

ENERGY-EFFICIENCY PROGRAMS

Utah Energy-Efficiency Results 2013

The Company's 2013 Commission-approved energy-efficiency programs and measures were similar to those in 2012, but also included new measures, changes to qualifying equipment, and changes to rebate levels. There was unexpectedly high participation in the ThermWise[®] programs in 2013. The Company recognized in early 2013 that participation trends, particularly in the Weatherization program, were exceeding original expectations. As a result, the Company requested (July 31, 2013 Letter) and received Commission approval in Docket No. 12-057-14 (September 20, 2013 Order) to increase the ThermWise[®] budget to \$31 million or 36% increase over the original 2013 budget.

While the Weatherization program was the main participation driver, the Appliance, Builder, Business and Home Energy Plan programs all exceeded 100% of participation goals. These higher-than-expected participation levels resulted in higher related Dth savings than budgeted. Higher customer participation rates in 2013 also helped to improve the overall program cost-effectiveness as shown in Table 8.1. In total, actual rebate dollars accounted for nearly 79% of total ThermWise[®] spending in 2013 (compared to 74% in 2013 budget) and resulted in annual natural gas savings of 637,349 Dth.

In August, the Company learned that Helgeson Enterprises Inc. (Helgeson), the ThermWise[®] rebate processing contractor since mid-2012, had been acquired by Parago Services Corporation (Parago). Subsequent to the acquisition, the Company learned that Helgeson's operations would slowly transition over the remainder of 2013 from its Minnesota headquarters to Parago's home in Texas. The Company remains under contract with Parago for rebate processing services through mid-2015.

Utah ThermWise[®] Appliance Rebates

The Company continued this program in 2013 with the elimination of rebates for lower tiered furnaces and a minor clarification to the solar assisted water heating measure. The Company eliminated the tier 1 ($90\% \leq 91.9\%$ efficient) and tier 2 ($92\% \leq 94.9\%$ efficient) furnaces from the list of eligible rebate measures in 2013. The Company eliminated these tiers in anticipation of the U.S. Department of Energy's (DOE) proposed May 1, 2013 increase in the furnace standard. The proposed standard would have increased the minimum efficiency to 90% for furnaces sold in the climate zones covered in the Company's Utah service territory.

Portland Energy Conservation, Inc. (PECI) assisted with design, outreach, marketing and technical assistance for the entire 2013 program year. Helgeson performed work related to rebate processing for this program in 2013.

Utah ThermWise® Builder Rebates

The Company continued this program in 2013 with several changes. The Company eliminated the lower tiers for furnaces from the Builder Program and adopted the minor solar assisted water heating clarification for the reasons listed in the 2013 Appliance Rebates section. The Company also removed the ENERGY STAR® Version 2.5 whole home as an eligible measure because it was no longer a valid ENERGY STAR® tier.

PECI assisted with design, outreach, marketing and technical assistance for the entire 2013 program year. Helgeson performed work related to rebate processing for this program in 2013.

Utah ThermWise® Business Rebates

The Company continued this program in 2013 with the following changes: 1) it eliminated the two lowest tiers of furnaces as eligible rebate measures for the reasons listed in the Appliance Rebates discussion; 2) it eliminated rebates for the roof-top furnace measure. The Company eliminated the roof-top furnace because it was in the early stages of development and, as a result, was not widely available in the market. These improvements more closely aligned the program with existing market conditions.

Nexant, Inc. (Nexant) assisted with design, outreach, marketing and technical assistance for the entire 2013 program year. Helgeson performed work related to rebate processing for this program in 2013.

Utah ThermWise® Weatherization Rebates

The Company continued this program in 2013 with no significant changes. The Company had contracts in place, but did not require assistance with design, outreach, marketing and technical assistance for this program in 2013. Helgeson performed work related to rebate processing for this program in 2013.

Utah ThermWise® Home Energy Plan

The Company continued this program in 2013 with the following changes: 1) the Company changed the name from the Home Energy Audit to the Home Energy Plan program; 2) in an effort to reach the rental market as well as make the program more cost-effective, the Company removed the single family restriction for the Home Energy Plan program. The program continued to provide certain low-cost energy efficiency measures at no charge for installation at single family residences. Multi-family properties were also eligible to receive no charge efficiency measures through this program. The Company improved participation in the 2013 Home Energy Plan program (2,793) by nearly 40% over the 2012 program year (2,000). The increased participation in the Home Energy Plan program contributed to the significant improvement in actual cost-effectiveness results over the results forecasted in the 2013 budget filing (Table 8.1).

