

# **Energy Efficiency Program Proposal**

ThermWise® Builder Rebates Program

# **Program Overview**

## **Description**

Questar Gas Company (Questar Gas) is proposing to continue the ThermWise® Builder Rebates program. The program will be delivered to the market and administered by Questar Gas and its program administrator. The program will be available to residential builders in the Questar Gas Utah service territory and include rebates for installing natural gas energy-efficiency measures in newly constructed single and multifamily residences receiving service on the GS rate schedule. Rebates under the program will be paid directly to the home builder or owner-builder (Builder) or as indicated on the application form for energy efficient construction or for installing specific energy-efficient natural gas measures, including high efficiency natural gas space heating and water heating appliances or solar assisted gas water heating systems.

The program is designed to leverage marketing and delivery directly to Utah home builders through a combination of Questar Gas staff and program implementation staff. Development, implementation, training, support and administration will be provided by Questar Gas in conjunction with our program administrator. All Questar Gas rebates will be available directly to Builders upon completion of program requirements.

# **Program Design**

# **Program Measures**

### **Qualifying Customers**

Separately metered single family or multifamily newly constructed residences, in Questar Gas' Utah service territory and billed on the GS rate schedule are eligible to participate in the ThermWise Builder Rebates program.

## List of Qualified Energy Efficiency Measures

Single (1-4 units) & Multifamily (5 or more units)				
Measure	Specification			
Whole home options (must include and qualifying stand-alone furnace & water heater)				
ENERGY STAR® Version 3.0	Meet or exceed ENERGY STAR Version 3.0 and include qualified gas space heating appliance and water heater. Field verification and supporting documentation by home energy rater (HERS) must be provided.			
High Performance Home	Exceed ENERGY STAR Version 3 meet or exceed a HERS score of 50. Include a qualified gas space heating appliance and/or water heater. Field verification and supporting documentation by home energy rater (HERS) must be provided.			
ThermWise® Builder Option Package 1 (Builder Cert.)	Builder certifies unit meets IECC 2009 energy code, field verification and includes qualifying space heating appliance and water heater. Supporting documentation by builder must be provided. Includes Class I insulation and TBC.			
ThermWise® Builder Option Package 2 (Rater Cert.)	Rater certifies unit meets IECC 2009 energy code, field verification and includes qualifying space heating appliance and water heater. Must provide required rater documentation.			
Stand-alone options				
95% AFUE natural gas furnace	AFUE Rating of ≥95%			
95% AFUE natural gas furnace with ECM	AFUE Rating of ≥95% with Electronically Commutated Motor (ECM)			
Gas Storage Water Heater (Tier 1)	Energy Factor (EF) ≥ .62 < .66			
Gas Storage Water Heater (Tier 2)	Energy Factor (EF) ≥ .67			
Tankless Water Heater (Tier 1)	Energy Factor (EF) ≥ .82 ≤ .90			
Tankless Water Heater (Tier 2)	Energy Factor (EF) >.90			
Condensing Storage Water Heater	Energy Factor (EF) of ≥ .90 or Thermal Efficiency of ≥ 90%			
Hybrid Water Heater	Energy Factor (EF) of ≥ .90 or Thermal Efficiency of ≥ 90%			
Gas Boiler (Tier 1)	AFUE Rating of ≥ 85% < 95%			
Gas Boiler (Tier 2)	AFUE Rating of > 95%			
Solar Assisted Gas Water Heating (domestic)	Active system certified OG- 300 by SRCC			
Solar Assisted Gas Water Heating (pool)	Active system certified OG-100 by SRCC			
2X6 R-20 Walls	2009 IECC - R-20 or code equivalent exterior walls			
Windows – R-5	High performance windows meeting specification U-value ≤ 0.22			

#### **ENERGY STAR® Version 3.0**

Builders may receive rebates for building a dwelling unit that qualifies under ENERGY STAR® Version 3. Field verification and ENERGY STAR® Version 3 compliance certificate by home energy rater (HERS) will be required before ENERGY STAR® Version 3 rebate will be paid.

#### **High Performance Home**

Builders may receive rebates for building a high performance home. To qualify a dwelling must meet or exceed ENERGY STAR® Version 3 and the home must also meet or exceed a HERS score of 50. Field verification, an ENERGY STAR® certificate and documentation verifying the home has met the high performance home requirements will be required from rater before high performance home rebate will be paid.

