BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)	CASE NO. INT-G-22-03
OF INTERMOUNTAIN GAS COMPANY)	
FOR A DETERMINATION OF 2021 ENERGY)	ORDER NO. 35663
EFFICIENCY EXPENSES AS PRUDENTLY)	
INCURRED)	
)	

On July 12, 2022, Intermountain Gas Company ("Company"), a subsidiary of MDU Resources Group, Inc., filed an Application with the Idaho Public Utilities Commission ("Commission") for an order designating \$4,028,174 of 2021 Energy Efficiency Program ("EE Program") expenditures as prudently incurred. The Company submitted its 2021 Energy Efficiency Annual Report with the Application.

The Company represented that the EE Program expenditures were funded through collections from customers via Energy Efficiency Charges. The Company stated that its Rate Schedule EEC-RS of \$0.02093 per therm funds the Residential EE Program, and the total Residential EE Program revenues for calendar year 2021 were \$5,393,824. The Company represented that its Rate Schedule EEC-GS of \$0.00320 per therm funds the Commercial EE Program, and the revenues for the first nine months of the Commercial program were \$234,906.

The Company represented that the combined expenditures for the Residential and Commercial Programs for January 1, 2021, through December 31, 2021, were \$4,028,174. The Company stated that the Residential Program began the year with an over-collected deferral balance of \$1,318,197, and experienced growth of the over-collected balance to \$2,834,164 by December 31, 2021. The Company represented that for this filing, the Company used the Avoided Costs as calculated in the IRP as submitted in Case No. INT-G-21-06.

On August 1, 2022, the Commission issued a Notice of Application and Notice of Intervention Deadline setting a 21-day intervention deadline. Order No. 35480. The City of Boise City ("Boise City") was the only party to intervene. Order No. 35516.

BACKGROUND

In 2017, the Commission authorized the Company to establish the EE Program for its residential customers. Order No. 33757 at 35-37. The purpose of the EE Program "is to encourage upgrades to, or use of, high efficiency natural gas equipment." Rate Schedule EE, Intermountain

Gas Company I.P.U.C. Gas Tariff, Sheet No. 16 at 1. On July 27, 2017, the Company requested Commission authority to implement a funding mechanism for the EE Program. Case No. INT-G-17-03. The Commission approved the Company's requested funding mechanism of an Energy Efficiency Charge ("EEC") for the EE Program, and approved Rate Schedules EE, EEC, and RS. The Commission found that the proposed EEC to residential customers of \$0.00367 per therm to fund the EE Program was reasonable and appropriate. Order No. 33888 at 3.

In Case No. INT-G-19-04, the Commission required the Company to commission a third-party Evaluation, Measurement and Verification ("EM&V") study, review and update the avoided cost calculation with the Energy Efficiency Stakeholder Committee ("EESC"), immediately and continuously monitor, evaluate, and update its EE Program incentives with the best available data, and discontinue the 80% AFUE condensing fireplace incentive. Order No. 34536. On October 1, 2019, the Commission authorized the Company to increase its EEC from \$0.00367 per therm to \$0.02093 per therm. Order No. 34454 at 4.

In Case No. INT-G-20-04, the Commission authorized the Company to implement a Commercial EE Program in Rate Schedule EE-GS and established a funding mechanism for program costs in Rate Schedule EEC-GS ("EEC-GS"), which set the EEC-GS at \$0.00320 per therm. The Commission directed the Company to develop an EM&V plan, file an Annual Commercial EE Program Report, include representatives from the GS-l rate class in its EESC, and immediately and continuously monitor, evaluate, and update its Commercial EE Program incentives with the best available data. Order No. 34941.

In Case No. INT-G-21-03, the Commission acknowledged an overfunded rider balance in the EE Program of \$1,318,197 and permitted the Company to carry forward the balance to meet anticipated increased EE Program participation. Order No. 35313 at 5.

COMMISSION STAFF COMMENTS

Commission Staff ("Staff") noted that this is the fourth Demand-Side Management ("DSM") Energy Efficiency prudency filing made by the Company since the EE Program's inception on October 1, 2017. Staff examined the Company's Application, 2021 Energy Efficiency Annual Report ("Annual Report"), Annual Report Supplements, workpapers, and additional information provided by the Company.

Staff specifically considered the Company's program financials, cost-effectiveness, program offerings, evaluations, studies, and avoided costs. Ultimately, Staff recommended the Commission approve the Company's EE Program expenses of \$4,028,174 as prudently incurred.

