Docket Number: **NG24-002**
Subject Matter: **First Data Request**
Request to: **Montana-Dakota Utilities Co. (MDU or Company)**
Request from: **South Dakota Public Utilities Commission Staff**
Date of Request: **February 1, 2024**
Responses Due: **February 8, 2024**

1-2. Refer to page 4 of MDU's letter.
   a. Provide the benefit/cost models that were used to calculate the benefit/cost test results for 2023 actual performance.
   b. Why were the 2024-2026 projected TRC ratios provided in docket NG23-025 higher than 2023 actual for the residential programs but lower for the commercial programs?
   c. Provide all the factors that contributed to the decrease in 2023 actual TRC ratios as compared to the 2022 actual performance.

Response:

a. See the Excel file titled Response No. 1-2 Attachment A.
b. Two factors played into the disparity of the ratios when comparing the projected TRC in NG23-025 to the actual results in NG24-002.
   1. The commodity cost of gas (COG) used in NG23-025 ($2.918 adjusted for losses) was slightly higher than the commodity cost of gas used in the 2023 actuals filing ($2.789 adjusted for losses). The lower COG drives the TRC ratios lower.

   2. The estimated average Dk saved per participant used in NG23-025 compared to the actual 2023 average Dk savings per participant. A breakdown of the average savings per participant in both filings is outlined in the table below. The higher savings per Dk for commercial participants aided in driving the results higher.

Average Dk savings per Participant

	NG23-025	NG24-002
Residential		
Furnace - 95+% AFUE - New	5.7	5.2
Furnace - 95+% AFUE - Repl.	19.6	18.3
Programmable Thermostats - Tier 1	2.3	2.3
Programmable Thermostats - Tier 2	5.8	6.2
Commercial		
Furnace - 95+% AFUE - New	4.5	7.2
Furnace - 95+% AFUE - Repl.	18.4	24.8
Custom Efficiency	500.0	234.0

The Custom project had a lower average Dk than what was estimated in NG23-025, but the ratios for this category stayed consistent. This is due to the life of the project being 20 years, whereas the Custom projects are estimated using a 15 year life in NG23-025. The results are also affected by a lower actual incremental cost than what is estimated in NG23-025.

c. The main factor that contributed to a decrease in 2023 actual TRC ratios vs 2022 actual TRC ratios is the COG. The COG included in NG23-004 was $4.357, compared to the COG included in NG24-002 was $2.789. The higher cost of gas resulted in greater TRC ratios in NG23-004.