#### ThermWise® Builder Option Package 1 (BOP 1) - Builder certified 2009 IECC with TBC

Builders may receive rebates for building a dwelling unit that qualifies under the 2009 IECC. Field verification and builder certification will be required before IECC 2009 builder certified rebate will be paid.

#### ThermWise® Builder Option Package 2 (BOP 2) - Rater certified 2009 IECC

Builders may receive rebates for building a dwelling unit that qualifies under the 2009 IECC. Field verification and supporting documentation by home energy rater (HERS) will be required before IECC 2009 rater certified rebate will be paid.

#### **Gas Furnaces**

Builders may receive a rebate for installing a high-efficiency natural gas furnace. Eligibility requirements are as follows:

- Tier 1, the builder must purchase and install a model with an AFUE Rating of >95%.
- Tier 2, the builder must purchase and install a model with an AFUE Rating of ≥95% with Electronically Commutated Motor (ECM).

#### **Gas Storage Water Heaters**

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

- Tier 1, the builder must purchase and install a model with an Energy Factor (EF) >.62 <.66.
- Tier 2, the builder must purchase and install a model with an Energy Factor (EF) ≥.67. Qualifying water heaters will have a minimum of 40 gallons in capacity.

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

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

- Tier 1, the builder must purchase and install a model with an Energy Factor (EF) ≥.82 < .90.</li>
- Tier 2, the builder must purchase and install a model with an Energy Factor (EF) >.90.

#### **Condensing Storage Gas Water Heater**

Builders may receive a rebate for installing a high-efficiency condensing natural gas storage water heater. To be eligible for a rebate, the builder must purchase and install a model with an Energy Factor (EF) of  $\geq$ .90 or (TE) of > 90%.

#### **Hybrid Gas Water Heater**

Builders may receive a rebate for installing a high efficiency hybrid natural gas storage water heater. To be eligible for a rebate, the builder must purchase and install a qualified model with a Thermal Efficiency (EF) of  $\geq$ .90 or (TE) of  $\geq$  90%.

#### **Gas Boilers**

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

- Tier 1, the builder must purchase and install a model with an AFUE Rating of > 85% < 95%.
- Tier 2, the builder must purchase and install a model with an EF >90.

#### Solar Assisted Gas Water Heating (domestic)

Builders may receive a rebate for installing 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)

Builders 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).

#### 2x6 Walls

Builders may receive rebates for installing a 2009 IECC 2x6 R-20 or code equivalents exterior wall. To be eligible builder must certify the installation of qualifying products.

#### Windows - R-5

Builders may receive rebates for installing R-5 Windows. To be eligible, builder must purchase and install qualified windows that meet the program requirement of a U-value ≤ 0.22.

#### **Multifamily**

Builders may receive rebates for building a multifamily property that meets program requirements. The requirements for multifamily projects are the same as those for single family projects. Any remaining new construction projects that are certified to the ENERGY STAR® 2.0 standards and were permitted prior to July 1, 2011 will have incentives paid at the 2011 rate structure during 2013.

## **Program Rebates**

Builders will be paid the rebates listed below after all completed documentation for the measure is received by the program administrator. A completed rebate application must be submitted within 6 months of the initiation of gas service for the subject dwelling units to be eligible to receive a rebate. The rebate will be paid in the form of a check. Rebates will be sent to the Builder contact listed on the Rebate Application.

Single (1-4 units) & Multifamily (5 or more units)			
Measure	Rebate SF/MF		
Whole home options (must include qualifying stand-alone furnace & water heater)			
ENERGY STAR® Version 3.0	\$300 (SF) /\$200 (MF)		
Furnace     Water heater	\$350-\$400		
• Water neater	\$50-\$350		
High Performance Home	\$500 (SF) /\$300 (MF)		
Furnace	\$350-\$400		
Water heater	\$50-\$350		
ThermWise® BOP 1 (Builder Cert.)	\$50 (SF) /\$50 (MF)		
Furnace	\$350-\$400		
Water heater	\$50-\$350		
ThermWise® BOP 2 (Rater Cert.)	\$100 (SF) /\$100 (MF)		
Furnace	\$350-\$400		
Water heater	\$50-\$350		
Stand-alone options			
95% AFUE natural gas furnace	\$350		
95% AFUE natural gas furnace with ECM	\$400		
Gas Storage Water Heater (Tier 1)	\$50		
Gas Storage Water Heater (Tier 2)	\$100		
Tankless Water Heater (Tier 1)	\$300		
Tankless Water Heater (Tier 2)	\$350		
Condensing Storage Water Heater	\$350		
Hybrid Water Heater	\$350		
Gas Boiler (Tier 1)	\$400		
Gas Boiler (Tier 2)	\$600		
Solar Assisted Gas Water Heating (domestic)	\$750		
Solar Assisted Gas Water Heating (pool)	\$750		
2X6 R-20 Walls	\$350/\$150		
Windows – R-5	\$1.20/ sq. ft.		