A. Financial Review

In its financial review, Staff audited the Company's EE Program expenses, which included a review of the Company's EE Program incentives, marketing campaign, program administration, and labor expenses. Staff verified that expenses were well documented and internal controls appeared to be in place to prevent improper payment of incentives and to properly record EE Program expenses.

With respect to the Tariff Rider balance, Staff stated it would continue to monitor the fund balance trends in the Company's quarterly updates to ensure the EEC-RS balance did not become substantially over funded again.

With respect to labor expenses, Staff noted that the Company's EE Program total labor expenses represented 15.9% of total program expenses in 2021, which was less than the 17.6% of total program expenses over the previous 12 months, and less than the 17.8% from the 12 to 24 months prior. Staff recommended the Company reduce labor costs wherever possible, which would help increase the cost-effectiveness of the Company's EE Programs.

Further, Staff explained that it currently did not object to the allocation of administrative expenses; however, this was the third time that Staff had requested that the Company directly assign administrative costs instead of allocating through an 80/20 split between Residential and Commercial. Staff noted there was no improvement on directly assigning costs in 2021. Of the \$726,622 total administrative expenses, only \$44,602 were directly assigned. The remaining \$682,020 was allocated using an 80/20 assumption. Staff recommended that when the Company does not directly assign costs, the Company should explain why the costs were not assignable. Staff also recommended the Company describe the progress made to improve the amount of directly assigned costs in its next DSM prudency filing.

B. Verification of Avoided Therms

With respect to the verification of avoided therms, Staff noted that in the Company's previous two prudency reviews, Case Nos. INT-G-20-06 and INT-G-21-03, the accuracy of estimated therm savings for the Furnace incentive and the Whole Home incentive had been an ongoing Staff concern. Staff explained that those two measures accounted for 94% of the claimed

therm savings for the entire 2021 Residential EE Program. Therefore, any potential errors in the estimated savings of those measures would have a significant impact on the cost-effectiveness of the Company's Residential EE Program portfolio.

Staff explained that in 2020, Case No. INT-G-20-06, a third-party contractor performed a detailed Evaluation, Measurement, and Verification ("EM&V") study of the actual therm savings for the Furnace and Whole Home rebates for the 2018-2019 program years. The study included a statistically rigorous regression analysis of customer bills ("billing analysis"), which concluded the actual therm savings were much less than the initial Conservation Potential Assessment ("CPA") estimates. The Company acknowledged the different results but opted to use an even higher savings value proposed by a calibrated simulation ("simulation analysis") for its Whole Home measure. The simulation analysis's estimated savings of 274 therms exceeds both the billing analysis estimate (58 therms) and CPA estimate (185 therms). The Company also opted to not use any of the EM&V analysis results for the Furnace program and continued using the CPA estimate (86 therms).

In its order, the Commission stated:

We expect the Company to use the *most accurate* evaluation method and clearly show why it is the most accurate method—regardless of "industry best practice." Whatever evaluation method the Company chooses, it should provide a detailed and convincing defense of the method— particularly if the Company chooses not to use a billing data analysis.

Order No. 34980 at 8.

Further, in Case No. INT-G-21-03, the Company used both the billing analysis and the simulation analysis therm estimates from the EM&V to present two sets of cost-effectiveness results. The lower billing analysis estimate showed the entire Residential EE Program was not cost-effective, while the higher simulation analysis therm estimates showed that the EE Program was cost effective. The Commission ordered the Company to "choose the most accurate evaluation method as directed by Order No. 34980. Once the Company chooses the evaluation method it will use, it should provide "a detailed and convincing defense of the method." Order No. 35313 at 5.

For the current filing, Staff did not believe the Company provided a detailed and convincing defense of the simulation analysis. First, the Company performed its own internal

¹ Case No. INT-G-21-03, Amended Application.

² Secondary analysis presented in 2020 EM&V Appendix B.

analysis of the Furnace measure and used the result of 81 therms as support of the higher 87 therm CPA estimate. Staff believed this internal analysis was flawed and the calculated therm savings should have been lower than 81 therms. Second, Staff asked the Company to, "provide detailed support and reasoning for choosing [its] evaluation method." First Production Request of Staff, Production Request No. 2 at 2. Staff believed that the Company's response lacked any data, analysis, or support for the simulation analysis, only articulated the usefulness of having a 'deemed' savings, and provided comments on billing analysis.

