

# **Energy Efficiency Program Proposal**

ThermWise® Home Energy Plan Program

# **Program Overview**

# **Description**

The ThermWise® Home Energy Plan Program targets residences receiving service on the GS residential rate schedule. The home energy plan includes two separate delivery channels. Customers will be able to request a self-completed mail-in plan at no charge, or may request that a Questar Gas Company (Questar Gas) technician come to their home and deliver an in-home energy plan. Questar Gas will require customers to pay a \$25 fee per residence for the in-home plan; 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 plan options (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 process and based on need, Questar Gas will offer certain energy efficiency measures identified in Table 1 at no charge.

The Company will continue to focus on reaching underserved market segments. Multifamily property owners have proven to be receptive to the Energy Plan Program, and will continue to be targeted. As scheduling allows, the Company may target senior homeowners, and will continue to waive the \$25 fee for the lower-income seniors targeted for participation in the Home Energy Plan Program. The Company will continue to review the energy plan process to examine ways to increase customer participation and improve the customer's customized energy efficiency plan. Changes would not alter the general framework of the program as outlined above but merely expand on and enhance the elements already in place.

# **Program Design**

# **Program Measures**

# **Qualifying Customers**

Residences in Questar Gas Utah service territory billed on the GS residential rate schedule are eligible to participate in the ThermWise® Home Energy Plan program.

# **Measure Eligibility**

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

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

	Pipe Insulation	Kitchen Sink Aerator	Faucet Aerator	Low Flow Shower Head	Programmable Thermostat <sup>7</sup>
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	Existing home with gas heat and existing non-programmable thermostat
Minimum efficiency requirements	First 4ft HW, first 2 ft CW	< 2.0 GPM	< 2.0 GPM	< 2.5 GPM	Shall have at least two different programming periods (for weekday and weekend programming) and at least four possible temperature settings (i.e., wake, day, evening and sleep settings).

<sup>&</sup>lt;sup>7</sup> Programmable thermostat will only be available to customers where a Questar Gas Energy Plan is completed.

# **Program Rebates**

Energy Plan related energy efficiency measures are outlined below in Table 2. Efficiency measures will be provided by Questar Gas during the home energy plan when eligibility requirements are met.

**Table 2. Energy Plan Efficiency Measures** 

Program Measure	QGC Provided	QGC Installed	Incentive \$
Pipe Insulation	Yes	No	N/A
Kitchen Sink Aerator	Yes	No	N/A
Faucet Aerator	Yes	No	N/A
Low Flow Shower Head	Yes	No	N/A
Programmable Thermostat	No	No	\$30

#### **Rebate Limitations**

No-charge energy efficiency measures are provided only to customers eligible to receive them based on the need determined during the energy plan process.

Single family home energy plans will include a blower door test to determine eligibility for weatherization air sealing measures. A premise that has received an energy plan in the past will be eligible for a blower door test to determine air-sealing eligibility but customer will be charged a \$25 fee.

# **Projected Participants**

Table 3 summarizes the projected number of energy plans that will be conducted and programmable thermostats that will be rebated through the program in 2014.

**Table 3. 2014 Energy Plan Program Participants** 

	Participants	Households	
Single Family	2,460	2,460	
Multi-family	50 2,500*		
Programmable Thermostats	140	140	
Total	2,650	5,100	

<sup>\*</sup>Assumes 50 apartments per complex.

# **Customer Participation Process**

#### Mail-In Energy Plans

Customers should be able to complete the mail-in plan survey 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 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.

Customers who have taken advantage of the mail-in energy plan must request a blower door test in order to be eligible for air sealing measures. Questar Gas will make every effort to explain to customers the difference between the mail-in energy plan and the in-home energy plan.

#### **In-Home Energy Plans**

Questar Gas customers requesting an in-home energy plan from one of Questar Gas's energy experts may be required to complete a basic questionnaire (e.g., customer information, usage patterns, etc.). If the number of in-home energy plan 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 energy plan process or other metrics identified by Questar Gas.

The in-home energy plan 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 and blower door testing (e.g., sealing windows, doors, electrical outlets, plumbing vents, fireplace dampers, etc.)

# **Projected Savings**

Table 4 presents the estimated gross customer savings.

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

Program Year	Pipe Insulation	Kitchen Faucet Aerator	Faucet Aerator	Low Flow Shower Head	Programmable Thermostat	Total
Quantity	3,450	975	3,900	3,975	140	12,440
Annual Savings	4,830	1,287	1,716	23,015	372	31,221

# **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, 2014.

Questar Energy Experts will continue to perform blower door testing to pre-qualify customers for the air-sealing measure, and recommend other measures that have the potential to increase energy efficiency. Other components of the energy plan may change slightly based on any program redesign recommendations but basic framework will remain unchanged.

#### **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. The Company has budgeted for and may begin work on an internally developed energy plan platform in 2014.