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**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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APPLICATION FOR APPROVAL OF THE	)	
2020 YEAR BUDGET FOR ENERGY	)	Docket No. 19-057-26
EFFICIENCY PROGRAMS AND MARKET	)	APPLICATION
TRANSFORMATION INITIATIVE	)	

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1. Questar Gas Company, doing business as Dominion Energy Utah (Dominion Energy or the Company), respectfully submits this Application for Approval of the 2019 Year Budget for Energy Efficiency Programs and Market Transformation Initiative (Application). The Company submits this Application pursuant to the applicable orders of the Public Service Commission of Utah (Commission) identified in the introduction section below. Dominion Energy respectfully submits this Application seeking approval of costs associated with the delivery of the Energy Efficiency (EE) programs and associated Market Transformation Initiative.

**I. INTRODUCTION**

2. In its Order issued January 16, 2007 in Docket No. 05-057-T01 (January 16, 2007 Order), the Commission approved Questar Gas Company's Application for

Expedited Approval of Demand Side Management Programs and a Market Transformation Initiative (Original Application), and approved a three-year pilot program for Questar Gas's Demand Side Management (DSM) programs in conjunction with the Conservation Enabling Tariff (CET). On June 3, 2010, the Commission issued an Order in Docket No. 09-057-16, approving the CET as an on-going program (June 3, 2010 Order). The Commission has reviewed and approved applications for EE Programs, Budgets, and Market Transformation Initiatives each year thereafter. Most recently, on December 31, 2018 the Commission issued an Order in Docket No. 18-057-20 (December 31, 2018 Order), approving Dominion Energy Utah's Application for Approval of the 2019 Year Budget for Energy Efficiency Programs and Market Transformation Initiative.

## **II. OVERVIEW OF PROPOSED 2020 ENERGY EFFICIENCY PROGRAMS AND MARKET TRANSFORMATION INITIATIVE**

3. In the Original Application (Docket No. 05-057-T01), the Company listed seven best practices for developing successful EE programs. These seven best practices are:

- A. Develop a comprehensive energy efficiency approach;
- B. Simplify and integrate program offerings;
- C. Brand EE and focus on customer service;
- D. Develop strategic partnerships with market participants;
- E. Provide customized service, when applicable;
- F. Provide qualified, independent expertise; and
- G. Integrate program evaluation early.

Through the design, development, implementation and administration of EE programs, the Company has successfully achieved, and in many cases exceeded, each of the best practices outlined in the Original Application. The Company's ThermWise<sup>®</sup> EE campaign is a model for natural gas utility programs nationwide. The ThermWise<sup>®</sup> rebate programs are customer friendly and cost effective.

4. In addition to the implementation and development of the ThermWise<sup>®</sup> EE campaign, the Company has made a concerted effort to maintain high levels of customer service. The Company has developed relationships with trade allies, including wholesalers, heating, ventilation and air conditioning (HVAC), weatherization contractors, dealers, and retailers. The Company has built flexibility into the implementation and marketing of its programs to allow for customized service when required.

5. Blackhawk Network Holdings, Inc. (Blackhawk), the ThermWise rebate processing contractor since mid-2012, informed the Company in June 2018 that it would terminate its rebate processing contract with the Company at the end of December 2018. Given that the previous rebate processing transition took nearly twelve months to complete, the Company requested proposals from firms it believed could complete the transition in a shortened six month timeframe. As such, the Company sought proposals from firms with either past ThermWise rebate processing experience or recent experience transitioning utilities from Blackhawk. After internal evaluation, the Company selected Nexant, Inc. (Nexant) and awarded a two year contract for rebate processing services. Nexant began processing rebates January 1, 2019. The Company will continue to contract with Nexant for rebate processing in the 2020 program year.

6. Based on input from the Utah DSM Advisory Group, Utah-based trade allies, program administrators and other energy efficiency stakeholders, Dominion Energy proposes continuing the eight existing ThermWise<sup>®</sup> EE programs in 2020: 1) the ThermWise<sup>®</sup> Appliance Rebates Program; 2) the ThermWise<sup>®</sup> Builder Rebates Program; 3) the ThermWise<sup>®</sup> Business Rebates Program; 4) the ThermWise<sup>®</sup> Home Energy Plan Program; 5) the ThermWise<sup>®</sup> Weatherization Rebates Program; 6) funding for the Low-Income Efficiency Program administered by the Utah Department of Workforce Services; 7) the Market Transformation Initiative; 8) and the ThermWise<sup>®</sup> Energy Comparison Report (Comparison Report).

7. **ThermWise<sup>®</sup> Appliance Rebates.** This program offers rebates to GS customers for installing high-efficiency qualifying measures. The Company is proposing to continue this program in 2020 with the elimination of 95% and 98% annual fuel utilization efficiency (AFUE) furnaces which currently include an additional \$50 rebate for electrically commutated motors (ECM) as rebate-eligible measures.