Staff explained that the Company's response comments on billing analysis, stated, "when a randomized control trial is employed in conjunction with evaluating billing data, this analysis can achieve more precise results with less bias." Response to First Staff Production Request, Response to Request No. 2 at 3. Staff agreed with the Company's assertion. Based on the Company's response, Staff recommended that the billing analysis be used to evaluate program performance until the Company justified other empirical analysis as part of its annual DSM prudency filing.

Staff also recommended the Company conduct impact evaluations for the Whole Home and Furnace measures to be included in the 2023 prudency filing. Staff reasoned that the Whole Home measure should be evaluated with data from April 1, 2021, through the end of 2022; the Furnace measure should be evaluated with data from the 2021 and 2022 program years; and that both impact evaluations should be conducted by an independent third-party and should include a billing analysis. Finally, Staff encouraged the Company to explore other acceptable and vetted bases for deemed savings such as the Regional Technical Forum.

1. Furnace Program Avoided Therms

Staff appreciated the Company's effort to verify savings for its programs. However, Staff believed that by only including customers whose replaced furnaces were 80% efficient or less, the Company excluded a significant portion of the rebates from its data set including rebates for furnaces above the programs minimum 95% efficiency. Staff recommended that the Company use savings data from all customers receiving rebates to ensure accurate estimates of therm savings attributed to the program, and that the Company tighten its rebate measure eligibility requirements.

2. EM&V Schedule

Staff believed that the Boiler, and Combination Boiler and Water Heater measures did not have enough participation or associated savings to justify the cost of an impact evaluation. Staff

recommended the Company monitor the participation of its programs and conduct EM&V impact evaluations when there was sufficient participation to justify an evaluation, and that the Company carefully consider the cost and benefits of an evaluation whenever considering an EM&V study. Staff believed that the Company should not assign EM&V expenses via the 80/20 split, and that if an EM&V was conducted for the Company's Residential Programs, the EM&V expense should be directly assigned to that program.

3. CPA RFP Status

Staff noted that it looked forward to reviewing the Company's CPA expenses in later prudency filings.

4. Marketing Programs and Effectiveness

In reviewing the Company's marketing materials and initiatives, Staff noted that it was unclear how the marketing materials and initiatives were directly related to, and impacted, the Company's individual energy efficiency measures, incentives, and programs. Staff encouraged the Company to actively manage key deliverables and results from marketing initiatives and programs that resulted in energy efficiency savings for the Company's ratepayers.

C. Avoided Costs

1. Avoided Cost Updates

Staff noted that the Company proposed several updates to the avoided cost calculation update schedule. Currently, the transportation component of the Company's costs is updated annually to reflect the latest PGA filing while the commodity costs are updated as part of the biennial IRP filing. The Company proposed to: (1) align updates to the transportation component of avoided costs with the Company's IRP filing schedule and to reflect costs outlined in the most recent PGA; (2) update all avoided cost calculations as exhibits to IRP filings; (3) no longer file avoided costs as exhibits to annual DSM prudence filings; (4) base program planning on the avoided costs of the most recent IRP; and (5) base cost-effectiveness testing on the avoided costs in place at the time of program planning. The avoided cost used in this filing was established in the Company's 2021 IRP, Case No. INT-G-21-06. Staff noted that establishing DSM avoided costs within an IRP is an accepted method and used by other utilities in Idaho. Staff supported this method and recommended that the Company update its DSM avoided cost calculation in the next and subsequent IRP filings.

D. Staff Recommendations

Based on its analysis, Staff recommended the Commission issue an order:

- 1. approving the Company's 2021 EE Program Expenses of \$4,028,174 as prudently incurred.
- 2. directing the Company to directly assign EE Program costs when possible and to provide explanations as to why costs are not assignable in its next DSM prudency filing.
- 3. directing the Company to use a billing analysis to evaluate program performance for the Furnace and Whole Home measures until such time as the Company justifies other empirical analysis as part of its annual DSM prudency filing.
- 4. directing the Company to submit a Request for Proposal ("RFP") for a third-party contract to conduct an impact evaluation with billing analysis for the Whole Home and Furnace measures using April 1, 2021, through 2022 for the Whole Home, and 2021 through 2022 for the Furnace program year data, to be included in the 2023 prudency filing.
- 5. approving the Company's proposal to update the transportation component of avoided cost as an exhibit to IRP filings.
- 6. approving the Company's proposal to no longer file avoided cost calculations as exhibits to the annual DSM prudency filings.
- 7. approving the Company's proposal to update all avoided costs as exhibits to IRP filings.
- 8. approving the Company's proposal to base program planning off the most recent IRP filing and to base cost-effectiveness testing off the avoided costs in place at the time of program planning.

