

# **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 and administered by Portland Energy Conservation, Inc. (PECI). 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, residential boilers, solar assisted hot water heating systems and energy-efficient gas fireplaces. Rebate's for most measures will be available regardless of who installs the product.

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

# **Program Design**

## **Program Measures**

## **Qualifying Customers**

All residences receiving service on the GS rate schedule in Questar Gas's Utah service territory are eligible to participate in the program.

## List of Qualified Energy Efficiency Measures-

Table 1

Measure	Specification
High-Efficiency Gas Furnace -Tier 1	Annual Fuel Utilization Efficiency (AFUE) Rating of 90.0% - 91.9%
High-Efficiency Gas Furnace -Tier 2	Annual Fuel Utilization Efficiency (AFUE) Rating of 92% - 94.9%
High-Efficiency Gas Furnace -Tier 3	Annual Fuel Utilization Efficiency (AFUE) Rating of 95% or greater
High-Efficiency Gas Storage Water Heater-Tier 1	Energy Factor (EF) 0.62 to 0.66
High-Efficiency Gas Storage Water Heater-Tier 2	Energy Factor (EF) 0.67 or greater
Tankless Gas Water Heater- Tier 1	Energy Factor (EF) 0.82 - 0.89
Tankless Gas Water Heater- Tier 2	Energy Factor (EF) 0.90 or greater
High-Efficiency Condensing Gas Storage Water Heater	Energy Factor (EF) of 0.90 or greater
High-Efficiency Hybrid Gas Water Heater	Thermal Efficiency (TE) 90% or greater
Residential Gas Boilers	AFUE of 95% or greater
Solar Assisted Gas Water Heating	Active system certified OG- 300 by S R C C
ENERGY STAR Clothes Washer	Modified Energy Factor (MEF) of 2.60 or greater; requires gas water heating
Direct-Vent Gas Fireplace	AFUE 70% or greater, intermittent ignition, heat rated, thermostatically controlled with a blower

## **High-Efficiency Gas Furnace**

Customers may receive a rebate for installing a high-efficiency gas furnace. To be eligible for Tier 1, the customer must purchase and install a model with an AFUE rating of 90.0%-91.9%. To be eligible for Tier 2, the customer must purchase and install a model with an AFUE rating of 92.0%-94.9%. To be eligible for Tier 3, the customer must purchase and install a model with an AFUE rating of 95.0% or greater.

#### **High-Efficiency Gas Storage Water Heater**

Customers may receive a rebate for installing a high-efficiency gas storage water heater. To be eligible for Tier 1, the customer must purchase and install a model with an Energy Factor (EF) of 0.62 to 0.66. To be eligible for Tier 2, the customer must purchase and install a model with an Energy Factor (EF) of 0.67 or greater.

#### **Tankless Gas Water Heater**

Customers may receive a rebate for installing a high-efficiency tankless gas water heater. To be eligible for Tier 1, the customer must purchase and install a model with an Energy Factor (EF) of 0.82 to 0.89. To be eligible for Tier 2, the customer must purchase and install a model with an Energy Factor (EF) 0.90 or greater.

## **High-Efficiency Condensing Gas Water Heater**

Customers may receive a rebate for installing a high-efficiency condensing gas storage water heater. To be eligible for a rebate, the customer must purchase and install a model with an Energy Factor (EF) of 0.90 or greater.

#### **High-Efficiency Hybrid Gas Water Heater**

Customers may receive a rebate for installing a high-efficiency hybrid gas storage water heater. To be eligible for a rebate, the customer must purchase and install a qualified model with a Thermal Efficiency (TE) of 90% or greater.

#### **High-Efficiency Gas Boiler**

Customers may receive a rebate for installing a high-efficiency gas boiler with an AFUE rating of 95% or greater.

#### **Solar Assisted Gas Water Heating**

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

#### **ENERGY STAR Clothes Washer**

Customers may receive a rebate for installing an ENERGY STAR qualified clothes washer. To be eligible for a rebate, the customer must purchase an ENERGY STAR qualified model with a Modified Energy Factor (MEF) of 2.60 or greater and have a gas water heater.

#### **Direct-Vent Gas Fireplace**

Customers may receive a rebate for installing a high-efficiency direct-vent, natural gas fireplace with an AFUE of 70% or greater, intermittent ignition, heat rated, thermostatically controlled with a blower.