8. Though the ECM does not contribute to natural gas savings, the Company first introduced an additional \$50 rebate for its inclusion with 95% or higher AFUE furnaces in 2012. This was done in cooperation with Rocky Mountain Power (RMP) and with the purpose of advancing overall energy efficiency in the State of Utah. The Company's cost effectiveness results have supported this additional rebate amount since it was first introduced. However, a July 3, 2019 change to the United States Department of Energy's (DOE) fan efficiency standards (10 Code of Federal Regulations (CFR) 430.32(y)) have mandated that ECM technology will be the industry-standard beginning

January 1, 2020. Because of the elimination of the ECM, the Company proposes to rebate  $\geq 95\%$  and  $\geq 98\%$  AFUE furnaces at \$300 and \$350 respectively in 2020.

9. The Company is also proposing to add smart water heater controllers as rebate-eligible measures in the Appliance Program in 2020. The smart water heater controller is a device which, when added to an existing storage water heater, allows a homeowner to cycle water heating on and off remotely from any location using a smartphone application or internet-connected computer. Additional benefits include the ability to learn and report on a home's hot water usage patterns, ability to suggest and implement a water heating schedule to prevent standby firings during periods of non-use, water heater maintenance scheduling, and messaging on water heater activity including water heater leak detection. The system is designed to be self-installed by anyone, as described by a manufacturer, with "...enough experience and confidence to install a new water faucet." Smart water heater controllers are designed to be used with storage natural gas water heaters but are not compatible with tankless and condensing systems. These controllers first entered the marketplace in the 2015-2016 timeframe and the Company has studied and continued to monitor available information since that time. The Company estimates a customer who purchases and installs a smart water heater controller will save, on average, 2.5 dekatherms (Dth) annually. The average cost of these devices is \$150 and they are available for purchase from several different online and traditional retailers. The Company proposes a \$50 rebate for smart water heater controllers which meet the equipment specifications outlined in the Legislative and Proposed Tariff sheets (DEU Energy Efficiency Exhibit 1.9). DEU Energy Efficiency Exhibit 1.1 sets forth the complete Appliance Program description for 2020.

10. **ThermWise® Builder Rebates.** Under this program, the Company offers rebates to residential builders for installing qualifying energy efficiency measures and constructing homes that meet certain whole-home efficiency requirements. The ThermWise® Builder Program is currently available to all newly constructed residences receiving service on the GS rate schedule. The Company proposes to eliminate the \$50 ECM rebate and to establish the tiered rebate amounts for  $\geq 95\%$  and  $\geq 98\%$  AFUE furnaces at \$300 and \$350 respectively in 2020 for the reasons outlined in the Appliance Program discussion. The Company also proposes to add the smart water heater controller as a rebate-eligible measure in the Builder Program in 2020 for the same reasons as described in the Appliance Program discussion.

11. The Company also proposes to restructure the current Home Energy Rater Score (HERS) Index rebate tiers (HERS Index 62 or lower at \$100 per home, HERS Index 55 or lower at \$200 per home, and HERS Index 48 or lower at \$300 per home) and Pay-for-Performance multifamily measure to a single Pay-for-Performance rebate measure which would incent builders to achieve increasing levels of efficiency. The rebate structure is proposed to be \$3 per therm (\$30 per Dth) saved. Under the 2019 rebate structure, a builder would receive an incentive for reaching the specified HERS levels and then also receive rebates for the high-efficiency equipment (e.g. \$400 per 98% AFUE furnace, \$300 per tankless water heater, \$50 per smart thermostat) that had been installed in the new home. Under the proposed 2020 Pay-for-Performance measure, a builder would receive a rebate solely for each therm of natural gas saved with no additional rebate for specific high-efficiency equipment. Natural gas savings for the Pay-for-Performance measure would be determined by comparing the energy

usage of new properties against a software-designed user defined reference home (UDRH). The UDRH would be based on common construction practices for new single and multifamily homes in Utah.

12. Incentives for this measure would be based on the software's calculation of the difference between the natural gas usage of the reference and subject homes and would be capped at a maximum of \$1,400 per single family home and \$800 per multifamily unit. In order to receive the maximum rebate for the Pay-for-Performance measure, single family homes would need to achieve modeled natural gas savings of 47 Dth or greater and multifamily units would need savings of 27 Dth or greater. The Company anticipates that the average Pay-for-Performance 2020 participant single and multifamily homes will achieve savings, when compared against the UDRH home, of 20 Dth and 10 Dth respectively.

13. The Company further proposes to keep the existing \$50 bonus incentive (for current HERS tiers) in place for Pay-for-Performance homes which seek and receive the ENERGY STAR<sup>®</sup> 3.0 certification. Additionally, the Company proposes to add a \$50 bonus incentive for homes that meet the qualifications for the DOE Zero Energy Ready Home designation. If approved, this would mean that a home reaching the maximum Pay-for-Performance rebates and achieving both certifications would receive \$1,500 per single family home and \$900 per multifamily unit. Specific requirements for the Pay-for-Performance, ENERGY STAR 3.0 certification, and DOE Zero Energy Ready Home designation are outlined in the Legislative and Proposed Tariff sheets (DEU Energy Efficiency Exhibit 1.9). DEU Energy Efficiency Exhibit 1.2 sets forth the complete Builder Program description for 2020.

