
Energy Efficiency Program Proposal

ThermWise[®] Weatherization Rebates Program

Program Overview

The ThermWise Weatherization Rebates program targets separately metered residences receiving service on the GS rate schedules. A qualifying residence is a structure that has up to four separately metered residential dwelling units.

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. For some measures, customers will be required to have measures installed by a pre-qualified contractor in order to qualify for incentives.

The ThermWise Weatherization Rebates program is one of several energy-efficiency programs offered by Questar Gas Company (Questar Gas). The objective of the program is to reduce customer energy consumption through the installation of cost-effective shell measures.

Program Design

Qualifying Customers

Separately metered existing residences in Questar Gas' Utah service territory that are billed on a GS rate schedule are eligible to participate in the ThermWise Weatherization Rebates program. A qualifying residence is a structure that has up to four separately metered residential dwelling units.

Measure Eligibility

Table 1 lists the low-cost energy-efficiency measures and eligibility requirements under the weatherization program.

Table 1. Weatherization Energy-Efficiency Measures

	Windows ¹	Wall Insulation ²	Attic Insulation ^{2,3}	Floor Insulation ²	Programmable Thermostat ⁴	Duct Sealing	Duct Insulation
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 and existing non-programmable thermostat	Existing home; gas heat; Minimum of ten continuous feet of ductwork in unconditioned ⁴ space	Existing home; gas heat; Minimum of ten continuous feet of uninsulated ductwork in unconditioned ⁵ space
Efficiency requirements	U factor of .35 or lower	Increment of R-11 or higher	Must install a new increment of R-19 or higher and final condition must be at least R-38 up to a max of R-60	Increment of R-19 or higher	ENERGY STAR® programmable thermostat	PTCS ⁶ Levels	R-6 or higher
Measure lifetime (yrs)	25	45	45	45	15	10	10
Installation by pre-qualified contractor required	No	No	No	No	No	Yes	Yes

¹ Including sliding glass patio doors, but excluding all other doors (storm doors, wood and/or metal doors with windows).

² Floor, wall and attic insulation will be available in homes that have not had the measure rebated with the ThermWise® program in previous years. This measure will be available on a one-time basis per measure per premise.

³ Eligible installations must be between a heated space and an unconditioned space or area outside of the building envelope.

⁴ Programmable thermostat will only be available to customers where an in-home or mail-in audit is completed.

⁵ Unconditioned space – 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.

⁶ PTCS = Performance Tested Comfort System.

Weatherization energy-efficiency measures are showing 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
Windows	\$.95	\$1.30	sq. ft.
Wall Insulation	\$.30	\$.64	sq. ft.
Attic Insulation	All completed projects must have minimum insulation levels of R-38 but not greater than R-60	\$.40	Tier 1 - \$0.20 sq. ft.
	Tier 1 - \$.20 - requires R-19 Tier 2 - \$.07 Combined with Tier 1 to add R-11 or greater to achieve at least an R-38	\$.20	Tier 2 - \$0.07 sq.ft.
Floor Insulation	\$.20	\$.42	sq. ft.
ENERGY STAR® Programmable Thermostat	\$30	\$39	each
Duct Sealing	\$225	\$310	each
Duct Insulation	\$250	\$347	each

Rebate Limitations

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

- Rebates are limited to existing homes with natural gas heat.
- Duct sealing and duct insulation measures must be installed in unconditioned spaces and will be required to have measures installed by a pre-qualified contractor in order to qualify for incentives.

- Duct sealing and duct insulation measures must be installed on a minimum of 10 continuous linear feet that is in an unconditioned (see previously defined language in measure eligibility) basement, attic and crawl spaces to qualify for the program incentives.
- Duct sealing measures must achieve at least a 100 CFM reduction in leakage to the outside to qualify for a rebate.
- Qualifying measures receiving rebates under the program may not receive equipment purchase and installation rebates under any other Questar Gas DSM program.
- Dwelling unit must be located in Questar Gas' Utah service territory and be a Questar Gas residential customer (i.e. meter set or account activated).
- Programmable thermostat rebates eligibility requires a completed ThermWise Home Energy Audit.
- Questar Gas will only offer a rebate for one Attic and one Floor measure per premise. Any additional installation(s) would not be eligible for rebate from Questar Gas Company.
- 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 necessarily the name provided by the customer in the rebate application.
- The Questar Gas customer must install attic insulation meeting Tier 1 requirements before the customer qualifies for a Tier 2 rebate. An installation of R-11 alone would not qualify for a Tier 2 rebate.

