
Energy Efficiency Program Proposal

ThermWise[®] Appliance Rebates Program

Program Overview

Description

Dominion Energy Utah (Dominion Energy or the Company) is proposing to continue offering the ThermWise® Appliance Rebates Program to Dominion Energy residential GS customers in Utah. This program will be delivered to customers in the Company's Utah service territory. Rebates will be offered on qualified program measures and mailed to the participating customer upon proof of purchase and/or installation.

Program measures will include high-efficiency space-heating equipment, water-heating equipment, and gas fireplaces. Rebates for most measures will be available regardless of who installs the product.

The program will be delivered through local retail, distributor, and contractor channels.

Program Design

Program Measures

Qualifying Customers

All residences receiving service on the GS rate schedule in the Dominion Energy Utah service territory are eligible to participate in the program.

Qualified Energy Efficiency Measures

For a complete list of rebate-qualifying models for each measure, please visit [ThermWise.com](https://www.thermwise.com).

For a complete list of minimum efficiency requirements and rebate amounts, see section 2.10 of the Company's Utah Tariff (DEU Energy Efficiency Exhibit 1.9).

Gas Furnaces

Customers may receive a rebate for installing a high-efficiency gas furnace. Eligibility requirements for differing tiers are defined as follows:

- The customer must purchase and install a model with an annual fuel utilization efficiency (AFUE) rating of $\geq 95\% < 97.5\%$.
- The customer must purchase and install a model with an AFUE rating of $\geq 97.5\%$.

Dual-Fuel Heating System – Tier 1

Customers may receive a rebate for installing a high-efficiency dual-fuel heating system. Eligibility and installation requirements are defined as follows:

- The customer must purchase and install an ENERGY STAR® Certified ducted heat pump with heating seasonal performance factor (HSPF) ≥ 9.0 and seasonal energy efficiency ratio (SEER) ≥ 14 .
- The customer must purchase and install an ENERGY STAR® Certified natural gas heating system to provide heat at low ambient outside air temperatures.
- The changeover set point, from heat pump to the natural gas backup, for the dual-fuel heating system must be set at 40° F or lower.

Dual-Fuel Heating System – Tier 2

Customers may receive a rebate for installing a high-efficiency dual-fuel heating system. Eligibility and installation requirements are defined as follows:

- The customer must purchase and install an ENERGY STAR® Certified ducted heat pump with heating seasonal performance factor (HSPF) ≥ 10.0 , seasonal energy efficiency ratio (SEER) ≥ 18 , and energy efficiency ratio (EER) ≥ 11.5 .
- The customer must purchase and install an ENERGY STAR® Certified natural gas heating system with $\geq 98\%$ AFUE to provide heat at low ambient outside air temperatures.
- The changeover set point, from heat pump to the natural gas backup, for the dual-fuel heating system must be set at 40° F or lower.

Gas Storage Water Heaters

Customers may receive a rebate for installing a high-efficiency natural gas storage water heater. Eligibility requirements are defined as follows:

- The customer must purchase and install an ENERGY STAR® Certified storage water heater. Qualifying water heaters will have a minimum of 40 gallons in capacity.

Tankless Gas Water Heaters

Customers may receive a rebate for installing a high-efficiency natural gas tankless water heater. Eligibility requirements are defined as follows:

- The customer must purchase and install an ENERGY STAR® Certified tankless water heater.

Condensing Storage Water Heater

Customers may receive a rebate for installing a high-efficiency natural gas condensing storage water heater. Eligibility requirements are defined as follows:

- The customer must purchase and install an ENERGY STAR® Certified condensing storage water heater with documentation verifying it is a condensing unit.

Hybrid Water Heater

Customers may receive a rebate for installing a high-efficiency gas hybrid storage water heater. Eligibility requirements are defined as follows:

- The customer must purchase and install a qualified model with a TE \geq 0.90.

Gas Boilers

Customers may receive a rebate for installing a high-efficiency natural gas boiler. Eligibility requirements are defined as follows:

- The customer must purchase and install a qualified model with an AFUE rating $> 85\% < 95\%$.
- The customer must purchase and install a qualified model with an AFUE rating $\geq 95\%$.

Solar Assisted Gas Water Heating (domestic)

Customers may receive a rebate for installing a solar assisted domestic natural gas water heating system, certified OG-300 by the Solar Rating and Certification Corporation (SRCC).

Solar Assisted Gas Water Heating (pool)

Customers may receive a rebate for installing solar assisted pool natural gas water heating system, certified OG-100 by the Solar Rating and Certification Corporation (SRCC).

Direct Vent Gas Fireplace

Customers may receive a rebate for installing a high-efficiency direct-vent, natural gas fireplace. Eligibility requirements are defined as follows:

- The customer must install a qualifying fireplace with a Fireplace Efficiency (FE) of $\geq 70\%$ with an electronic pilot ignition.