#### **Rebate Limitations**

The following requirements apply to rebate application payments for the program:

- Rebates are limited to one energy-efficient Whole House Certification rebate per qualifying newly
  constructed, dwelling unit (as further described above under the Qualified Energy Efficiency Measures
  section) and will be tracked by Builder, meter number and address.
- Builders are eligible to receive rebates for a maximum of two (2) qualifying measures per measure type in
  each newly constructed, dwelling unit. Builders are only eligible to receive an additional whole home
  performance option measure if they have installed a qualifying space heating appliance and water heater.
  They can receive a maximum of two individual measure incentives per home plus one performance
  measure.

- A complete rebate application must be submitted within 6 months of the initiation of gas service for the subject dwelling unit to be eligible to receive a rebate.
- Qualifying packages and/or measures receiving rebates under the program may not receive equipment purchase and installation rebates under any other Questar Gas Energy Efficiency program.
- Dwelling unit must be located in Questar Gas' Utah service territory.

# **Projected Participants**

Single (1-4 units) & Multifamily (5 or more units)				
Measure	Participants			
	Single Family	Multifamily		
Whole home options (must include and qualifying standalone furnace & water heater)				
ENERGY STAR® Version 3.0	276	100		
High Performance Home	22	84		
ThermWise® BOP 1 (Builder Cert.)	296	69		
ThermWise® BOP 2 (Rater Cert.)	291	69		
Total Whole home options	885	322		
Stand-alone options				
95% AFUE natural gas furnace	1,614	559		
95% AFUE natural gas furnace with ECM	106	28		
Gas Storage Water Heater (Tier 1)	922	500		
Gas Storage Water Heater (Tier 2)	150	20		
Tankless Water Heater (Tier 1)	30	5		
Tankless Water Heater (Tier 2)	30	12		
Condensing Storage Water Heater	5	5		
Hybrid Water Heater	20	5		
Gas Boiler (Tier 1)	5	5		
Gas Boiler (Tier 2)	38	5		
Solar Assisted Gas Water Heating (domestic)	35	210		
Solar Assisted Gas Water Heating (pool)	5	5		
2X6 R-20 Walls	450	500		
Windows – R-5	10	5		
Total Stand-alone options	3,420	1,864		
TOTAL Builder Program	4,305	2,186		

# **Projected Savings**

Measure	Single Family Total Annual Gross Savings (decatherms)	Multifamily Total Annual Gross Savings (decatherms)
ENERGY STAR® Version 3.0	8,446	1,470

High Performance Home	950	1,739
ThermWise® BOP 1 (Builder Cert.)	5,062	449
ThermWise® BOP 2 (Rater Cert.)	6,227	573
95% AFUE natural gas furnace	18,077	3,634
95% AFUE natural gas furnace with ECM	1,187	182
Gas Storage Water Heater (Tier 1)	1,577	855
Gas Storage Water Heater (Tier 2)	594	79
Tankless Water Heater (Tier 1)	264	44
Tankless Water Heater (Tier 2)	288	115
Condensing Storage Water Heater	46	46
Hybrid Water Heater	204	51
Gas Boiler (Tier 1)	60	60
Gas Boiler (Tier 2)	612	80
Solar Assisted Gas Water Heating (domestic)	613	3,675
Solar Assisted Gas Water Heating (pool)	345	345
2X6 R-20 Walls	5,760	2,000
Windows – R-5	73	16
TOTAL Buider Program	50,384	15,412

# 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, 2013.

# **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 2013.