

ENERGY-EFFICIENCY PROGRAMS

Utah Energy-Efficiency Results 2014

The Company's energy-efficiency efforts have consistently focused on providing all segments of the GS rate class with a comprehensive suite of natural-gas-saving efficiency programs. That focus continued into 2014 as the Company introduced new rebate-qualifying efficiency measures for existing and new homes, multi-family properties, low-income customers and commercial customers. In addition to the new measures, the Company continued expansion of the ThermWise[®] Energy Comparison Report by sending it to an additional 100,000 customers in 2014.

ThermWise results for 2014 were strong with participation rates in the Builder, Business and Home Energy Plan programs surpassing 100% of original projections. Additionally, the Appliance, Weatherization and Low-Income Efficiency programs achieved participation rates of 97% or greater for the program year. The Business Custom program was short of the 2014 participation goals primarily due to several high savings projects which were not completed by the end of the year.

Spending for the 2014 program year totaled \$26.3 million or 96% of the \$27.5 million Commission-approved ThermWise[®] budget. Actual expenditures in the Appliance, Business Custom, Weatherization, and Low Income Efficiency programs were lower than budgeted. The market transformation expenditures were also lower than expected (67% of budget) in 2014. This was primarily due to lower-than-projected marketing expenses and the Company's ongoing efforts to secure event and promotional contracts at low rates. In total, rebate dollars accounted for nearly 78% of total ThermWise[®] spending in 2014 (73% in 2014 budget) and resulted in annual natural gas savings of more than 600,000 Dth. Actual natural gas savings were 97% of the amount projected in the Company's 2014 budget filing.

Utah ThermWise[®] Appliance Rebates

The Company continued this program in 2014 with the reinstatement of 92% annual fuel utilization efficiency (AFUE) natural gas furnaces to the rebate measure mix. In the 2013 budget filing (Docket No. 12-057-14), the Company proposed elimination of two lower AFUE furnace tiers (Tier 1 - 90% to 91.9%, Tier 2 - 92% to 94.9%) as eligible rebate measures. The Company did so in anticipation of a new direct final rule (DFR) proposed by the Department of Energy (DOE). This rule would have moved the 80% AFUE efficiency standards for new/replacement furnaces to a minimum of 90% in the Company's service territory. Due to a lawsuit and a resulting settlement, the U.S. Court of Appeals vacated the DFR concerning furnace efficiency standards (*American Public Gas Ass'n v. Department of Energy*, D.C. Cir. No 11-1485). As a result of this settlement, 80% AFUE furnaces remain the baseline efficiency for furnaces sold across all of the Company's service territory. The Company proposed reinstatement of the 92% furnace rebate in an effort to continue advancement of energy efficiency. The Company also added a higher tier furnace (\geq 98% AFUE with an electronically commutated motor (ECM)) to the rebate measure mix in 2014.

Portland Energy Conservation, Inc. (PECI) assisted with design, outreach, marketing and technical assistance for the majority of the 2014 program year. CLEAResult, Inc. performed these services for the final two months of 2014, after Blackhawk Engagement Solutions acquired PECI. Parago, Inc. performed rebate processing work for this program in 2014.

Utah ThermWise® Builder Rebates

The Company continued this program in 2014 with several changes. The Company reinstated the 92% AFUE furnace as a rebate measure for the reasons listed in the 2014 Appliance program discussion. The Company also added a higher tier furnace (\geq 98% AFUE with ECM) to the rebate measure mix in 2014.

PECI assisted with design, outreach, marketing and technical assistance for the majority of the 2014 program year. CLEAResult, Inc. performed these services for the final two months of 2014, after Blackhawk Engagement Solutions acquired PECI. Parago, Inc. performed rebate processing work for this program in 2014.

Utah ThermWise® Business Rebates

In order to promote market adoption of the high-savings pre-rinse spray valve, the Company began a direct-install program in early 2014. The program was aimed at overcoming the barriers that businesses have historically faced in purchasing and installing the valves. The Company also reinstated the 92% AFUE furnace as a rebate measure for the reasons listed in the 2014 Appliance program discussion. The Company also added a higher tier furnace rebate (\geq 98% AFUE with ECM) in 2014.