14. **ThermWise® Business Rebates.** Under this program, the Company offers rebates to commercial GS customers who purchase and install qualifying natural gas efficiency measures. The Company proposes to continue this program with the elimination of the \$50 ECM rebate and to establish the tiered rebate amounts for  $\geq 95\%$  and  $\geq 98\%$  AFUE furnaces at \$300 and \$350 respectively in 2020 for the reasons outlined in the Appliance Program discussion.

15. The Company also proposes to add two new tiers for high efficiency boilers and one new tier for tankless water heaters to the list of current rebate-eligible equipment in the 2020 ThermWise Business Program. Both boiler rebate tiers (Tier 1:  $\geq 300,000$  Btu/hour  $< 2.5$  million Btu/hour; Tier 2:  $\geq 2.5$  million Btu/hour) are proposed to apply to boilers which can meet and exceed 95% thermal efficiency (TE) in water heating. The proposed new tankless water heater tier is  $\geq 200,000$  Btu/hour with TE of 90% or greater. With this change, the Company also proposes to pay an increased rebate for 95% TE boilers (\$3.50 per kBtu/hour versus the 2019 amount of \$3.25 per kBtu/hour) and a rebate amount of \$3.00 per kBtu/hour for the 90% TE tankless water heater in 2020. Though these efficiency levels are currently rebate-eligible under the 2019 Business Program, the Company is proposing to make these rebate-tier distinctions to increase customer uptake of the most efficient boilers and tankless water heaters in 2020.

16. The Company also proposes to introduce a pilot midstream incentive in 2020. Under this rebate method, the Company would pay rebates to boiler distributors, rather than directly to customers, as has been done historically. Rebate eligibility and documentation of the participating customer (e.g. active Dominion Energy GS account and service agreement numbers) would be collected and verified by the Company before



a rebate would be paid to the equipment distributor. Equipment distributors would also be required to share both traditional and high-efficiency boiler stocking and sales data with the Company in order to be included as a participant in the proposed 2020 pilot midstream incentive. The goal of this midstream incentive is to encourage dealers to stock and actively sell the most efficient boilers in 2020. The Company also believes that receiving the stocking and sales data of all boilers will help it better monitor penetration of high-efficiency boilers in the short-term and overall market transformation over time. The Company proposal to limit the 2020 pilot midstream incentive to high-efficiency boilers, a historically low participation measure, is intended to increase uptake while also informing future proposals for midstream rebate offerings in other ThermWise programs and rebate measures.

17. The Company further proposes to make minor changes to Tariff language. In 2019, the Company applied for and received Commission approval in Docket No. 18-057-20 to offer rebates for six types of used food service equipment (charbroilers, combination ovens, commercial fryers, convection ovens, conveyor ovens, and steam cookers). However, the Company erroneously omitted used natural gas griddles from the list of equipment and in its 2019 Tariff update. The Company proposes to correct this oversight in 2020 by adding used natural gas griddles as a rebate-eligible measure in the Tariff. The Company also proposes to add language to the Tariff referring customers to the Business Custom Program Manual, maintained by Nexant and available at ThermWise.com, in an effort to provide customers with greater detail on specific program requirements. DEU Energy Efficiency Exhibit 1.3 provides an explanation of

the proposed new rebate measures and sets forth the complete program description for 2020.

18. **ThermWise<sup>®</sup> Home Energy Plan.** The Company continues to receive very positive customer feedback about this program. The Company proposes to continue this program with no major changes in 2020. DEU Energy Efficiency Exhibit 1.4 sets forth the complete program description for 2020.

19. **ThermWise<sup>®</sup> Weatherization Rebates.** Under this program, the Company offers residential GS customers rebates for installing qualifying weatherization measures. The Company proposes to continue this program in 2020 with a two-year extension of the pilot direct-install program, first proposed and approved by the Commission as a three-year pilot in Docket No. 16-057-15. The direct-install program was designed to encourage contractors to re-engage in the Weatherization Program in 2017 by specifically targeting communities and customers with historically low participation rates. As part of the pilot program, the Company proposed to work closely with RMP on developing combined direct-install weatherization incentives for the targeted areas. The proposed direct-install incentives were proposed to not exceed the existing DEU and RMP combined rebate levels for natural gas heated and electrically cooled homes. The Company further proposed to pay weatherization rebates directly to the contractors, rather than the customer, after the work was performed. Another component of the direct-install pilot was that the Company's inspectors would perform random quality control/assurance (QA/QC) on a percentage of jobs and ensure pilot program compliance. At the end of the pilot period, the Company proposed to use the data generated by the program to assess the combination of weatherization measures that

are most effective in producing energy savings. The Company further proposed to keep the Advisory Group informed on the progress of the direct-install pilot program throughout the three-year period.

20. The direct-install weatherization pilot program has seen great success throughout the three-year period, performing work in more than 12,000 homes and realizing participation rates in some targeted zip codes which more than doubled the historic levels. The Company has also found over the pilot period that many of the homes in the targeted zip codes were moderate to low-income, though often beyond the income requirements for participation in the State Weatherization Agency's programs. Another finding has been that many of the participant homes were in more need of a tighter structure/building envelope, thereby requiring greater air sealing (instead of the projected need for additional attic, wall, or floor insulation).