BOISE CITY COMMENTS

Boise City commended the Company on continuing to develop and implement new energy efficiency programs, particularly with the challenges faced during the COVID-19 pandemic and supply chain disruptions, and specifically recognized the Company's efforts to establish a commercial energy efficiency program.

Boise City believed that the reported 461,690 therm savings attributed to the Whole Home rebate program, in effect from January 1st through March 31st, were likely overstated. A key factor in revising the Whole Home rebate and introducing an updated, tiered approach was the significant difference in therm savings identified in the simulation (274 therms) and billing (58 therms) analyses. INT-G-21-03 Application at 8. Boise City noted that if the 58 therm savings value was used to assess the retired Whole Home rebate, the UCT ratio would be reduced from 1.6 to 0.3 and the overall program would fall to a UCT ratio of 0.7.

Boise City explained that with the sunsetting of the original Whole Home rebate, it would be more accurate to report the savings separately and look at the residential energy efficiency program offerings with only the updated Whole Home I and Whole Home II tiered rebates. Removing the original Whole Home rebate savings and costs, yields an overall program UCT ratio of 1.3, using the Company's deemed savings approach.

Boise City was concerned by the Company's decision and supporting reasoning for adopting a simulated or deemed savings evaluation for the updated Whole Home I and II rebates. Boise City was also concerned that without billing analysis it is unclear if the adopted changes created a cost-effective energy efficiency incentive or if it required existing residential customers to further subsidize the connection of new customers.

Boise City recommended the Commission direct the Company to designate the Whole Home I and II rebates as pilot programs and commission a third-party EM&V of the Whole Home I and II rebates paid through 2022 using a billing analysis methodology. Boise City explained that without these modifications, Boise City believed the Company should be directed to suspend its Whole Home I and II rebate offerings due to the Company's failure to comply with the Commission's repeated directive to "provide a detailed and convincing defense" of its selected evaluation method and the continued cost-effectiveness uncertainty. Order No. 33980 at 8; Order No. 35313 at 5.

Boise City recommended the Company evaluate and present a targeted, behavioral energy efficiency program offering to its Energy Efficiency Savings Committee for future implementation, and to evaluate and incorporate a risk premium in the avoided cost model.

Ultimately, Boise City recommended the Commission find the Company's 2020 energy efficiency expenses prudently incurred, direct the Company to modify its Whole Home I and II rebates to be identified as pilot programs, and to amend its EM&V schedule to evaluate Whole Home I and II rebates paid through 2022 using a billing analysis evaluation.

COMPANY REPLY COMMENTS

In response to Staff's comments, the Company represented that for 2022 expenses, the Company was working to better identify expenses that could be directly assigned to the requisite program. Additionally, for the pool of expenses that could not be directly assigned, such as promotional and educational activities with an audience of both commercial and residential customers and contractors, the Company was investigating a justifiable allocation of expenses between the two Programs based on "factors driving the costs," as recommended by Staff.

Further, the Company stated that including the entire population of furnace replacements in the internal analysis conducted by the Company would have diluted the therm savings by reflecting limited therm savings for high-efficient to high-efficient furnace replacements. However, the Company agreed with Staff's suggestion that exploring other acceptable and vetted bases for deemed savings might be a good solution to that ongoing discussion. The Company indicated that it also intended to use the data collected in the new required fields on the rebate form to continue with its internal monitoring of therm savings, and the Company would research options for deemed therm savings and discuss further with its EESC.

With respect to the Whole Home Program, the Company clarified that because of the Residential program redesign that was effective on April 1, 2021, the annual report in this case included rebates that were paid under the old program as well as the new program. The Company stated that the Whole Home rebate that uses 274 therm savings was retired in 2021. The Company explained that it included all retired measures in the program analysis for completeness of reporting, however, the Company agreed that the original Whole Home rebate with the 274 therm savings would not be used in the future. Only homes that were permitted before April 1, 2021, would be allowed to be rebated under the retired rebate, and there would be no Whole Home rebates at the 274 therm savings level in the 2023 Prudency Filing.

With respect to marketing, the Company agreed it could better measure and communicate how marketing initiatives impact energy efficiency measures, incentives, and programs.

In response to Boise City's Comments, the Company appreciated Boise City's recognition and support of the EE Programs and the unique and important benefits that energy efficiency delivers to all customers. The Company agreed that making a substantial program revision mid-year could be challenging, including reporting on the resulting split year. The Company believed EM&V results were properly incorporated in the forward Program planning.