Nexant assisted with design, outreach, marketing and technical assistance for this program. Parago, Inc. performed rebate processing work for this program in 2014.

Utah ThermWise® Weatherization Rebates

The Company continued this program in 2014 with no significant changes. The Company had contracts in place for but did not require assistance with design, outreach, marketing and technical assistance for this program in 2014. Parago, Inc. processed rebates for this program in 2014.

Utah ThermWise® Home Energy Plan

The Company continued this program in 2014 with no major changes.

Utah Low-Income Efficiency Program

The Company continued funding the Low-Income Weatherization Assistance Program in 2014 at \$500,000 per year from the energy-efficiency budget (\$750,000 total Company funding). The Company disbursed \$250,000 every six months, with the disbursements occurring in January and July.

The Company changed the program name from “Low-Income Weatherization Assistance Program” to “Low-Income Efficiency Program” (LIEP) in 2014. The Company did so in an effort to make the program name more reflective of its purpose and because the program had expanded beyond weatherization-only measures.

The Company continued the direct rebate payment process for approved non-profit or governmental agencies in 2014. Additionally, Parago, Inc. performed work related to rebate processing for this program in 2014.

Utah ThermWise® Business Custom Rebates

The Company continued this program with one significant change. The Company implemented a strategic energy management service as part of the Business Custom program in 2014. Business Custom projects are typically complex and diverse in nature and require highly technical analysis including calculations of occupancy rates, seasonality, and varying levels of usage depending on the type of business. The Company actively marketed the service to customers (using the 2012 Commercial Customer Segmentation study and current billing analysis) with the greatest opportunity for natural gas savings.

Nexant continued to assist with design, outreach, marketing and technical assistance for this program. Additionally, Parago, Inc. performed work related to rebate processing for this program in 2014.

A summary of the projected and actual benefit/cost ratios for each of the 2014 ThermWise® programs is shown below.

Table 8.1 – Utah 2014 Projected & Actual B/C ratios by program and California Standard Practice Test

Program	Total Resource Cost Test		Participant Test		Utility Cost Test		Ratepayer Impact Measure Test	
	2014 Projected B/C	2014 Actual B/C	2014 Projected B/C	2014 Actual B/C	2014 Projected B/C	2014 Actual B/C	2014 Projected B/C	2014 Actual B/C
ThermWise® Appliance Program	1.06	1.05	2.55	2.60	1.68	1.66	0.86	0.85
ThermWise® Builder Program	0.87	0.82	2.24	1.97	1.32	1.59	0.77	0.84
ThermWise® Business Custom Program	1.64	0.05	6.39	1.23	2.18	0.05	0.98	0.05
ThermWise® Business Program	1.53	1.04	4.18	2.85	2.29	1.54	1.00	0.83
ThermWise® Weatherization Program	1.16	1.16	2.78	2.83	1.34	1.39	0.79	0.79
ThermWise® Home Energy Plan	1.09	1.51	34.45	60.91	1.08	1.50	0.67	0.81
Low-Income Efficiency Program	1.14	0.76	4.68	2.15	1.25	0.93	0.74	0.61
Market Transformation	0.00	0.00	N/A	N/A	0.00	0.00	0.00	0.00
TOTALS	1.09	0.99	2.88	2.61	1.41	1.41	0.80	0.79

Actual benefit/cost results for 2014 were lower than the corresponding budget projections, the ThermWise® programs as a whole passed both the Participant and Utility Cost tests. Actual cost-effectiveness results were lower than projected primarily due to higher than expected

participation in lower-savings energy-efficiency measures and lower than forecasted avoided natural gas costs than were used in cost-effectiveness modeling for the 2014 ThermWise budget filing (Docket No. 13-057-14).

Customer participation in the ThermWise® programs remained high in 2014 (106,361 actual rebates paid) finishing the year above the Company's original 2014 estimate (101,173). Actual participation surpassed estimated participation in the Builder (12,851), Business (3,153), and Home Energy Plan (2,872) programs. The Weatherization and Appliance programs had the highest total number of participants (65,977 and 19,537 respectively).

The DSM Advisory Group continued to meet to discuss the Company's energy-efficiency initiative. Three meetings were held on the following dates: March 24, 2014, June 26, 2014 and September 18, 2014.