## **Program Rebates**

To receive a rebate, customers will complete and submit an application for rebate payment after they purchase and install a qualifying program measure. Rebate amounts are provided in Table 2. These amounts 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 2

Measure  gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%- Tier 1  gh-Efficiency Gas Furnace-AFUE 92.0%-94.9%-Tier 2  gh-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3  gh-Efficiency Gas Storage Water Heater-Tier 1  gh-Efficiency Gas Storage Water Heater-Tier 2  nkless Gas Water Heater- Tier 1  nkless Gas Water Heater- Tier 2  gh-Efficiency Gas Condensing Water Heater  gh-Efficiency Hybrid Gas Water Heater  gh-Efficiency Residential Gas Boilers  lar Assisted Gas Water Heating  lERGY STAR Clothes Washer –MEF 2.6 or greater  ect-Vent Gas Fireplace  Multifamily (5 or gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1  gh-Efficiency Gas Furnace-AFUE 92.0%-94.9%- Tier 2	\$200 \$300 \$350 \$50 \$100 \$300	\$290 \$300 \$350 \$100 \$400
gh-Efficiency Gas Furnace-AFUE 92.0%-94.9%-Tier 2 gh-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3 gh-Efficiency Gas Storage Water Heater-Tier 1 gh-Efficiency Gas Storage Water Heater-Tier 2 gh-Efficiency Gas Storage Water Heater-Tier 2 gh-Efficiency Gas Condensing Water Heater gh-Efficiency Gas Condensing Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating IERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace  Multifamily (5 o	\$300 \$350 \$50 \$100	\$300 \$350 \$100
gh-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3 gh-Efficiency Gas Storage Water Heater-Tier 1 gh-Efficiency Gas Storage Water Heater-Tier 2 gh-Efficiency Gas Water Heater- Tier 1 nkless Gas Water Heater- Tier 2 gh-Efficiency Gas Condensing Water Heater gh-Efficiency Hybrid Gas Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating IERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace  Multifamily (5 o	\$350 \$50 \$100	\$350 \$100
gh-Efficiency Gas Storage Water Heater-Tier 1 gh-Efficiency Gas Storage Water Heater-Tier 2 nkless Gas Water Heater- Tier 1 nkless Gas Water Heater- Tier 2 gh-Efficiency Gas Condensing Water Heater gh-Efficiency Hybrid Gas Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating lERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace  Multifamily (5 o	\$50 \$100	\$100
gh-Efficiency Gas Storage Water Heater-Tier 2  nkless Gas Water Heater- Tier 1  nkless Gas Water Heater- Tier 2  gh-Efficiency Gas Condensing Water Heater  gh-Efficiency Hybrid Gas Water Heater  gh-Efficiency Residential Gas Boilers  lar Assisted Gas Water Heating  IERGY STAR Clothes Washer –MEF 2.6 or greater  ect-Vent Gas Fireplace  Multifamily (5 o	\$100	,
nkless Gas Water Heater- Tier 1  nkless Gas Water Heater- Tier 2  gh-Efficiency Gas Condensing Water Heater gh-Efficiency Hybrid Gas Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating IERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace  Multifamily (5 o	,	\$400
nkless Gas Water Heater- Tier 2 gh-Efficiency Gas Condensing Water Heater gh-Efficiency Hybrid Gas Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating lERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace Multifamily (5 o	\$300	
gh-Efficiency Gas Condensing Water Heater gh-Efficiency Hybrid Gas Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating IERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace  Multifamily (5 o	*	\$750
gh-Efficiency Hybrid Gas Water Heater gh-Efficiency Residential Gas Boilers lar Assisted Gas Water Heating IERGY STAR Clothes Washer –MEF 2.6 or greater ect-Vent Gas Fireplace  Multifamily (5 o	\$350	\$1,345
gh-Efficiency Residential Gas Boilers  lar Assisted Gas Water Heating  ERGY STAR Clothes Washer –MEF 2.6 or greater  ect-Vent Gas Fireplace  Multifamily (5 o	\$350	\$1,150
lar Assisted Gas Water Heating  IERGY STAR Clothes Washer –MEF 2.6 or greater  ect-Vent Gas Fireplace  Multifamily (5 or greater)  gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	\$350	\$1,238
ect-Vent Gas Fireplace  Multifamily (5 o gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	\$600	\$1,550
ect-Vent Gas Fireplace  Multifamily (5 o gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	\$750	\$4.500
Multifamily (5 o gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	\$50	\$100
gh-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	\$200	\$500
	r more units)	
h-Efficiency Gas Furnace-AFUE 92.0%-94.9%- Tier 2	\$200	\$290
	\$300	\$300
gh-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3	\$350	\$350
gh-Efficiency Gas Storage Water Heater-Tier 1	\$50	\$175
gh-Efficiency Gas Storage Water Heater-Tier 2	\$100	\$400
nkless Gas Water Heater-Tier 1	\$300	\$750
nkless Gas Water Heater-Tier 2	\$350	\$1,345
h-Efficiency Gas Condensing Water Heater	\$350	\$1,150
h-Efficiency Hybrid Gas Water Heater	\$350	\$1,238
h-Efficiency Residential Gas Boilers	\$600	\$1,550
lar Assisted Gas Water Heating	\$750	\$4.500
IERGY STAR Clothes Washer – MEF 2.6 or greater	\$50	\$100
ect-Vent Gas Fireplace	\$200	\$500