21. As of the beginning of October 2019, approximately 110 direct-install participant homes (or fewer than 1% of participant homes) had met the Company's evaluation requirement criteria of one-year pre-participation and two-year post-installation natural gas usage data. Therefore, the Company is proposing a two-year extension, beginning in 2020, in order to report on the actual savings achieved through the direct-install initiative. In looking ahead to the next few months, the Company expects to see the number of evaluation-ready homes increase to nearly 1,000 by the end of 2019. The Company also expect exponential growth in the number of homes that meet the evaluation criteria throughout 2020 and 2021. The direct-install weatherization initiative has become the primary source of overall Weatherization Program participation and does not require any additional costs to administer. The Company has kept the

Advisory Group up to date on the direct-install program findings over the initial three-year pilot period and proposes to do the same with natural gas savings data if the additional two-year pilot period is approved. DEU Energy Efficiency Exhibit 1.5 sets forth the complete program description for 2020.

22. **Low-Income Efficiency Program.** The Company proposes to maintain funding for the Low-Income Efficiency Program at \$500,000 per year. The Company will continue to disburse \$250,000 every six months, with the disbursements occurring in January and in July. The Company proposes to continue this program with the elimination of the \$50 ECM rebate and to establish the tiered rebate amounts for  $\geq 95\%$  and  $\geq 98\%$  AFUE furnaces at \$300 and \$350 respectively in 2020 for the reasons outlined in the Appliance Program discussion. DEU Energy Efficiency Exhibit 1.6 sets for the complete program description for 2020.

23. **Market Transformation Initiative.** In addition to the EE rebate programs outlined above, Dominion Energy is proposing to continue its comprehensive Market Transformation initiative. Market Transformation involves promoting ongoing and lasting changes to natural gas appliance penetration rates and new construction markets, as well as natural gas conservation. Dominion Energy believes that its EE programs, including its Market Transformation initiative, complement the goals of Utah's 2014 Energy Efficiency & Conservation Plan.

24. One component of the Market Transformation initiative is a market awareness campaign designed to (1) enhance the Company's involvement in energy efficiency and conservation promotion; (2) change consumer and market participation

behaviors; and (3) encourage persistent demand for energy efficiency products and practices.

25. Another component of the Market Transformation initiative involves the sponsorship of building code training for stakeholders in the construction industry. The Governor's Office of Energy Development (OED) conducts building code training programs, in collaboration with and through partial funding from Dominion Energy. The purpose of the training is to support the adoption, awareness, and enforcement of building codes associated with the IECC code. Based on the success of previous training sessions, and the ongoing need in the market for more specific training sessions, the Company is proposing to continue funding these training sessions in 2020 at a level of \$80,000. The Office of Energy Development will continue to work with an outside vendor to design and conduct these trainings in 2020.

26. The next component of the market transformation initiative is the ThermWise.com website. The Company launched an informative, interactive, easy-to-use and dedicated energy efficiency website ([www.ThermWise.com](http://www.ThermWise.com)) during 2007. The website provides consumers with EE program descriptions, rebate applications, information regarding the economics of energy efficiency, other information to help consumers reduce their energy consumption, on-line energy audit input capability, and links to other useful websites related to energy efficiency and conservation. With the exception of a minor update in 2012, ThermWise.com has remained largely unchanged since 2007. The Company undertook a comprehensive update and redesign of ThermWise.com during 2019 and expects to have it completed and launched by the end

of the year. The Company expects to make only the necessary updates for annual programmatic changes to ThermWise.com in 2020.

27. In its Order issued December 29, 2017 in Docket No. 17-057-22 (December 29, 2017 Order), the Commission provided guidance regarding future applications for the market transformation initiative. Specifically, the Commission supported the recommendation that the applications include strategies and justification for proposed budget amounts. Additionally, the Commission indicated support for the Advisory Group and the collaborative process originally envisioned for this group as outlined in the Joint Application filed December 16, 2005 (Docket No. 05-057-T01). The Company has sought to be responsive to this guidance throughout 2019. The Advisory Group met March 28, 2019, August 28, 2019, and September 24, 2019. At each of these meetings, the Company or its contracted marketing firm, Faktory Inc. (Faktory), discussed aspects of the current or future ThermWise campaign. Representatives from Commission staff, the Division, and the Office were in attendance at each meeting and provided useful feedback along with other program stakeholders.

28. At the March 29 meeting, the Company discussed the 2018 ThermWise campaign strategy. The Company additionally sought input from stakeholders and dedicated a portion of the meeting to the future of the ThermWise campaign. The Company concluded the market transformation initiative discussion indicating that it would conduct the annual ThermWise customer survey in June 2019 and that the survey results would be presented at the next Advisory Group meeting.