EE Effects on Peak Day

In Docket No. 13-057-04 the Commission ordered the Company to discuss the "...effect of EE programs on peak demand and the need for new infrastructure and how EE programs could reduce or offset the need for future capital projects" in both a DSM Advisory Group and IRP public input meeting. (Report and Order dated October 22, 2013, Docket No. 13-057-04.) The Company addressed this topic at the Advisory Group meeting held March 19, 2014 and again at the IRP meeting held on April 30, 2014. In both meetings the attendees discussed the ThermWise programs, the fact that they are designed to reduce over-all energy consumption and that they do not, necessarily, impact peak day usage.

In Docket No. 14-057-15 the Commission ordered the Company to "...continue its discussion on peak day issues in the DSM Advisory Group and in a public input meeting associated with the 2015 IRP." (Report and Order dated October 8, 2014, Docket No. 14-057-15.) The Company continued the discussion of the effects of energy-efficiency on peak day at the Advisory Group meeting held March 24, 2015 and again at the IRP meeting held on March 25, 2015. The Company expanded on the 2014 discussions of this topic by explaining that some rebate-eligible equipment has little impact on peak-hour usage (either by reducing or increasing), but over the entire peak day, usage should be reduced by installing energy-efficient equipment. The Company further agreed in both 2015 meetings to continue study of this topic in the future.

Wyoming Energy-Efficiency Results 2014

The Company filed for approval (Docket No. 30010-133-GT-13) of a fifth year of Wyoming ThermWise® programs on October 31, 2013. The fifth year Wyoming programs were modified to closely align with the proposed 2014 Utah ThermWise® programs in an effort to achieve cost savings for both states while also taking current energy-efficiency and equipment standards into account. The Wyoming Public Service Commission approved the fifth-year programs (January 13, 2014 Order) and ordered the changes effective January 1, 2015.

The Wyoming energy-efficiency programs (Appliance, Builder, Business, Home Energy Plan, and Weatherization) have seen good participation and interest from customers since the Company launched the programs on July 1, 2009. In the fifth full program year (January through December 2014) the Wyoming ThermWise® programs had 502 participants or 1.8% of the Company's December 31, 2014 Wyoming residential GS customer base.

Utah Energy-Efficiency Plan 2015

Based on work with the DSM Advisory Group, Utah-based trade allies, program administrators and other energy-efficiency stakeholders, the Company proposed and the Utah Public Service Commission approved the continuation of the seven energy-efficiency programs from 2014 as well as the ThermWise® Market Transformation initiative. The ThermWise® energy-efficiency programs continuing in 2015 are: 1) the ThermWise® Appliance Rebates Program; 2) the ThermWise® Builder Rebates Program; 3) the ThermWise® Business Rebates Program; 4) the ThermWise® Weatherization Rebates Program; 5) the ThermWise® Home Energy Plan Program; 6) funding of \$500,000 for the Low-Income Efficiency Program administered by the Utah Department of Workforce Services; and 7) the ThermWise® Business Custom Rebates Program. The Public Service Commission also approved the Company's proposal to separate the ThermWise® Energy Comparison Report from the Market Transformation Initiative and launch it as a stand-alone program in 2015.

Utah ThermWise® Appliance Rebates

The Company will continue this program in 2015 with a few changes relating to appliance efficiency and the addition of new equipment to the overall rebate offerings to customers. Those changes and additions are as follows: 1) adjustment of the qualifying AFUE for the 98% efficient furnace rebate to 97.5%; and 2) the introduction of smart thermostats as rebate eligible measures.

CLEARresult, Inc. will continue to assist with design, outreach, marketing and technical assistance for this program. Blackhawk Engagement Solutions, which acquired Parago, Inc. near the end of 2014, will perform rebate processing work for this program in 2015.

Utah ThermWise® Builder Rebates

The Company will continue this program in 2015 with several changes. The Company will eliminate the Builder Option Package (BOP) rebates in 2015 as the rebate qualifications became code-required with the State's adoption of the 2012 International Energy Conservation Code (IECC). The Company will introduce a 10% above-code rebate in place of the BOP rebates in 2015. The Company believes that the State's new home market will benefit from the inclusion of a "reach" measure designed to encourage above-code construction. The Company will also adjust the AFUE requirement for the 98% efficient furnace rebate and introduce the smart thermostat rebate for the reasons given in the Appliance Program discussion.