Projected Participants

Table 3 summarizes the ThermWise Weatherization Rebates program's expected customer participation for each measure during the second year.

- Floor, wall and attic insulation will be available in homes that have not had the measure rebated with the ThermWise® program in previous years. This measure will be available on a one-time basis per measure per premise.

Table 3. Weatherization Energy Efficiency Measure Participation Estimates

Program Year	Windows	Wall Insulation	Attic Insulation Tier 1	Attic Insulation Tier 2	Floor Insulation	Programmable Thermostat	Duct Sealing	Duct Insulation
	#	#	#	#	#	#	#	#
Estimated Participants	13,873	3,313	52,575	14,868	1,840	116	2,302	2,694
	sq.ft.	sq.ft.	sq.ft.	sq.ft.	sq.ft.	Each	System	System
Estimated Participants	13,873	3,313	52,575	14,868	1,840	116	2,302	2,694
Units per participant	66	867	1,345	1,246	1,079	1	1	1
Estimated Units	919,918	2,874,089	70,697,120	18,525,528	1,985,115	116	2,302	2,694

Process Overview

Purchase Measure – Customer purchases qualified measure and receives a rebate form.

Measure Installation – Qualifying measure is installed according to program guidelines by a qualified contractor, if required.

Submittal – Customer submits the completed rebate form along with a copy of proof of purchase and documentation that the equipment meets the program's minimum efficiency requirements (if applicable).

Receipt and Data Entry – Program staff date stamp and enter data into the program database.

Internal Checklist Review – Data is reviewed for accuracy and qualification.

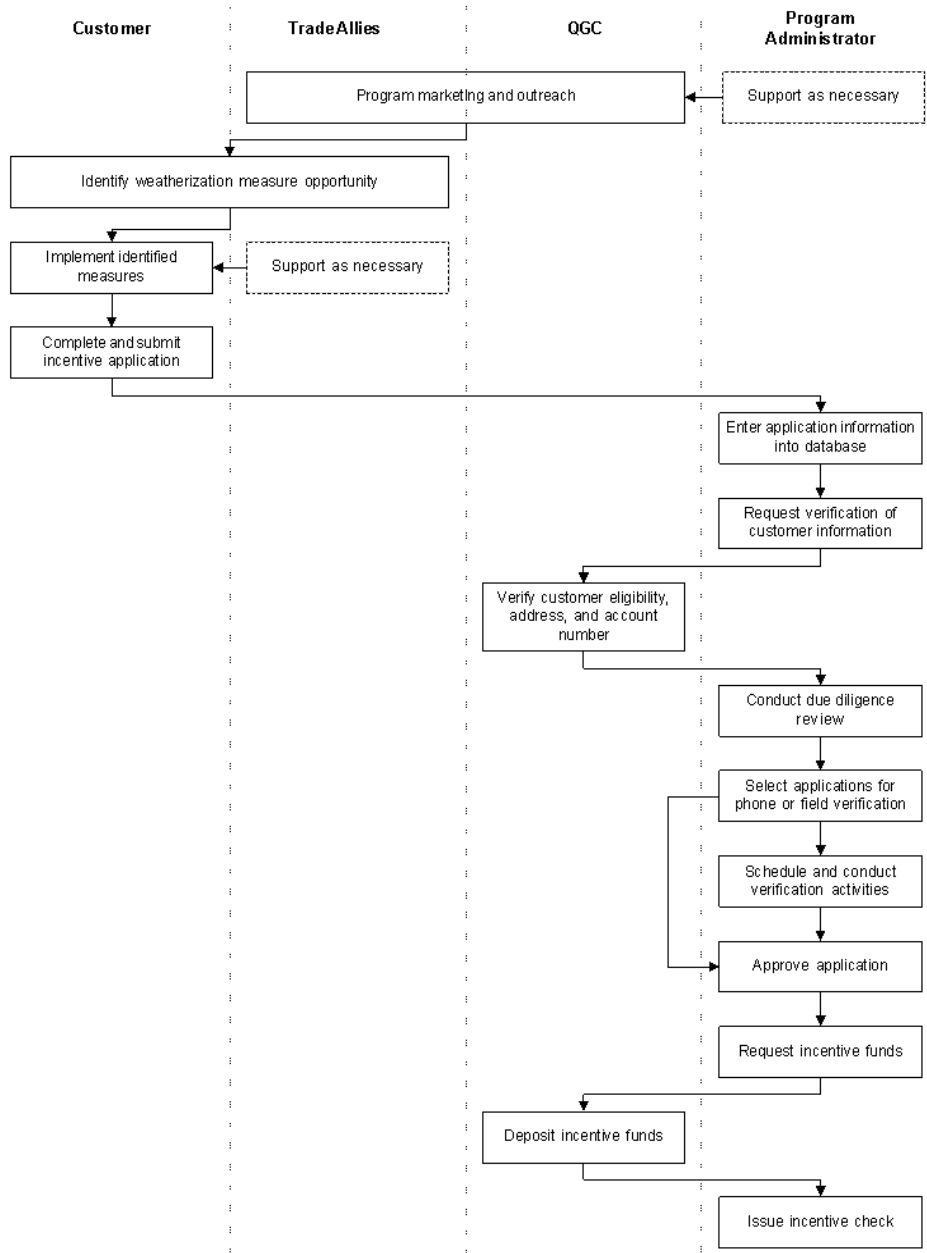
Copy of Invoice/Proof of Payment – A copy of the customer invoice is required to verify the validity of the sales and purchase information.