29. The Company's contracted survey firm, Lighthouse Research (Lighthouse), presented the results of the 2019 customer survey at the August 28

meeting. Lighthouse contacted 707 customers by phone with an even split between genders and with an age profile that was similar to the Company's overall 2019 customer base. Faktory followed the Lighthouse presentation with an interpretation of the survey results. The primary conclusions drawn from the survey by the marketing experts was that the majority of Company's customers (91%) believe it's important for utilities to offer efficiency programs, that ThermWise continues to be the most recognized energy efficiency program (60%) in the State, and that television remains the most common medium where customers see ThermWise messaging. However, Faktory also recognized that an overall downward trend seemed to be emerging where customer awareness of the State's efficiency programs had decreased significantly over the past four annual surveys (45% recognition of efficiency programs in 2016 and 31% in 2019). In addition, the survey indicated awareness of energy efficiency programs had decreased most sharply among women and younger customer demographic groups. The Company's 2019 marketing campaign resulted in an increase in ThermWise awareness amongst women (64% in 2018 to 70% in 2019) while awareness in the youngest demographic group (ages 18 to 24) remained the lowest (40%) of all groups. The survey results amongst age groups are in keeping with what the Company would expect, as younger customers traditionally have lower rates of home ownership. Faktory believes that the 2019 ThermWise mass media was, for the most part, in the right places. Faktory expects to make minor changes to the mass media campaign but to keep the overall strategy in place for 2020.

30. Faktory presented a high-level vision for the 2020 ThermWise Market Transformation Initiative at the Advisory Group meeting held on September 28. The

main element of Faktory's presentation was that, while saving money continues to be the main reason customers currently conserve natural gas (67% in the 2019 Lighthouse survey), customer's primary interest in saving energy to protect the environment has risen from a low of 9% in 2009 to high of 15% of customers in 2019. The Company believes that there is an opportunity to encourage greater participation in the ThermWise Programs by creating environmentally focused messaging focused around a new tagline of "Conserve, Save, Breathe" in 2020. As part of the 2019 marketing campaign research, Faktory presented the following information to the Advisory Group (September 26, 2018) from local newspapers and research organizations in support of environmentally focused messaging: 1) Utahns lead the nation in searching the internet for ways to clean the air we breathe; 2) Utahns rate poor air quality as one of the top issues we face as a state, but we believe we're doing the worst at addressing it; 3) Utahns want to work to clean the air; 4) Utahns base air quality concerns on health reasons first, with other reasons secondary; and 5) Utahns are willing to do things in their homes to achieve better air quality. The Company proposes to use both "If You Conserve, You Can Save" and "Conserve, Save, Breathe" taglines and messaging around savings money and environmental benefits of participation in energy efficiency in 2020. The Company additionally proposes to hold an Advisory Group in early 2020, prior to implementing any environmental messaging and/or the "Conserve, Save, Breathe" tagline. The Company further commits to reach an agreement with the Advisory Group at this meeting or in subsequent meetings before moving ahead with the new environmental messaging/tagline.



31. Beginning in 2019 the Company proposed to transition away from sports marketing and into efforts focused more on communities and grass-roots programs to increase awareness and advance customer knowledge of energy efficiency. To that end, the Company proposed to partner with Habitat for Humanity organizations throughout Utah to promote advanced building techniques by supporting the construction of Net-Zero Homes. This partnership focused on building homes that meet Net-Zero energy standards. A Net-Zero Home is defined as an energy efficient building where, on a source energy basis, the actual annual consumed energy is less than or equal to the onsite generated or subscriber renewable energy procured. In addition to renewables, the Company proposed to support advanced building shell technologies and inclusion of highly efficient natural gas and electric appliances. The Company viewed, and continues to believe, that this initiative is a foundation for the development of a robust and self-sustaining Net-Zero Homes market in the years to come.

32. The Company proposed in 2019 to partner with higher education institutions, local trade schools, contractors, and other interested parties to implement the Net-Zero Homes initiative and partnership with Habitat for Humanity. An additional goal of this initiative was to train the next generation of contractors and tradesfolk in the production of Net-Zero Homes. The first project broke ground in Ogden in the Spring of 2019, was completed in July of this year, and finished in time to be included in the Northern Wasatch Parade of Homes. The building shell of the home achieved a home energy rating score (HERS) of 41. The systems of the home included advanced technologies such as an electric heat pump, a 95% efficient natural gas combo space and water heating system, and an energy recovery ventilator (ERV) which is intended to reuse

rather than vent waste heat. It is estimated that once completed, this Ogden home will use about half of the energy needed for a comparable new home. The Company proposed a 2019 budget for this initiative of \$200,000. However, the Company now anticipates that only the Ogden project will be completed in 2019 and that the majority of the \$200,000 budget will remain unspent.

33. The Company proposes to continue the Net-Zero Homes initiative with a budget of \$200,000 in 2020. The Company further proposes to continue to work with Habitat for Humanity organizations as well as expand the initiative to other non-profits, High School building programs, and higher-education building programs throughout Utah in 2020. The goals of the 2020 Net-Zero Homes initiative remain the same as those first proposed in the 2019 budget: To advance highly efficient natural gas and electric technologies, promote above code building shell construction techniques, and train the upcoming generations of tradesfolk in advanced building practices. More specific information on the strategies to engage customers in the ThermWise programs, budgets, and studies in support of the proposed 2020 changes to the Market Transformation Initiative can be found in DEU Energy Efficiency Exhibit 1.7.