CLEARresult, Inc. will continue to assist with design, outreach, marketing and technical assistance for this program. Blackhawk Engagement Solutions will perform the rebate processing work for this program in 2015.

Utah ThermWise® Business Rebates

The Company will continue this program in 2015 with the following changes: 1) introduce smart thermostats, combined space/water heat, condensing infrared (IR) heaters, and condensing indirect-fired roof top units (RTU) to the current rebate measure mix; 2) eliminate new construction windows (< .30 U value) as eligible rebate measures because they have become the baseline window in the marketplace; 3) add eligibility restrictions to the Tariff to ensure natural gas savings for boiler tune-ups; 4) adjust the AFUE qualification for the 98% efficient furnace measure for the reasons given in the Appliance Program discussion.

Nexant will continue to assist with design, outreach, marketing and technical assistance for this program. Blackhawk Engagement Solutions will perform rebate processing work for this program in 2015.

Utah ThermWise® Weatherization Rebates

The Company will continue this program with one change in 2015. This program has incented the purchase and installation of windows with a U-value of .30 or lower since 2008. That measure has seen increasing levels of participation and market adoption since that time. The Company believes that the windows market has now transformed and that .30 windows have become the standard in the marketplace. The Company therefore will eliminate .30 U-value windows as a rebate-eligible measure in 2015. The Company will continue to incent in 2015, along with the remaining 2014 rebate measures, .22 or lower U-value windows in an effort to continue the advancement of energy efficiency in the State of Utah.

This program will continue to be available to existing residential customers in the Company's Utah service territory. Nexant will continue to assist with design and technical assistance for this program. Blackhawk Engagement Solutions will perform rebate processing work for this program in 2015.

Utah ThermWise® Home Energy Plan

The ThermWise® Home Energy Plan program is offered and administered by Questar Gas with periodic consulting and assistance from Nexant. This program includes two primary components: in-home energy plan performed by trained and experienced Questar Gas Auditors and "do-it-yourself" mail-in plan with on-line data input availability. This program will continue to be available to customers in the Company's Utah service territory.

Utah Low-Income Efficiency Program

The Company will continue funding the LIEP in 2015 at \$500,000 per year from the energy-efficiency budget (\$750,000 total Company funding). The Company will disburse \$250,000 every six months, with the disbursements occurring in January and July.

The Company will eliminate the .30 U-value windows from the program in 2015 for the reason previously mentioned in the Weatherization Program discussion. Blackhawk Engagement Solutions will perform rebate processing work for this program in 2015.

Utah ThermWise® Business Custom Rebates

The Company is continuing this program with the addition of steam traps to the list of simplified analysis rebate measures. A steam trap is a device which is used to discharge condensate and non-condensable gases with a negligible consumption or loss of live steam. Most steam traps are valves which open, close, or modulate automatically. For energy efficiency purposes, it is important to ensure that steam traps function correctly in order for a system to generate only the steam needed, thereby achieving optimal natural gas consumption. This measure is designed to achieve savings through the replacement of failed steam traps.

Nexant will continue to assist with design, outreach, marketing and technical assistance for this program. Blackhawk Engagement Solutions will perform rebate processing work for this program in 2015.

Utah ThermWise® Energy Comparison Report

The Company will move this program from the Market Transformation Initiative and launch it as a stand-alone program in 2015. The ThermWise® Energy Comparison Report allows customers to compare their natural gas usage with neighboring homes which are similarly sized and situated. Additionally, the Comparison Report encourages customers to employ energy efficiency measures and behaviors. The Company developed the Comparison Report and first offered it to customers as part of the Market Transformation Initiative in November 2011. The Company initially sent the report to a small group of customers (Group A – 8,000 customers) as a pilot program. The Company has since launched larger pilot groups in 2012 (Group B – 25,000 customers), 2013 (Group C – 100,000 customers), and 2014 (Group D – 100,000 customers). In 2015 the Company will send the report, via U.S. and electronic mail, to more than 230,000 of its customers. The Company will maintain an additional group of nearly 50,000 customers in order to determine natural gas savings achieved from delivery of the Comparison Report. With the exception of the control group, all customers will be able to generate and view a copy of their Comparison Report through their online account at www.questargas.com.

