

Energy Efficiency Program Proposal

ThermWise[®] Appliance Rebates Program

Program Overview

Description

Questar Gas Company (Questar Gas) is proposing to continue offering the ThermWise Appliance Rebates Program to Questar Gas 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 clothes washers, space and water-heating appliances, and energyefficient 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 Questar Gas 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.

For a complete list of minimum efficiency requirements and rebate amounts, see section 2.10 of the Questar Gas Company Utah Tariff (QGC 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:

- Natural Gas Furnace 92% AFUE, the customer must purchase and install a model with an AFUE rating of ≥ 92% < 95%.
- Natural Gas Furnace 95% AFUE, the customer must purchase and install a model with an AFUE rating of ≥ 95% < 97.5%.
- Natural Gas Furnace with ECM 95% AFUE, the customer must purchase and install a model with an AFUE rating of <u>></u> 95% < 97.5% with an ECM.
- Natural Gas Furnace with ECM 98% AFUE, the customer must purchase and install a model with an AFUE rating of <u>></u> 97.5% with an ECM.

Gas Storage Water Heaters

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

• Storage Water Heater .67 EF, the customer must purchase and install a model with an EF \geq 0.67.

Tankless Gas Water Heaters

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

- Tankless Water Heater .82 EF, the customer must purchase and install a model with an EF
 <u>></u> 0.82 < 0.90.
- Tankless Water Heater .90 EF, the customer must purchase and install a model with an EF \geq 0.90.

Condensing Storage Water Heater

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

 Condensing Storage Water Heater .90 EF, the customer must purchase and install a model with an EF ≥ 0.90.

Hybrid Water Heater

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

• Hybrid Water Heater .90 TE, 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 gas boiler. Eligibility requirements are defined as follows:

- Natural Gas Boiler 85% AFUE, the customer must purchase and install a qualified model with an AFUE rating > 85% < 95%.
- Natural Gas Boiler 95% AFUE, the customer must purchase and install a qualified model with an AFUE rating > 95%.

Solar Assisted Gas Water Heating

Customers may receive a rebate for installing a high-efficiency solar assisted gas water heating system. Eligibility requirements are defined as follows:

- Solar Assisted Water Heater certified OG-300 by the Solar Rating and Certification Corporation (SRCC), customers may receive a rebate for installing solar assisted domestic gas water heating systems.
- Solar Assisted Pool Water Heater certified SRCC OG-100, customers may receive a rebate for installing solar assisted domestic pool gas water heating systems.

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:

• Fireplace 70% AFUE, the customer must install a qualifying fireplace with an AFUE of ≥ 70%, intermittent ignition, heat rated, thermostatically controlled with a blower.

Smart Thermostat

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, set-backs
- Online dashboard and/or mobile app connected to the user account
- Occupancy sensor (to determine if the user is out of the space)