34. **ThermWise<sup>®</sup> Energy Comparison Report.** The ThermWise<sup>®</sup> Energy Comparison Report (ECR) allows customers to compare their natural gas usage with neighboring homes that are similarly sized and situated. The Comparison Report encourages customers to employ energy efficiency measures and behaviors. The Company developed the Comparison Report and first offered it to customers in November 2011. The Company initially sent the report to a small group of customers (Group A – 8,000 customers) as a pilot program. The Company has since launched

larger pilot groups in 2012 (Group B – 25,000), 2013 (Group C – 100,000), 2014 (Group D – 100,000), 2016 (Group E – 55,000), 2017 (Group F – 50,000), 2018 (Group G – 50,000), and in Fall of 2019 (Group H – 25,000). In 2019 the Company sent the report, via U.S. and electronic mail, to more than 224,000 of its customers. The Company maintains an additional group of more than 100,000 customers in order to determine natural gas savings achieved from delivery of the Comparison Report. With the exception of the control group, all customers are able to generate and view a copy of their Comparison Report through their online account at [www.dominionenergy.com](http://www.dominionenergy.com). As of the end of September 2019, the Comparison Report had been generated over 330,000 times online by nearly 130,000 unique customers.

35. The Company proposes to increase delivery of the Comparison Report to 266,000 in 2020. The Company realizes this total number by restarting Group D beginning November 2019 and adding Group I which will be delivered to 25,000 additional customers in 2020. Data shows that customers not only change behaviors to save natural gas as a result of the Comparison Report, but they are also more likely to participate in other ThermWise<sup>®</sup> Programs if they have received the report. The Company conducted an analysis in 2019 that showed, when contrasted against a control group of non-recipients, customers who had received their Comparison Report were more likely to participate in a ThermWise<sup>®</sup> rebates and/or request a Home Energy Plan. The Company proposes to continue to target the Comparison Report to customers with higher usage relative to conditioned square footage in 2020.

36. While proposed program participants increase from 2019, natural gas savings are projected to decrease by 11% in 2020. The Company expects savings to

decrease because of the Company-conducted study in 2019 that focused savings analysis on all current recipients of the report (Groups D and E). As a result, the Company updated the natural gas savings number from 1.62 Dth/year in the 2019 Model, to 1.21 Dth/year in the 2020 Model. Throughout the life of the ECR Program, the Company has observed that peak decatherm savings occur approximately in years two through four, and then slightly decrease and moderate. Historically group C has been the highest performing group and is currently moving toward the moderating phase. Groups B and D are also past peak savings years. Groups C and D represent the majority of participants evaluated and therefore, their slight decrease reduces the total saving value for the ECR Program. DEU Energy Efficiency Exhibit 1.8 describes the methodology used in the realization studies and sets forth the complete program description for 2020.

37. **Tariff Sheets.** Tariff sheets for all programs are attached in both legislative and proposed formats as DEU Energy Efficiency Exhibit 1.9. The Company proposes that these Tariff sheets become effective January 1, 2020.

### **III. PROPOSED 2020 BUDGET**

38. The total 2020 projected budget for Dominion Energy's Energy Efficiency Programs and the Market Transformation Initiative is \$26.5 million and is shown in DEU Energy Efficiency Exhibit 1.10, column T, line 12. The proposed 2020 budget is a \$.96 million increase from the 2019 budget filed with the Commission on October 16, 2018 in Docket No. 18-057-20. This projected increase is mainly due to greater expected participation in the ThermWise Appliance, Builder, and Weatherization programs. The 2020 budget is reflective of the 2019 nine (9) month (January-September) actual participation numbers; insights from retailers, distributors and other trade allies; and the

market knowledge of the Company's contractor, Nexant. To the extent actual participation levels differ from projected levels, actual costs will differ from budget. The Company proposes to continue to report to the Division of Public Utilities (Division) quarterly and to provide the actual participation levels and related costs and gas savings compared to projections.

39. The Company projects that customer incentives will increase, as a percentage of the total budget, by 2.7% from 2019 (73.4%) to 2020 (76.1%). This increase results from the Company's continued focus on running cost-effective energy efficiency programs and the resulting efforts to minimize non-incentive costs. The most recently published American Gas Association (AGA) study of natural gas efficiency programs (Natural Gas Efficiency Programs Brief – *Investment and Savings Impacts 2017 Program Year, Report Appendices*<sup>1</sup>) showed that the average non-incentive costs for the 41 states participating in natural gas efficiency programs to be 44% of total expenditures. Additionally, of the 21 states with natural gas efficiency expenditures over ten million dollars, Utah ranked fifth in terms of lowest non-incentive costs as a percentage of overall expenditures. DEU Energy Efficiency Exhibit 1.7 provides greater detail on the results of the 2017 AGA study.

