AFUE) of 95%.

Currently, both new construction customers and existing customers replacing a furnace receive the same rebate of \$300. For the new plan, Montana-Dakota proposes two separate rebate amounts. Customers replacing an existing furnace will receive a \$300 rebate. However, customers with a new construction furnace will only be eligible for a \$150 rebate. The change in rebates for new construction furnaces is due to a change in the incremental cost for new furnaces referenced in the Technical Reference Manual utilized by Montana-Dakota.

As the Company explained in response to Staff's Data Request 1-1, the incremental cost for replacement furnaces compares the cost of installing a high efficiency furnace to installing an 80% AFUE baseline furnace, while the new construction furnaces compare the cost of installing a high efficiency furnace to installing a 90% AFUE baseline furnace. The incremental cost to move to a 95% AFUE furnace from a 90% AFUE baseline condensing furnace is smaller than moving from a non-condensing 80% AFUE baseline furnace to a 95% AFUE furnace for replacement furnaces.

Staff agrees it is reasonable to have a smaller rebate for new construction furnaces than replacement of existing furnaces, since the options for new construction furnaces customers are choosing between will be more efficient than the furnaces other customers are opting to replace in an existing home, thus lowering the cost differential.

Montana-Dakota has reached the budget level for new construction furnace rebates in 2020. Staff inquired as to how the transition between rebate amounts worked when rebate applications were received after funding was depleted for the current plan year. The Company explained to Staff that any new construction furnace rebate submissions received within 90 days from when the new home connects service with Montana-Dakota will receive the rebate at the new rebate amount approved for 2021. Staff agrees this approach is reasonable.

Residential Programmable Thermostats

The Residential Programmable Thermostat program is available to new construction and existing dwellings, in two tiers. Tier 1 is available to those customers installing an Energy Star rated programmable thermostat whereas Tier 2 is available to customers installing a Wi-Fi enabled thermostat. The Tier 1 rebate is \$15 per unit and the Tier 2 rebate is \$60 per rebate. The rebate is limited to two units per account, if the home has multiple heating systems or zoned heating. The Company does not propose any changes to this program for the upcoming plan years.

Commercial

In the Commercial sector, Montana-Dakota proposes to continue its Space Heating – High Efficiency Furnace and Custom programs. Both programs are described below.

Commercial Space Heating – High Efficiency Furnace

Commercial customers taking service under Rates 70 and 72 are eligible for the high efficiency furnace rebate. Like the residential program, customers are eligible for a rebate if they install a qualifying furnace rated at a minimum of 95% AFUE to replace an existing furnace or if they install a qualifying furnace in a new construction building. Montana-Dakota proposes the same rebate change for Commercial customers as Residential customers in that new construction furnaces will be eligible for a \$150 rebate instead of the current \$300 rebate and replacement furnaces will continue to be eligible for the \$300 rebate.

Commercial Custom

Montana-Dakota also offers rebates to commercial customers on a customized basis. The Company reviews each project individually and offers a rebate based on the amount of energy savings projected for the measure. Each custom project must pass the benefit/cost test with a Total Resource Cost (TRC) greater than 1.00 to qualify. In addition, equipment must be more efficient than the industry standard, simple payback must be greater than 18 months, and the rebate cannot exceed 50% of the incremental cost of the equipment. The Company requires preapproval prior to start of any project.

B. DISCONTINUED PROGRAM

Residential Energy Assessments

Montana-Dakota proposes to discontinue the Energy Assessment rebate program. Previously, the Company partnered with Black Hills Energy to share the cost for customers who received natural gas service from Montana-Dakota and electric service from Black Hills Energy. Black Hills Energy discontinued its program and over the past three years Montana-Dakota has experienced declining participation. Therefore, Montana-Dakota has chosen to discontinue this program as it has become difficult to deliver the program in a cost-effective manner.

C. PROMOTION AND EDUCATION

Montana-Dakota's promotional plan focuses on awareness and increasing participation of the energy saving programs. The Company plans to use billboard and online advertising, dealer and builder meetings, and bill inserts.

2021-2023 BUDGET

Montana-Dakota proposes a budget of \$470,925 for 2021 through 2023. The 2021 budget is \$141,200 which is a decrease of 34.7% from the current 2020 budget. The decrease is due to the proposed discontinuation of the Residential Energy Assessment Program and the decrease in the new construction furnace rebate amount. The 2022 and 2023 budgets are a year over year increase of 11.1% and 10.1%, respectively. A breakdown of the budget per year is provided in Table 1 on the following page.

Table 1. Proposed Portfolio Budget			
Program	EEP Budgets		
	2021	2022	2023
<i>Residential</i>			
New Construction High Efficiency Furnace	\$26,642	\$28,096	\$29,567
Replacement High Efficiency Furnace	\$83,253	\$89,246	\$95,270
Programmable Thermostats - Tier 1	\$1,499	\$1,405	\$1,314
Programmable Thermostats - Tier 2	\$10,657	\$11,569	\$12,155
Total Residential	\$122,051	\$130,316	\$138,306
<i>Commercial</i>			
New Construction High Efficiency Furnace	\$833	\$1,157	\$1,643
Replacement High Efficiency Furnace	\$4,995	\$5,619	\$6,570
Custom	\$13,321	\$19,833	\$26,281
Total Commercial	\$19,149	\$26,609	\$34,494
Total All Programs	\$141,200	\$156,925	\$172,800

Montana-Dakota's budget is comprised of program incentive costs, educational and promotional costs, and administration costs. Promotional and Administrative costs are allocated to each program based on anticipated participation. Incentives account for \$127,200, \$142,425, and \$157,800 of the proposed budgets for 2021, 2022, and 2023, respectively. Promotion/Education accounts for \$5,000 of the proposed budgets each year, whereas Administration accounts for \$9,000, \$9,500, and \$10,000 for 2021, 2022, and 2023, respectively.

Staff has no concerns regarding Montana-Dakota's proposed budget for 2021-2023.

2021-2023 BENEFIT/COST TESTS

Staff reviewed the Company's TRC test results associated with the proposed 2021-2023 plan. Table 2 on the following page provides Montana-Dakota's forecasted TRC scores for the 2021-2023 portfolio. As shown, Montana-Dakota expects all programs to be cost effective, with TRC scores greater than 1.0. Staff supports continuation of these programs given the forecasted cost effectiveness.

Table 2. Total Resource Cost Test	
Program	2021-2023 TRC
<i>Residential</i>	
New Construction High Efficiency Furnace	1.43
Replacement High Efficiency Furnace	1.50
Programmable Thermostats - Tier 1	2.41
Programmable Thermostats - Tier 2	1.22
<i>Commercial</i>	
New Construction High Efficiency Furnace	1.87
Replacement High Efficiency Furnace	1.60
Custom	1.46
Total Portfolio	1.48

2021-2023 PERFORMANCE FINANCIAL INCENTIVE

Montana-Dakota's current performance financial incentive cap was set in Docket NG14-007. The financial incentive cap is calculated by multiplying Montana-Dakota's tax-adjusted rate of return by 100% of the approved budget. Montana-Dakota has not proposed any changes to the financial incentive in this docket. Financial incentive amounts are not included in the budget amounts discussed in this memo.

RECOMMENDATION

Staff recommends the Commission approve Montana-Dakota's proposed 2021-2023 Natural Gas Conservation Portfolio Plan, effective January 1, 2021.