The Company stated that it planned to commission an EM&V study again once there was sufficient data, and data over the important winter heating season, to make the study cost effective and the results useful. The Company did not see a benefit to designating the Whole Home I and II rebates as pilot programs. The Company reasoned that leaving the rebates in place throughout the service territory would allow for greater uptake, and thus a greater amount of data, which would lead to a more robust EM&V study.

Finally, the Company explained that for future evaluations, the Company would work with the EESC to set evaluation expectations and parameters up front. The Company agreed with Staff's recommendation to postpone formal evaluation of the Boiler, and Combination Boiler and Water Heater measures until there was enough participation to justify the cost of an impact evaluation. However, the Company would like to work with the EESC to determine whether there was enough history, particularly during the heating season, to conduct meaningful impact evaluations on: Furnace rebates, and Whole Home I and Whole Home II rebates using April 1, 2021through Program Year 2022. The Company agreed that EM&V studies would be directly assigned to the program being evaluated.

COMMISSION FINDINGS AND DECISION

The Company is a gas corporation under *Idaho Code* § 61-117, and a public utility under *Idaho Code* § 61-129. The Commission has jurisdiction over the issues in this case under Title 61 of the Idaho Code, including *Idaho Code* §§ 61-301, 501, 502, and 503. The Commission has reviewed the record. Based on its review, the Commission finds the Company prudently incurred \$4,028,174 in EE Program expenses in 2021.

The Commission commends the Company for continuing to adjust its EE Program to deliver cost effective energy savings to customers, and the collaborative efforts of the Company, its EESC, and Staff to provide and maintain a DSM program that has value.

Having reviewed the record and all submitted materials, the Commission finds that there are improvements that can be made for future DSM prudency filings. Specifically, the Commission directs the Company to directly assign EE Program costs when possible. If it does not directly assign these costs the Company must provide explanations as to why costs are not assignable in its next DSM prudency filing.

Further, the Company is directed to use a billing analysis to evaluate program performance for the Furnace and Whole Home measures. The Company may present argument and evidence to justify other empirical analysis as part of its annual DSM prudency filing. This comports with the Commission's previous directives to the Company in Order Nos. 34980 and 35313.

Finally, the Company is directed to submit an RFP for a third-party contract to conduct an impact evaluation with billing analysis for the Whole Home and Furnace measures to be included in its 2023 prudency filing. The analysis should use April 1, 2021, through 2022 for the Whole Home, and 2021 through 2022 for the Furnace program year data.

As an additional matter, the Commission notes the proposed adjustments to the Company's treatment of avoided costs. The Commission approves: the Company's proposal to update the transportation component of avoided cost as an exhibit to IRP filings; the Company's proposal to no longer file avoided cost calculations as exhibits to the annual DSM prudency filings; the Company's proposal to update all avoided costs as exhibits to IRP filings; and, the Company's proposal to base program planning off the most recent IRP filing and to base cost-effectiveness testing off the avoided costs in place at the time of program planning.

ORDER

IT IS HEREBY ORDERED that the Company's Application is approved. The Company prudently incurred \$4,028,174 in EE Program Expenses in 2021.

IT IS FURTHER ORDERED that the Company assign EE Program costs when possible or provide explanations as to why costs are not assignable in its next DSM prudency filing.

IT IS FURTHER ORDERED that the Company use a billing analysis to evaluate program performance for the Furnace and Whole Home measures. The Company may submit argument and evidence to justify other empirical analysis as part of its annual DSM prudency filing.

IT IS FURTHER ORDERED that the Company submit a RFP for a third-party contract to conduct an impact evaluation with billing analysis for the Whole Home and Furnace measures using April 1, 2021, through 2022 for the Whole Home, and 2021 through 2022 for the Furnace program year data, to be included in the 2023 prudency filing.

IT IS FURTHER ORDERED that the Commission approves: the Company's proposal to update the transportation component of avoided cost as an exhibit to IRP filings; the Company's proposal to no longer file avoided cost calculations as exhibits to the annual DSM prudency filings; the Company's proposal to update all avoided costs as exhibits to IRP filings; and, the Company's proposal to base program planning off the most recent IRP filing and to base cost-effectiveness testing off the avoided costs in place at the time of program planning.

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date upon this Order regarding any matter decided in this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. *See Idaho Code* §§ 61-626 and 62-619.

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 13^{th} day of January 2023.

ERIC ANDERSON, PRESIDENT

JOHN CHATBURN, COMMISSIONER

ATTEST:

Jan Noriyuki
Commission Secretary

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