40. **ThermWise<sup>®</sup> Appliance Rebates.** The Company expects participation in this program to increase in 2020 by 7%. The Company also expects the 2020 program budget to increase by 4% (DEU Energy Efficiency Exhibit 1.10, column I, line 13) and the related gas savings to increase by 8% (DEU Energy Efficiency Exhibit 1.10, column

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<sup>1</sup> [https://www.aga.org/sites/default/files/natural\\_gas\\_efficiency\\_programs\\_2017\\_program\\_year\\_-\\_report\\_appendices\\_0.pdf](https://www.aga.org/sites/default/files/natural_gas_efficiency_programs_2017_program_year_-_report_appendices_0.pdf)

I, line 16). These changes are largely the result of higher expected participation across all program measures.

41. **ThermWise<sup>®</sup> Builder Rebates.** For 2020 the Company is projecting an 5% increase in program participants over 2019. The Company also projects the 2019 program budget to increase by 23% (DEU Energy Efficiency Exhibit 1.10, column G, line 13) and the related natural gas savings to increase by 23% (DEU Energy Efficiency Exhibit 1.10, column G, line 16). These changes are largely the result of greater expected participation and the proposed move to the Pay-for-Performance rebate structure for new single and multifamily homes.

42. **ThermWise<sup>®</sup> Business Rebates.** The Company projects that the 2020 program budget will decrease by 13% (DEU Energy Efficiency Exhibit 1.10, column K, line 13) below the 2019 budget and that natural gas savings will decrease by 21% (DEU Energy Efficiency Exhibit 1.10, column K, line 16). The Company also projects that 2020 program participation will increase by 45%. The projected decreases in program budget and natural gas savings coupled with increasing participation are a reflection of greater expected 2020 participation in lower savings measures (e.g. furnaces) versus participation in higher savings measures (e.g. boiler reset controls, boiler tune-ups, demand control ventilation systems) than were projected in 2019.

43. **ThermWise<sup>®</sup> Home Energy Plan.** The Company projects 2,240 home energy plans will be performed in 2020. This projection is 20% lower than the 2019 home energy plan participation forecast. The Company also expects the overall program cost in 2020 to decrease by 16% in comparison to 2019 (DEU Energy Efficiency Exhibit

1.10, column C, line 13). These decreases are due the Company reducing Energy Expert staff from 5.5 full time equivalents to 4.5 beginning in 2019 and continuing through 2020.

44. **ThermWise<sup>®</sup> Weatherization Rebates.** The Company projects that participation will decrease by 12% and that natural gas savings will decrease by 18% (DEU Energy Efficiency Exhibit 1.10, column E, line 16) in comparison to the 2019 budget. The Company also expects the overall program budget in 2020 to increase by 3% in comparison to 2019 (DEU Energy Efficiency Exhibit 1.10, column E, line 13).The projected increase in program budget coupled with decreasing participation and natural gas savings is related to the way this program has changed over the three year direct-install weatherization pilot program, moving from an insulation based program to one based more recently on the air sealing measure. The Company spoke to this change in the earlier Weatherization Program discussion (¶ 20).

45. **Low-Income Efficiency Program.** The proposed 2020 budget for this program is \$.87 million or less than 1% lower (DEU Energy Efficiency Exhibit 1.10, column Q, lines 13) than 2019. The Company also projects that natural gas savings will increase by 2% (DEU Energy Efficiency Exhibit 1.10, column Q, line 16) in comparison to the 2019 budget. The projected natural gas savings increase is mainly due to greater expected installation of the smart thermostat rebate measure which was added to this program in 2019. Funding for furnace replacements is proposed to remain at \$500,000 in 2020.

46. **Market Transformation Initiative.** The fundamentals of the ThermWise<sup>®</sup> marketing campaign are expected to remain similar to past years. Therm will continue to perform his role as the “Energy Wise Guy.” The 2020 proposed budget for Market Transformation Initiative includes \$900,000 in advertising and media purchases; \$280,000 for special marketing events, trade/consumer shows, community initiatives, and special event sponsorships; and \$50,000 for ThermWise<sup>®</sup> management and administration. The budget also includes \$10,000 for program design, and \$80,000 for State of Utah codes training. The budget for Market Transformation in 2020 is proposed to remain the same (DEU Energy Efficiency Exhibit 1.10, column M, line 13) as 2019. A comprehensive discussion of the Market Transformation Initiative is included as DEU Exhibit 1.7.

47. **ThermWise<sup>®</sup> Energy Comparison Report.** The Company proposes to the budget for the ThermWise<sup>®</sup> Energy Comparison Report at the same total amount as 2019 (DEU Energy Efficiency Exhibit 1.10, column O, line 13). The Company however will shift \$40,000 from DEU Management & Admin to Postage in 2020. This will be done in order to accommodate the proposed increase in program participation (and the resulting postage). The Company has also found that as this program has matured, the funds required to manage the program have decreased. Natural gas savings are projected to decrease by 11% (DEU Energy Efficiency Exhibit 1.10, column O, line 16) in 2020. The reason for the decrease in savings has to do with the realization study conducted by the Company in 2019 that reduced average annual participant savings from 1.62 Dth to 1.21 Dth in 2020.