- **Qualifying Measure** – The qualifying measure must meet or exceed the minimum efficiency requirements in Table 1. Questar will require appropriate documentation to confirm eligibility of the measure.
- **Date Sold** – The sale date must be within the valid dates of the program.
- **Quantity** – Customer must provide valid documentation of the quantity (e.g. square footage) of each eligible measure.
- **Correction** – If incomplete rebate forms or faulty information is received, customer will be contacted in order to correct the application and to advance the application to the approval stage. The rebate will not be processed until appropriate information and/or documentation is provided.
- **Approval** – Payment for the customer is approved after all information is received, entered, and the project passes the internal checklist review.
- **Payment** – Payment is issued and sent to the customer and the database is updated with payment information.

Application Process

Figure 1 illustrates the customer participation process for weatherization measure incentives.

Figure 1. Weatherization Measure Application Process



Questar Gas will provide marketing and promotional support for the ThermWise Weatherization Rebates program to encourage customer participation and help program cost effectiveness. Marketing strategies may include:

- On-line brochure and associated program information placed on ThermWise.com.

- Placement of point-of-purchase brochures and advertising with applicable dealers and contractors.
- Education and awareness meetings with participating trade allies on program aspects.
- Notification in company newsletters and bill inserts (when applicable) of program information and availability.
- Referrals and customer awareness assistance from the State of Utah Low Income Weatherization Assistance Program.
- Cross-marketing with other Questar Gas energy-efficiency programs and activities, i.e. consumer and trade shows, special promotions, direct sales and rebate check inserts.
- In addition, as with all Questar Gas Demand Side Management (DSM) programs, market transformation education and awareness advertising will incorporate the Residential Weatherization program into the overall energy-efficiency campaign advertisements and strategies.

Trade Ally Identification & Recruitment

Questar Gas and Nexant, Inc. (Nexant) will implement the following process to identify trade ally participants.

Step 1. Identify vendors and contractors that serve the area and develop a targeted list of the most influential and active. Examples of sources that will be used to identify and populate the trade ally network include:

- Questar Gas marketing representatives, project manager and consultants.
- Existing contacts with national and regional equipment distributors.
- Attendance at applicable customer meetings, trade shows and professional associations.
- Local chamber of commerce offices.
- Telephone directory and web searches.
- Applications that are submitted by customers to participate in the ThermWise program.

