
Energy Efficiency Program Proposal

ThermWise[®] Home Energy Audit
Program

Program Overview

Description

The ThermWise® Home Energy Audit Program targets separately metered residences receiving service on the GS residential rate schedule. The home energy audit includes two separate delivery channels. Customers will be able to request a self-completed mail-in audit survey at no charge, or may request that a Questar Gas Company (Questar Gas) technician come to their home and conduct an in-home audit. Questar Gas will require customers to pay a \$25 fee per residence for the in-home audit; the fee is added to the customer's Questar Gas bill. This fee is fully refundable upon implementation of any qualifying Questar Gas energy-efficiency rebate measure, by way of a credit to the customer's Questar Gas bill.

With both home energy audits (in-home or mail-in), participating customers will receive a customized report recommending home improvements that can be implemented to reduce natural gas usage. During the audit and based on need, Questar Gas will offer certain energy-efficiency measures identified in Table 1 at no charge.

Program Design

Program Measures

Qualifying Customers

Separately metered existing residences in Questar Gas’s Utah service territory that are billed on a GS residential rate schedule are eligible to participate in the ThermWise® Home Energy Audit program.

Measure Eligibility

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

Table 1. Audit Energy-Efficiency Measures

	Pipe Insulation	Kitchen Sink Aerator	Faucet Aerator	Low Flow Shower Head
Baseline requirement	Gas water heater, no pipe insulation	Gas water heater, ≥ 2.75 GPM	Gas water heater, ≥ 2.75 GPM	Gas water heater, ≥ 3.0 GPM
Minimum efficiency requirements	First 4ft HW, first 2 ft CW	< 2.0 GPM	< 2.0 GPM	< 2.5 GPM
Measure lifetime (yrs)	10	10	10	10

Program Rebates

Audit related energy-efficiency measures are outlined below in Table 2. These measures will be provided by Questar Gas during home-energy audits when eligibility requirements are met.

Table 2. Audit Energy Efficiency Measures

Program Measure	QGC Provided	QGC Installed
Pipe Insulation	Yes	No
Kitchen Sink Aerator	Yes	No
Faucet Aerator	Yes	No
Low Flow Shower Head	Yes	No

Rebate Limitations

- No-charge energy-efficiency measures are provided only to customers eligible to receive them based on the need determined in the audit. Only one audit will be allowed per customer per premise.

Projected Participants

Table 3 summarizes the projected number of audits that will be conducted under the program.

Table 3. 2011 Audit Participants

Program Year	On-site Audits	Mail-in Audits	Total
2011	2,680	1,093	3,773

Customer Participation Process

Mail-In Audits

Customers should be able to complete the mail-in audit within 30 to 60 minutes. The process will require customers to walk around their homes and collect information about natural gas-consuming appliances and equipment (e.g., number, location, size, model number, etc.) as well as building shell information, but will not require any special equipment, skills or detailed measurements to be taken.

Information from completed and returned surveys will be used to prepare a customized audit report for the customer. The report will contain the estimated breakdown of natural gas consumption by major end-use calibrated to the customer's past usage history if available. The report will also contain a prioritized list of recommended energy-efficiency measures that the customer should implement, based on estimated cost, payback and complexity. Where applicable, information on how to apply for available rebates from Questar Gas will also be included.

In-Home Audits

Questar Gas customers requesting an in-home audit from one of Questar Gas's audit technicians may be required to complete a basic questionnaire (e.g., customer information, usage patterns, etc.). If the number of in-home audit requests exceed Questar Gas's ability to complete them in a timely manner, customers may be screened and prioritized based on age of house, natural gas usage, size of house, age of appliances, eligibility for weatherization assistance, ability to complete the mail-in audit process or other metrics identified by Questar Gas. Any customer who cannot be offered an in-home audit within a reasonable timeframe will be redirected to the mail-in audit portion of the program.

The in-home audit process will collect and/or augment the following customer information:

- Building shell information (e.g., insulation levels, window types and sizes, conditioned square footage, etc.)
- Gas appliance information (e.g., number, type, age, size, etc.)
- Heating system information (e.g., age, size, model number, nameplate efficiency, etc.)
- Usage patterns (e.g., temperature set points, number of occupants, etc.)
- Primary infiltration reduction opportunities identified by visual inspection (e.g., sealing windows, doors, electrical outlets, plumbing vents, fireplace dampers, etc.)

Projected Savings

Table 4 presents the estimated gross customer savings.

Table 4. Audit Energy Efficiency Measure Gross Savings Estimates (Dth/yr)

Program Year	Pipe Insulation	Kitchen Faucet Aerator	Faucet Aerator	Low Flow Shower Head	Total
Unit	system	each	each	each	
Unit Savings (Dth/unit/yr)	1.40	1.32	.44	5.79	
Quantity	2,568	1,500	1,200	961	
Annual Savings	3,595	1980	528	5,564	8,072

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.