Smart Thermostat – Tier 1

Customers may receive a rebate for installing a smart thermostat. Eligibility requirements are defined as follows:

- ENERGY STAR® qualified thermostat
- Wi-Fi enabled; must be able to communicate wirelessly

- Programmable for schedules
- With qualifying geofencing technology

Smart Thermostat – Tier 2

Customers may receive a rebate for installing a smart thermostat. Eligibility requirements are defined as follows:

- Intuitive User Interface (UI); may include touchscreen or buttons
- Wi-Fi enabled; must be able to communicate wirelessly
- Programmable for schedules
- Online dashboard and/or mobile app connected to the user account
- With qualifying occupancy sensor technology

Boiler Reset Control

Customers may receive a rebate for installing a boiler reset control. Eligibility requirements are defined as follows:

- Install after-market boiler reset control
- Control must automatically adjust supply temperature based on outside air temperature

Combined Space and Water Heater Units

Customers may receive a rebate for installing a combined space and water heating units. Eligibility requirements are defined as follows:

- Must be considered one unit by manufacturer
- AFUE \geq 95%

Smart Water Heater Controller

Customers may receive a rebate for installing a smart water heater controller or purchasing a new storage water heater that has a factory installed web enabled smart water heater control. Eligibility requirements are defined as follows:

- The rebate is limited to smart water heater controllers installed on gas fired storage tank water heaters
- The controllers must have remote water heater on and off and/or setback capabilities using a smartphone app or other online interface
- The ability to implement and/or suggest a water heating schedule to prevent standby firings of the water heater during periods of non-use

Energy Recovery Ventilation (ERV)

Customers may receive a rebate for installing an energy recovery ventilation (ERV) system. Eligibility requirements are defined as follows:

- Gas space heating is required
- Must include a central system with internal fan system and separation of indoor and outdoor airflows
- Must not be required by code

HVAC Monitoring

Customers may receive a rebate for installing HVAC monitoring system. Eligibility requirements are defined as follows:

- System must provide automatic fault detection and diagnostics to homeowner and/or HVAC contractor for the existing or newly installed gas furnace.

Program Projected Participation and Savings

To receive a rebate, customers must install a qualifying program measure, then complete and submit a rebate application form within six months of the measure installation date. Rebate amounts, projected participation, and natural gas savings estimates are provided in Table 1. Rebate amounts are shown per unit and were determined by examining the best available information on incremental costs of the equipment, recognizing the minimum rebate levels necessary to constitute a viable marketing message, and overall program cost effectiveness.

Table 1. Appliance Energy Efficiency Projected Participation and Savings

Single Family (1-3 units)		
Measure	Projected Participation	Total Projected Savings (annual Dth)
Natural Gas Furnace 95% AFUE	4,500	52,965
Natural Gas Furnace 98% AFUE	400	5,540
Storage Water Heater	250	715
Condensing Storage Water Heater	25	217
Hybrid Water Heater .90 EF	20	174
Natural Gas Boiler 85% AFUE	10	179
Natural Gas Boiler 95% AFUE	150	3,285
Solar Assisted Water Heater SRCC OG-300	4	70
Solar Assisted Pool Heater SRCC OG-100	4	276
Tankless Water Heater	1,700	15,929
Fireplace 70% FE	100	1,080
Smart Thermostat - Tier 1	1,300	7,930
Smart Thermostat - Tier 2	2,300	19,780
Boiler Reset Control	10	54
Combined Space and Water Heater Units	40	760
Smart Water Heater Controller	30	75
Dual-Fuel Heat Pump System - Tier 1	200	5,200
Dual-Fuel Heat Pump System - Tier 2	1,800	61,200
Energy Recovery Ventilation (ERV)	40	416

HVAC Monitoring	5	5
TOTAL Single Family	11,888	175,850
Multifamily (4 or more units)		
Measure	Projected Participation	Total Projected Savings (annual Dth)
Natural Gas Furnace 95% AFUE	300	2,640
Natural Gas Furnace 98% AFUE	50	520
Storage Water Heater	4	9
Condensing Storage Water Heater	75	405
Hybrid Water Heater .90 EF	0	0
Natural Gas Boiler 85% AFUE	1	12
Natural Gas Boiler 95% AFUE	1	16
Solar Assisted Water Heater SRCC OG-300	0	0
Solar Assisted Pool Heater SRCC OG-100	1	69
Tankless Water Heater .90 EF	4	24
Fireplace 70% AFUE	4	16
Combined Space and Water Heater Units	0	0
Smart Water Heater Controller	0	0
Dual-Fuel Heat Pump System - Tier 1	4	60
Dual-Fuel Heat Pump System - Tier 2	1	20
Energy Recovery Ventilation (ERV)	1	5
HVAC Monitoring	4	3
Smart Thermostat - Tier 1	25	100
Smart Thermostat - Tier 2	50	315
TOTAL Multifamily	525	4,214
TOTAL Appliance Program	12,413	180,064

Rebate Limitations

ThermWise® Appliance Rebate program limitations are defined in Section 2.10 of the Company's Utah Tariff (DEU Energy Efficiency Exhibit 1.9).

Implementation

This program is currently in the marketplace. Upon Commission approval, implementation activities will begin for the new program year in order to launch January 1, 2023.

Administration

The program administration represents the on-going delivery of the program. All internal systems, processes, and procedures have been created and are in place for 2023.