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# Energy Efficiency Program Proposal

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## ThermWise<sup>®</sup> Weatherization Rebates Program

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# Program Overview

## Description

The ThermWise® Weatherization Rebate program targets residences receiving service on the GS rate schedule. A qualifying single-family residence is an existing structure that has up to four residential dwelling units. A qualifying multifamily residence is an existing dwelling having five or more residential dwelling units. To qualify for insulation, air sealing and duct related rebates, customers will be required to have measures installed by a ThermWise® Authorized Contractor.

For qualifying multifamily residences, a pre-qualification inspection will be required. This program will offer incentives for qualifying weatherization measures. Weatherization measure delivery will leverage the marketing access and existing delivery channels of local businesses, wholesalers and retailers.

Questar will work with its authorized contractors to identify previously completed measures in a premise. If a premise has received rebates and conditions warrant additional attic, floor or wall insulation work to be completed, approval can be granted based on the recommendation from a ThermWise In-home audit, Home performance audit, inspection or documented program approval for specific work.

# Program Design

## Program Measures

### Qualifying Customers

Existing single-family or multifamily residences in Questar Gas Utah service territories that are billed on the GS rate schedule are eligible to participate in the ThermWise Weatherization Rebates program.

### Measure Eligibility

To receive a rebate, customers must submit a completed application form within 6 months of the installation date and provide all required documentation. Table 1 illustrates the low-cost energy-efficiency measures and eligibility requirements under the weatherization program.

**Table 1. Weatherization Energy-Efficiency Measures**

Weatherization Rebates Efficiency Measure <sup>1</sup>	Windows <sup>3,5</sup>	R-5 Windows <sup>4,5</sup>	Wall Insulation <sup>5,7</sup>	Attic Insulation <sup>5,6</sup>	Floor Insulation <sup>5,7</sup>	Duct Sealing & Insulation <sup>8</sup>	Air Sealing <sup>9</sup>
Baseline requirement	Existing home with gas heat	Existing home with gas heat	Existing home with gas heat	Existing home with gas heat	Existing home with gas heat	Existing home with gas heat that meets the program criteria	Existing Single-family homes – pre-approved by audit and combined with attic insulation that meets the program criteria
Efficiency requirements	U-factor of .30 or lower	Highly Insulated Windows	Increment of R-11 or higher	Tier 1 – Minimum increment of R-19 or higher with a post installation R-value of at least R-38 but not more than R-60  Tier 2 – An additional increment of at least R-11 with at least R-38 but not to exceed R-60	Increment of R-19 or higher	Must be done to Questar Gas duct sealing & insulation specification	Must be done to Questar Gas 2012 air sealing specification
Measure lifetime (yrs)	25	30	35	35	35	20	20
Installation by pre-qualified contractor required <sup>2</sup>	No	No	Yes	Yes	Yes	Yes	Yes

<sup>1</sup> These measures are available to existing dwelling units heated with natural gas. Multifamily units must have a pre-qualification inspection.

<sup>2</sup> If “Yes,” this measure must be installed by a ThermWise® Authorized Contractor.

<sup>3</sup> Including sliding glass patio doors, but excluding all other doors (storm doors, wood and/or metal doors with windows). Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site built windows or glass only will not qualify for a rebate in the residential weatherization program.

<sup>4</sup> Eligible products are listed on [www.windowsvolumepurchase.org](http://www.windowsvolumepurchase.org)

<sup>5</sup> Eligible installations must be between a heated space and an unconditioned space or area outside of the building envelope. An unconditioned space is defined as an area or room within a building that is not being heated or cooled, that has no fixed opening directly into an adjacent conditioned space, or which is outside of the building envelope.

<sup>6</sup> Questar will allow a premise that previously received an attic insulation incentive to participate in the program again based on the recommendation of a ThermWise® audit, Home Performance audit, inspection or documented program approval. In the case of such a recommendation, the homeowner will be eligible to participate in the Tier 2 attic insulation measure without additional participation in the Tier 1 measure. A new homeowner of an existing premise may also qualify for participation in just the Tier 2 attic insulation rebates.

<sup>7</sup> Floor and wall insulation may be eligible for multiple rebates when the work completed covers a portion of the dwelling not previously submitted for a rebate.

<sup>8</sup> Eligible rebates are available only for work completed per the duct sealing and duct insulation specifications posted on ThermWise.com and are only available to dwelling units with heating ducts outside conditioned space. Duct Sealing and insulation is allowed on a one-time per premise basis. The work must be completed on the entire system outside conditioned space. Both single-family and multifamily residences are eligible with pre-qualification inspections required on all multifamily units.

<sup>9</sup> To be eligible for an air sealing measure a single family dwelling must first be tested by a ThermWise, Home Performance, or low-income Weatherization Assistance program audit which recommends air sealing only on a one-time per premise basis. The work must adhere to the specifications posted on ThermWise.com. The final R-value of attic insulation must meet or exceed R-38.

## Program Rebates

Weatherization energy-efficiency measures are outlined below in Table 2 and include the associated available incentive per unit. These measures will be available to residential customers based on measure eligibility requirements.