## **Rebate Limitations**

The following requirements apply for all measures:

- Measures must be installed in residences within the Questar Gas Utah service territory with an active Questar Gas account.
- Natural gas must be the primary source of heat to qualify for a rebate.
- Measures must be purchased new, not used or leased.
- Rebates will be paid for up to two of each type of measure purchased and installed per dwelling unit. For example, a rebate will be paid for up to two high-efficiency gas furnaces and up to two high-efficiency gas water heaters, etc., purchased and installed per dwelling unit.
- Each rebate will be mailed to the mailing address listed on the Questar Gas customer account.
- Each rebate check will be made payable to the Questar Gas customer account name on record, not the name provided by the customer in the rebate application.
- Property Owner Addendum will be required when applicable.

## **Projected Participants**

Table 3

Single Family (1-4 units)				
Measure	Participants			
High-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	500			
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%-Tier 2	3,000			
High-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3	8,400			
High-Efficiency Gas Storage Water Heater-Tier 1	4,000			
High-Efficiency Gas Storage Water Heater-Tier 2	500			
Tankless Gas Water Heater-Tier 1	600			
Tankless Gas Water Heater-Tier 2	900			
High Efficiency Gas Condensing Water Heater	20			
High-Efficiency Hybrid Gas Water Heater	20			
High-Efficiency Residential Gas Boiler	225			
Solar Assisted Gas Water Heating	20			
ENERGY STAR Clothes Washer	12,000			
Direct-Vent Gas Fireplace	20			
TOTAL	30,205			
Multifamily (5 or more units)				
Measure	Participants			
High-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	50			
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%-Tier 2	500			
High-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3	100			
High-Efficiency Gas Storage Water Heater-Tier 1	30			
High-Efficiency Gas Storage Water Heater-Tier 2	5			

Tankless Gas Water Heater-Tier 1	20
Tankless Gas Water Heater-Tier 2	5
High-Efficiency Gas Condensing Water Heater	5
High-Efficiency Hybrid Gas Water Heater	5
High-Efficiency Residential Gas Boilers	5
Solar Assisted Gas Water Heating	5
ENERGY STAR Clothes Washer – MEF 2.6 or greater	500
Direct-Vent Gas Fireplace	10
TOTAL	1,240
TOTAL PROGRAM	31,445

## **Customer Application Process**

It is the goal of the program to make the rebate application process as simple as possible for customers.

#### **Process Overview**

- 1. Purchase Appliance Customer purchases qualified appliance and receives a rebate form.
- **2. Appliance Installation** Appliance is installed according to program installation guidelines, by a qualified contractor if required.
- 3. Submittal Customer submits the completed rebate form along with a copy of proof of purchase.
- 4. Receipt and Data Entry Program staff date, stamp and enter data into the program database.
- 5. Internal Checklist Review Data is reviewed for accuracy and qualification according to the following guidelines:
  - Copy of invoice/proof of payment a copy of the customer invoice is required to verify the validity of the sales and purchase information.
  - Qualified appliance the appliance must meet the specifications under List of Qualified Energy Efficiency Measures (Table 1).
  - Date sold the sale date must be within the valid dates of the program.
  - Serial number the retailer or customer must provide the appliance serial number to prove uniqueness of each sale.
  - Customer verification customer must assert that they are a residential customer of Questar Gas and sign the rebate form. Utility account numbers will be used to verify this information.
- **Correction** If incomplete rebate forms or faulty information is received, customers are contacted in order to correct the application and advance it through the review process and into the approval stage.
- **7. Approval** Payment for the customer is approved after all information is received, entered, and verified.