A summary of the cost-effectiveness used in the energy-efficiency model for each ThermWise® program as provided with the 2015 budget filing is shown in Table 8.2 below.

Table 8.2 – Utah 2015 projected NPV & B/C ratios by program and California Standard Practice Test

2015 Projections	Total Resource Cost		Participant Test		Utility Cost Test		Ratepayer Impact Measure Test	
	NPV*	B/C	NPV*	B/C	NPV*	B/C	NPV*	B/C
ThermWise [®] Appliance Program	\$2.67	1.34	\$19.63	3.34	\$4.21	1.72	-\$1.54	0.87
ThermWise [®] Builder Program	-\$0.28	0.94	\$7.64	2.52	\$1.04	1.30	-\$1.47	0.75
ThermWise [®] Business Custom Program	\$0.22	1.26	\$1.64	5.09	\$0.52	1.94	-\$0.08	0.93
ThermWise [®] Business Program	\$1.16	1.31	\$9.24	3.62	\$2.21	1.82	-\$0.56	0.90
ThermWise [®] Weatherization Program	\$1.51	1.11	\$28.77	2.76	\$3.43	1.28	-\$5.12	0.75
ThermWise [®] Home Energy Plan Program	\$0.19	1.21	\$2.42	38.08	\$0.18	1.20	-\$0.43	0.71
Low-Income Efficiency Program	\$0.07	1.07	\$2.08	4.50	\$0.00	0.99	-\$0.62	0.64
Market Transformation Initiative	-\$1.45	0.00	\$0	N/A	-\$1.45	0.00	-\$1.45	0.00
ThermWise [®] Energy Comparison Report	\$0.17	1.52	\$0.93	3.59	\$0.09	1.25	-\$0.14	0.79
TOTALS	\$4.26	1.12	\$72.35	3.08	\$10.24	1.36	-\$11.42	0.77

*Shown in millions

Table 8.3 shows the Utah cost-effectiveness results using the projections included in the budget filing updated to include the gas cost forward curve used in the SENDOUT model.

Table 8.3 – Utah 2015 NPV & B/C ratios using gas cost forward curve from SENDOUT model

2015 IRP Forward Curve	Total Resource Cost		Participant Test		Utility Cost Test		Ratepayer Impact Measure Test	
	NPV*	B/C	NPV*	B/C	NPV*	B/C	NPV*	B/C
ThermWise [®] Appliance Program	\$1.11	1.14	\$19.63	3.34	\$2.65	1.45	-\$3.10	0.73
ThermWise [®] Builder Program	-\$0.86	0.82	\$7.64	2.52	\$0.46	1.13	-\$2.06	0.65
ThermWise [®] Business Custom Program	\$0.03	1.04	\$1.64	5.09	\$0.33	1.60	-\$0.28	0.76
ThermWise [®] Business Program	\$0.48	1.13	\$9.24	3.62	\$1.53	1.57	-\$1.24	0.77
ThermWise [®] Weatherization Program	\$0.06	1.00	\$28.77	2.76	\$1.98	1.16	-\$6.57	0.68
ThermWise [®] Home Energy Plan Program	-\$0.04	0.96	\$2.42	38.08	-\$0.05	0.95	-\$0.66	0.56
Low-Income Efficiency Program	-\$0.08	0.92	\$2.08	4.50	-\$0.15	0.86	-\$0.77	0.55
Market Transformation Initiative	-\$1.45	0.00	\$0	N/A	-\$1.45	0.00	-\$1.45	0.00
ThermWise [®] Energy Comparison Report	-\$0.06	0.81	\$0.93	3.59	-\$0.13	0.67	-\$0.37	0.42
TOTALS	-\$0.81	0.98	\$72.35	3.08	\$5.16	1.18	-\$16.49	0.67

*Shown in millions

Wyoming Energy-Efficiency 2015

The Company expects sixth-year participation in the portfolio of Wyoming ThermWise[®] programs to reach 809 customers which would be an increase of over 60% from 2014 participation levels. This projected increase is mainly due to the continued benefits from the 2013 expansion of eligibility from single-family and business GS customers to all customers receiving service on the GS rate schedule. This change continues to allow residential properties with more than four dwelling units to participate in the programs. The Company believes that multi-family dwellings represent an underserved market segment where customers could realize significant savings.