Step 2. Questar Gas and Nexant will develop and hold targeted program overview sessions to describe the program, available opportunities, next steps for potential trade ally members and the participation process.

Participating as a Trade Ally

Interested vendors and contractors will be required to complete and submit a trade ally application and participation agreement. Examples of items that will be considered during the trade ally application evaluation process include, but are not limited to:

- Current licensing and status with respective State of Utah Department of Commerce offices or other governing bodies.
- Number and type of complaints on file with licensing agencies and other sources (e.g. Better Business Bureau).

Alliance Participant Maintenance

Questar Gas and Nexant will work closely with new trade allies to identify and support efforts to initiate projects and become comfortable with the process. Questar Gas and Nexant will maintain an updated listing of all trade ally participants and will make it available to interested customers, account representatives, customer service representatives, as well as the general public.

Alliance Support and Project Facilitation

Questar Gas and Nexant will develop and maintain the following functions to support trade ally participants and help meet program savings goals:

- Dedicated program email addresses where trade allies can submit inquiries or request additional support/information.
- Dedicated toll free phone numbers to reach the appropriate program coordinator.
- Ensuring the availability of customer-oriented marketing materials and updating existing information and develop new pieces as necessary.
- Maintaining regular email and phone communication.
- Offering and conducting annual training sessions.
- Holding regular face-to-face meetings with targeted trade ally participants.
- Providing assistance with determining customer eligibility, qualifying equipment, and available rebates.
- Supporting trade ally efforts to identify viable energy savings opportunities and estimate the potential energy and cost savings for the customer.
- Helping trade allies leverage the availability of other available rebates to further improve customer paybacks.
- Updating program materials such as applications and program manuals.

Table 4 presents the estimated gross customer savings for the weatherization measures.

Table 4. Weatherization Energy Efficiency Measure Gross Savings Estimates

Program Year	Wall Insulation	Attic Insulation Tier 1	Attic Insulation Tier 2	Floor Insulation
	sq.ft.	sq.ft.	sq.ft.	sq.ft.
Unit Savings (Dth/unit/yr)	.007	.007	.0017	.009
Units per participant	867	1,345	1,246	1,079
Estimated Units	2,874,089	70,697,120	18,525,528	1,985,115
Estimated Participants	3,313	52,575	14,868	1,840
Savings Estimates (Dth/yr)	20,119	494,880	31,493	17,866

Table 4. Continued.

Program Year	Windows	Programmable Thermostat	Duct Sealing	Duct Insulation	Total
	sq.ft.	Each	System	System	
Unit Savings (Dth/unit/yr)	.042	2.66	5.70	8.95	
Units per participant	66	1	1	1	
Estimated Participants	13,873	116	2,302	2,694	
Estimated Units	919,918	116	2,302	2,694	
Estimated Participants	13,873	116	2,302	2,694	91,581
Savings Estimates (Dth/yr)	38,637	309	13,121	24,111	640,536

The program is currently in the marketplace so all existing implementation activities will continue without delay assuming program approval. New measures and associated activities will be implemented within 30-45 days after program approval.

This program is on-going and all internal systems, processes and procedures have been created and are in place.

Due-diligence application review activities will include verification of the following items:

- Customer account number.
- Installation address for submitted account number.
- Valid equipment installation date.
- Equipment eligibility.
- Equipment capacity and efficiency ratings, where applicable.
- The requested incentive amount.

Questar Gas and Nexant will augment the application process quality control measures with random telephone and field inspections to ensure program integrity. These verification activities will serve to verify the following information:

- Installation address.
- Equipment make and manufacturer.
- Equipment model number.
- Equipment size.

The verification process will balance the need for randomness, the need to maintain a robust sample size, and the need to verify the compliance of multiple equipment installers. Nexant will target these additional quality assurance and quality control measures on approximately 5% of all submitted applications.