48. The majority of the Comparison Report budget (93%) is directly attributable to the postage costs associated with delivering the report to customers. The remainder of the Comparison Report budget is necessary for programming and other labor associated with the ongoing maintenance of the Company developed system. It is important to note that the Company's internally-developed Energy Comparison Report has been delivered at significant cost savings to Utah customers. Comparable programs, delivered by third-party vendors, can cost up to six times as much annually as the Company's internally-developed program. The Company believes that it has developed a program that will not only deliver energy savings but will also deliver those savings at a cost that is unmatched in the market.

49. **Total Budget.** The total 2020 budget is proposed to be \$26.5 million (DEU Energy Efficiency Exhibit 1.10, column T, line 12). This budget is an increase of \$0.92 million (DEU Energy Efficiency Exhibit 1.10, column V, line 12) or 4% higher than the total 2019 budget. Total savings are projected to be 1.14 million Dth/year (DEU Energy Efficiency Exhibit 1.10, column T, line 15) or 5% below projected 2019 natural gas savings estimates. The primary reasons for the expected decrease in 2020 natural gas savings is the shift of the Weatherization Program from an insulation to an air sealing based program and the change in realized savings (from 1.62 Dth to 1.21 Dth per participant) in the ECR Program. The 2020 proposed budget reflects a concerted effort to reach all GS market segments and produce significant, persistent, and cost effective natural gas savings through a comprehensive energy efficiency campaign.

#### **IV. COST EFFECTIVENESS**

50. A summary of the cost effectiveness for each program is attached as DEU Energy Efficiency Exhibit 1.11. Page 1 of this exhibit summarizes the test results of the proposed programs along with the market transformation initiative. Although the market transformation initiative does not lend itself to the same economic analysis as the Energy Efficiency rebate programs, it has been included so that the overall impact of all programs can be measured and analyzed. A benefit-cost ratio greater than 1 is indicative of benefits exceeding costs, and therefore “passes” the test. As shown on page 1, line 9, column C of DEU Energy Efficiency Exhibit 1.11, the overall benefit-cost ratio for the Total Resource Cost (TRC) test of all programs and the market transformation activities is 1.23. And as shown on line 9, column G, the Utility Cost test (UCT) for all programs is 1.41. Additionally, as shown on line 9, column E, the overall benefit-cost ratio for the Participant Cost test passes at 3.72, and as shown on line 9 column I, the Ratepayer Impact Measure test (RIM) for all programs equals 0.73. A detailed benefit-cost analysis of each program by measure has been included in pages 2-9 of DEU Energy Efficiency Exhibit 1.11. The cost-effectiveness tests included in this Application have been calculated using a 4.37% discount rate which is consistent with the Company’s Integrated Resource Plan (IRP). Additionally, gas prices and GS rates have also been updated in the Model to reflect expected 2020 market conditions and to be consistent with the gas costs projected in Dominion Energy’s most recent IRP.

51. An examination of the benefit-cost results at the IRP discount rate shows that a few individual measures are marginal in the current low-gas-price environment. The Company has chosen not to eliminate measures solely on the basis of failing a benefit-cost test. Most programs and individual measures are fairly low cost to maintain, but expensive to start-up. The Company feels taking the long view in this low-price environment is in the best interest of customers and the ThermWise<sup>®</sup> programs.

52. The Model, developed by the Company to measure the cost-effectiveness of the programs (Model), is based on the California Standard Practice Manual and is the same Model that was used in the 05-057-T01 docket. The Model has been reviewed by Nexant and the Utah ThermWise<sup>®</sup> Advisory Group and has been used by other utilities in the nation in program implementation and cost-effectiveness analysis.

53. The Company has relied on specific market reports, industry studies, and the expertise of Nexant to arrive at the savings levels, measure life and incremental customer cost for each measure of each program. DEU Energy Efficiency Exhibit 1.12 provides the source and/or references for the estimated gas savings (pages 1-8), measure life (pages 9-13), and incremental cost (pages 14-20) for each measure of each program.

54. Dominion Energy has successfully implemented a broad range of programs and a Market Transformation Initiative. The Company has implemented best practices to help ensure that necessary and reasonable steps have been taken to implement cost-effective programs that benefit all GS customers. This 2020 Application and Budget will continue and expand these efforts to meet the gas savings goals of customers and the State of Utah.

**V. PRAYER FOR RELIEF**

55. Based on the foregoing, Dominion Energy respectfully requests that the Commission issue an order: 1) approving the application for the 2020 budget for the Energy Efficiency Programs and continuation of Dominion Energy's Market Transformation Initiative for implementation on January 1, 2020; and 2) approving the proposed Tariff sheets effecting the improvements in the EE programs described herein.

DATED this 16<sup>th</sup> day of October, 2019.

Respectfully submitted,

DOMINION ENERGY



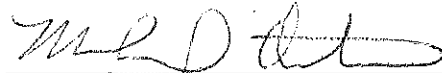
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## CERTIFICATE OF SERVICE

I, Michael Orton, certify that a true and correct copy of the foregoing

Application was served upon the following by electronic mail on October 16, 2019:

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