SENDOUT Model Results for 2015

The Company entered projections from the approved 2015 energy-efficiency budget into the SENDOUT model in response to the Utah Commission's request. Data entries for the 2015 energy-efficiency programs included participants and associated deemed lifetime Dth savings per program measure. The Company also incorporated incentive (variable) and administration (fixed) costs for each program measure into the SENDOUT model.

The SENDOUT model used the projected 2015 participation and administration costs as the baseline for its analysis of each program. For each program, the model then examined what would happen if participation was reduced to as low as 25% or increased to as high as 150% of the 2015 projection. The model also examined different scenarios involving the escalation of annual administration costs per program. In these scenarios, administration costs per program were increased to 150% and 200% of the 2015 projection. SENDOUT then made the judgment as to whether a program should be "accepted" (100% on the included graph) or "rejected" (0% on the included graph) based on a given level of participation and administration costs. Please see Exhibit 8.1 for the SENDOUT results in a table format.

The model accepted the 2015 ThermWise® Weatherization program at 25% of 2015 projected participation if administration costs were increased to 200% of the 2015 budget projection. The model accepted the Appliance and Business programs at 50% of participation and 200% of the 2015 budget projection. The model accepted the Builder program at 50% of participation and 150% of the 2015 of projected administration costs. The model accepted the Business Custom program at 100% of participation and 150% of the 2015 budget projection. The model did not accept the Home Energy Plan and Energy Comparison Report as resources in 2015.

Another way to view the results of the SENDOUT model is to analyze the level that administration costs could increase to if participation was held at 100% of the 2015 projection. In this scenario, SENDOUT would suggest that the administration costs for the Appliance, Builder, Business and Weatherization programs could increase by eight times the 2015 budget projection and still be accepted. The Appliance and Business programs could increase projected administration costs by four times and still be accepted. The Builder program could increase administration costs by three times and the Business Custom program could increase administrative costs by fifty percent and still be accepted by SENDOUT.

In summary, the SENDOUT model results indicate that as a gas supply resource at the approved budget and participation levels, the 2015 energy-efficiency programs are accepted as qualifying and cost-effective resources when compared to other available resources. Furthermore, this holds true when participation rates are held constant and program administrative costs are increased by as much as eight times 2015 budget levels.

The SENDOUT model is a comprehensive resource planning and evaluation tool. In comparison, Questar Gas developed its Energy-Efficiency Model in-house, with the assistance of the Questar Gas Energy-Efficiency Advisory Group and the Utah Commission's review. The Questar Company uses its Energy-Efficiency Model for the sole purpose of modeling Questar Gas'

energy-efficiency programs. To this end, the Company relies on the Questar Gas Energy-Efficiency Model for energy-efficiency program planning purposes and more importantly energy-efficiency program cost effectiveness (based on the California Standard Practices Manual).

Using the Questar Gas Energy-Efficiency Model, the Company analyzed the approved 2015 energy-efficiency programs at a “break-even” benefit / cost ratio ($B/C = 1.00$) by holding participation (and incentive payments) constant and increasing all other costs in a linear manner. The analysis is based on projected natural gas savings of 905,288 Dth in 2015. This analysis resulted in a projected potential total energy-efficiency spending limit of \$33.7 million per year using the Utility Cost Test. The currently-approved \$27.4 million per year is well below this threshold. This analysis indicates that the maximum potential spending on energy-efficiency is directly related to the cost-effectiveness of realizing each Dth saved. Therefore, as long as the Company’s energy-efficiency programs are determined cost-effective in the Questar Gas Energy-Efficiency Model, accepted by the SENDOUT model when compared to other available resources, and do not negatively impact company operations, energy-efficiency programs are an appropriate resource.

Avoided Costs Resulting From Energy-Efficiency

The ThermWise[®] Cost-Effectiveness Model calculates the avoided cost of gas purchases as the sole benefit of the energy-efficiency programs. In 2014, the avoided gas cost attributable to energy-efficiency was calculated as \$37.6 million. For 2015, the avoided gas cost attributable to energy-efficiency is estimated to be \$33.7 million. The avoided purchased gas is valued at the same price level that is used in the IRP modeling.