**8. Payment** – Payment is issued and sent to the customer and the database is updated with payment information. The Company anticipates an approximate six week turn-around from receipt of valid and complete rebate form to payment.

## **Customer Service**

#### **Call Center**

The program administrator has provided a call center to answer customer questions through consultation, education and recommendations. Established customer service guidelines and protocols are in place to answer any ThermWise question regarding rebates, contractors and other issues related to the program. Call center staff will be prepared with extensive information that includes facts on qualified products, specific benefits of efficient products, other pertinent phone numbers relevant to the program and current program rebate parameters. The call center will be staffed during regular business hours (8am – 5pm MST) to respond to customer inquiries.

A Trade Ally Hotline has been implemented. Trade Allies have immediate access to ThermWise representatives. This hotline provides opportunities for Trade Allies to order rebate forms, obtain a listing of qualified efficient products, contact information for a ThermWise marketing representative and the opportunity to have any program-related questions answered.

Information on ThermWise.com will enhance participation and customer service. Information will include:

- Program forms
- Rebate information and qualifications for easy reference
- Trade ally marketing materials and training information
- Contact information

## **Projected Savings Measure Tool**

Table 4

Single Family (1-4 units)				
Measure	Unit Gross Annual Savings (Dth)	Participants	Total Gross Annual Savings (Dth)	
High-Efficiency Gas Furnace-AFUE 90.0%-91.9%- Tier 1	13.5	500	6,750	
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%- Tier 2	16.6	3,000	49,800	
High-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3	20.5	8,400	172,200	
High-Efficiency Gas Storage Water Heater-Tier 1	1.71	4,000	6,840	
High-Efficiency Gas Storage Water Heater-Tier 2	3.96	500	1,980	
Tankless Gas Water Heater-Tier 1	8.8	600	5,280	

Tankless Gas Water Heater-Tier 2	9.6	900	8,640
High-Efficiency Gas Condensing Water Heater	9.2	20	184
High-Efficiency Hybrid Natural Gas Water Heater	10.2	20	204
High-Efficiency Residential Gas Boiler	25.2	225	5,670
Solar Assisted Gas Water Heating	17.5	20	350
ENERGY STAR Clothes Washer – MEF 2.6 or greater	1.74	12,000	20.88
Direct-Vent Natural Gas Fireplace	10.8	20	216
TOTAL		30,205	258,135
Multifamily (5 or mo	re units)		
Measure	Unit Gross Annual Savings (Dth)	Participants	Total Gross Annual Savings (Dth)
High-Efficiency Gas Furnace-AFUE 90.0%-91.9%-Tier 1	4.6	50	230
High-Efficiency Gas Furnace-AFUE 92.0%-94.9% Tier 2	5.6	500	2800
High-Efficiency Gas Furnace-AFUE 95.0% or greater-Tier 3	6.5	100	650
High-Efficiency Gas Storage Water Heater-Tier 1	1.71	30	51.3
High-Efficiency Gas Storage Water Heater-Tier 2	3.96	5	19.8
Tankless Gas Water Heater-Tier 1	8.8	20	176
Tankless Gas Water Heater-Tier 2	9.6	5	48
High-Efficiency Gas Condensing Water Heater	9.2	5	46
High-Efficiency Hybrid Gas Water Heater	10.2	5	51
High-Efficiency Residential Gas Boilers	16.11	5	80.55
Solar Assisted Natural Gas Water Heating	17.5	5	87.5
ENERGY STAR Clothes Washer –MEF 2.6 or greater	1.74	500	870
Direct-Vent Natural Gas Fireplace	4.10	10	41
TOTAL		1,240	5,151
Total Program		31,445	263,286

## **Implementation**

The program is currently in the marketplace so all existing implementation activities will continue without delay upon Commission approval effective January 1, 2011.

## **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. Some modifications may be required due to program changes for 2011.

## **Tracking & Measurement**

The database will continue to be updated to capture pertinent and required program information. The database is designed to verify rebate eligibility, provide necessary information for program reporting and collect market information.

#### **Data Tracking**

Information collected in the database includes:

- Customer information including name, site address and account information.
- Equipment details including product name, model number and serial number.
- Sales data including price, quantity and where purchased.

#### **Quality control**

The database is structured to allow for quality control in rebate processing including:

- Prevention of duplicate payments by checking for duplicate entry of site addresses, serial numbers and account numbers.
- Project qualification verified through site location and detailed product information (model numbers, etc.).
- Check for completeness by verifying that all required data has been entered and information is within accepted data parameters.