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 (1-4 units)		
Measure	Projected Participation	Total Projected Savings (annual Dth)
Natural Gas Furnace 92% AFUE	61	1,013
Natural Gas Furnace 95% AFUE	3,364	68,962
Natural Gas Furnace with ECM 95% AFUE	4,794	98,277
Natural Gas Furnace with ECM 98% AFUE	700	15,260
Storage Water Heater .67 EF	761	2,176
Condensing Storage Water Heater .90 EF	70	608
Hybrid Water Heater .90 EF	10	87
Natural Gas Boiler 85% AFUE	40	748
Natural Gas Boiler 95% AFUE	81	2,040
Solar Assisted Water Heater SRCC OG-300	7	123
Solar Assisted Pool Heater SRCC OG-100	7	482
Tankless Water Heater .82 EF	73	625
Tankless Water Heater .90 EF	725	6,793
Fireplace 70% AFUE	351	3,790
Smart Thermostat	9,250	79,550
TOTAL Single Family	20,294	280,534
Multifamily (5 or more units)		
Measure	Projected Participation	Total Projected Savings (annual Dth)
Natural Gas Furnace 92% AFUE	5	
	9	28
Natural Gas Furnace 95% AFUE	60	28 390
Natural Gas Furnace 95% AFUE Natural Gas Furnace with ECM 95% AFUE		
	60	390
Natural Gas Furnace with ECM 95% AFUE	60 60	390 390
Natural Gas Furnace with ECM 95% AFUE Natural Gas Furnace with ECM 98% AFUE	60 60 5	390 390 109
Natural Gas Furnace with ECM 95% AFUE Natural Gas Furnace with ECM 98% AFUE Storage Water Heater .67 EF	60 60 5 5	390 390 109 14
Natural Gas Furnace with ECM 95% AFUE Natural Gas Furnace with ECM 98% AFUE Storage Water Heater .67 EF Condensing Storage Water Heater .90 EF	60 60 5 5 5 5	390 390 109 14 27
Natural Gas Furnace with ECM 95% AFUE Natural Gas Furnace with ECM 98% AFUE Storage Water Heater .67 EF Condensing Storage Water Heater .90 EF Hybrid Water Heater .90 EF	60 60 5 5 5 5 5 5	390 390 109 14 27 27
Natural Gas Furnace with ECM 95% AFUE Natural Gas Furnace with ECM 98% AFUE Storage Water Heater .67 EF Condensing Storage Water Heater .90 EF Hybrid Water Heater .90 EF Natural Gas Boiler 85% AFUE	60 60 5 5 5 5 5 5 0	390 390 109 14 27 27 27 0
Natural Gas Furnace with ECM 95% AFUENatural Gas Furnace with ECM 98% AFUEStorage Water Heater .67 EFCondensing Storage Water Heater .90 EFHybrid Water Heater .90 EFNatural Gas Boiler 85% AFUENatural Gas Boiler 95% AFUE	60 60 5 5 5 5 5 5 0 0 5	390 390 109 14 27 27 0 81
Natural Gas Furnace with ECM 95% AFUENatural Gas Furnace with ECM 98% AFUEStorage Water Heater .67 EFCondensing Storage Water Heater .90 EFHybrid Water Heater .90 EFNatural Gas Boiler 85% AFUENatural Gas Boiler 95% AFUESolar Assisted Water Heater SRCC OG-300	60 60 5 5 5 5 5 0 5 5 5 5 5 5	390 390 109 14 27 27 0 81 88
Natural Gas Furnace with ECM 95% AFUENatural Gas Furnace with ECM 98% AFUEStorage Water Heater .67 EFCondensing Storage Water Heater .90 EFHybrid Water Heater .90 EFNatural Gas Boiler 85% AFUENatural Gas Boiler 95% AFUESolar Assisted Water Heater SRCC OG-300Solar Assisted Pool Heater SRCC OG-100	60 60 5 5 5 5 5 5 5 5 5 5 5 5 5 5	390 390 109 14 27 27 0 0 81 88 345
Natural Gas Furnace with ECM 95% AFUENatural Gas Furnace with ECM 98% AFUEStorage Water Heater .67 EFCondensing Storage Water Heater .90 EFHybrid Water Heater .90 EFNatural Gas Boiler 85% AFUENatural Gas Boiler 95% AFUESolar Assisted Water Heater SRCC OG-300Solar Assisted Pool Heater SRCC OG-100Tankless Water Heater .82 EF	60 60 5 5 5 5 5 0 5 5 5 5 5 5 5	390 390 109 14 27 27 0 0 81 88 345 27
Natural Gas Furnace with ECM 95% AFUENatural Gas Furnace with ECM 98% AFUEStorage Water Heater .67 EFCondensing Storage Water Heater .90 EFHybrid Water Heater .90 EFNatural Gas Boiler 85% AFUENatural Gas Boiler 95% AFUESolar Assisted Water Heater SRCC OG-300Solar Assisted Pool Heater SRCC OG-100Tankless Water Heater .90 EF	60 60 5 5 5 5 0 0 5 5 5 5 5 5 5 5 5 5 5	390 390 109 14 27 27 0 0 81 88 345 27 30
Natural Gas Furnace with ECM 95% AFUENatural Gas Furnace with ECM 98% AFUEStorage Water Heater .67 EFCondensing Storage Water Heater .90 EFHybrid Water Heater .90 EFNatural Gas Boiler 85% AFUENatural Gas Boiler 95% AFUESolar Assisted Water Heater SRCC OG-300Solar Assisted Pool Heater SRCC OG-100Tankless Water Heater .90 EFFireplace 70% AFUE	60 60 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	390 390 109 14 27 27 0 0 81 88 345 27 30 21

Rebate Limitations

ThermWise Appliance Rebate program limitations are defined in Section 2.10 of the Questar Gas Company Utah Tariff (QGC 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, 2017.

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.