**Table 2. Weatherization Energy Efficiency Measures Incentives**

Program Measure	Incentive \$	Incremental Customer Cost	Unit
<b>Windows</b>	\$.95	\$1.30	sq. ft.
<b>Windows (R-5)</b>	\$2.50	\$6.00	sq. ft.
<b>Wall Insulation</b>	\$.30	\$.64	sq. ft.
<b>Attic Insulation</b>	All completed projects must have minimum insulation levels of R-38 but not greater than R-60  Tier 1 - \$.25 requires R-19  Tier 2 - \$.07 Combined with Tier 1 to add R-11 or greater to achieve at least an R-38	\$.34  \$.11	Tier 1 - \$.25/ sq. ft.  Tier 2 - \$.07/ sq. ft.
<b>Floor Insulation</b>	\$.20	\$.42	sq. ft.
<b>Programmable Thermostat</b>	\$30	\$39	each
<b>Air Sealing</b>	<u>Single Family</u>  \$100 per job + \$.20 sq. ft. of conditioned floor area not to exceed a total rebate of \$850	\$.40 per sq. ft of conditioned floor area	each
<b>Duct Sealing and Insulation</b>	<u>Single Family</u>  \$100 per job plus \$5.25/linear ft. not to exceed a total rebate of \$450  <u>Multifamily</u>  \$100 per job plus \$5.25/linear ft. not to exceed a total rebate of \$250	\$657/\$273	each

## Rebate Limitations

In addition to the requirements in Table 2, the following requirements apply to rebate application payments for the program:

- Rebates are limited to existing homes with natural gas as the primary source of heat.
- Rebate may be scaled based upon the size of the system or conditioned floor area of a home.
- Rebates are only available for work that has not been previously rebated with some exceptions as noted.
- Adhere to all program specifications.
- Comply with all local codes and ordinances.
- Pre-inspection required on all multifamily jobs.
- Customers will be required to have insulation, duct measures and air sealing installed by a ThermWise® Authorized Contractor in order to qualify for rebates. Insulation self-installations are permitted.
- Qualifying 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 territories and be a Questar Gas residential customer (i.e. meter set or account activated).
- Programmable thermostat rebate eligibility requires a completed ThermWise® Home Energy Audit.
- Questar Gas will only offer a rebate for one attic measure per premise, except in the case where additional attic insulation is recommended by a ThermWise® Home Energy Audit or Home Performance audit or by receiving program approval.
- Unless otherwise set forth herein, Questar Gas will only offer a rebate for one measure per premise. Rebates will be allowed for the same measure in a premise given it is for a different area of the home, excluding duct and air sealing measures. Please refer to posted program rules or contact program before proceeding with a project if you have specific questions.
- Except as set forth in Exhibit 1.6, rebate checks will be made payable to the Questar Gas customer account name on record, not necessarily the name provided by the customer in the rebate application, and mailed to the mailing address listed on the Questar Gas customer account. Exceptions may be made through the Property Owner Addendum.

## Projected Participants

Table 3 summarizes the ThermWise® Weatherization Rebates program's expected customer participation for each measure and savings estimates.

**Table 3. Weatherization Energy Efficiency Measure Participation Estimates**

Single Family (1-4 units)									
	Windows	Window R-5	Wall Insulation	Attic Insulation Tier 1	Attic Insulation Tier 2	Floor Insulation	Duct Sealing & Insulation	Air Sealing	Total
	#	#	#	#	#	#	#	#	
Unit Savings (Dth/unit/yr)	0.0412	.0698	0.0053	0.0053	0.0013	0.0068	13.48	.0048	
Estimated Participants	16,572	20	1,620	19,788	13,584	780	936	250	<b>53,550</b>
	sq. ft.	sq. ft.	sq. ft.	sq. ft.	sq. ft.	sq. ft.	System	sq. ft.	
Units per Participant	50	50	747	1,352	1,344	845	1	2,704	
Estimated Units	828,600	1,000	1,210,140	26,753,376	18,256,896	659,100	936	676,000	
Savings Estimates (Dth/yr)	34,138	70	6,414	141,793	23,734	4,482	12,617	3,245	<b>226,493</b>
Multifamily (5 or more units)									
	Windows	Window R-5	Wall Insulation	Attic Insulation Tier 1	Attic Insulation Tier 2	Floor Insulation	Duct Sealing & Insulation	Air Sealing	Total
	#	#	#	#	#	#	#	N/A	
Unit Savings (Dth/unit/yr)	0.0412	.0698	0.0053	0.0053	0.0013	0.0068	8.00	N/A	
Estimated Participants	150	2	10	1,400	1,400	10	2,000	N/A	<b>4,972</b>
	sq. ft.	sq. ft.	sq. ft.	sq. ft.	sq. ft.	sq. ft.	System	N/A	
Units per Participant	200	50	1,650	1,000	1,000	1,000	1	N/A	
Estimated Units	30,000	100	16,500	1,400,000	1,400,000	10,000	2,000	N/A	
Savings Estimates (Dth/yr)	1,236	7	87	7,420	1,820	68	16,000	N/A	<b>26,638</b>

## Rebate Application Process

See Application (Section VI. 2012 Rebate Processing) for information regarding rebate applications and processing.

## Projected Savings

Table 3 presents the estimated gross customer savings for the weatherization measures.

## Implementation

The program is currently in the marketplace so all existing implementation activities will continue without delay upon Commission approval effective January 1, 2012. The company is proposing the air-sealing program be initiated as a pilot. Trained and certified authorized contractors will complete all work to a developed specification. An energy audit will be required for participation in the air sealing measure with Questar Gas Auditors conducting a blower door test as part of the audit to determine eligibility. Only single-family units will be eligible for the air-sealing program. Auditors will encourage participation in air sealing and other qualifying weatherization measures. Based on the potential invasive nature of the sealing in an attic we will require that customers have a weighted R-value of R-38 or better attic insulation once air-sealing specifications are achieved. The program will require initial training of auditors and contractors as well as ongoing monitoring and onsite quality assurance follow up at the time work is completed. These tasks will be coordinated internally and with Questar Gas' implementation contractor.

## 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 2012.