Questar Gas continued to administer the ThermWise[®] Home Energy Plan program with periodic consulting and assistance from Nexant in 2013. The program included 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.

Utah Low-Income Weatherization Assistance Program (LIWAP)

The Company continued funding the LIWAP in 2013 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 also continued the direct rebate payment process for approved non-profit or governmental agencies in 2013. Additionally, Helgeson performed work related to rebate processing for this program in 2013.

Utah ThermWise[®] Business Custom Rebates

The Company continued this program in 2013 with no changes.

A summary of the projected and actual benefit-cost ratios for each of the 2013 ThermWise[®] programs is shown in Table 8.1 below.

Table 8.1 – Utah 2013 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	
	2013 Projected B/C	2013 Actual B/C	2013 Projected B/C	2013 Actual B/C	2013 Projected B/C	2013 Actual B/C	2013 Projected B/C	2013 Actual B/C
ThermWise [®] Appliance Program	1.2	1.4	2.8	3.3	1.5	1.6	0.9	0.9
ThermWise [®] Builder Program	0.8	0.8	1.7	1.7	1.3	1.3	0.9	0.9
ThermWise [®] Business Custom Program	1.5	1.3	6.0	10.1	2.0	1.2	1.1	0.8
ThermWise [®] Business Program	1.3	1.5	3.0	3.7	2.1	2.3	1.1	1.1
ThermWise [®] Weatherization Program	1.2	1.2	2.7	2.6	1.3	1.4	0.9	0.9
ThermWise [®] Home Energy Plan	1.0	1.4	32.0	54.5	1.0	1.4	0.7	0.9
Low Income Weatherization	1.4	1.0	4.3	3.0	1.5	1.2	0.9	0.8
Market Transformation	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0
TOTALS	1.06	1.14	2.74	2.75	1.32	1.41	0.85	0.89

Actual benefit/cost results for 2013 were higher than the corresponding budget projections, the ThermWise[®] programs as a whole passed the Total Resource, Participant, and Utility Cost tests. The improved cost-effectiveness results were mainly due to the Company's ongoing efforts to reduce administrative (non-incentive) costs within the programs. In the 2013 budget, administrative costs made up nearly 26% of projected expenditures. Administrative costs in the 2013 actual numbers accounted for about 21% of total expenditures.

Customer participation in the ThermWise[®] programs remained high in 2013 (118,040 actual rebates paid) finishing the year above the Company's original 2013 estimate (88,845) but below the revised estimate (135,852). Actual participation surpassed estimated participation in the Appliance (109%), Builder (140%), Business (215%), and Home Energy Plan (111%) programs. The Weatherization and Appliance programs had the highest total number of participants (82,409 and 18,397 respectively). The Business Custom program was short of the 2013 participation goal (20%) yet still achieved 42% of the 2013 program savings goal.

During 2013, the DSM Advisory Group continued to meet to discuss the Company's energy-efficiency initiative. Three meetings occurred on the following dates: April 10, August 5, and September 26.

EE Effects on Peak Day

In Docket No. 13-057-04 the Commission ordered (October 22, 2013) 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 such as some of the reinforcement projects described in the DNG action plan" at an Advisory Group meeting. The Commission also ordered the Company to subsequently address this issue as a discussion topic at an IRP public input meeting. 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.

Wyoming Energy-Efficiency Results 2013

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. This was done 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 filing on January 13, 2014 and ordered the changes effective January 1, 2014.

The Wyoming energy-efficiency programs (Appliance, Builder, Business, Home Energy Plan, and Weatherization) have seen good participation and interest from customers since they were launched on July 1, 2009. In the fourth full program year (January through December

2013) the Wyoming ThermWise® programs had 1,066 participants or 4.4% of the Company's December 31, 2013 Wyoming residential GS customer base. In contrast, the third program year (July 2011 through June 2012) of the Wyoming programs resulted in 723 participants or 68% of the fourth year program results. The Company has forecasted 1,294 participants in the fifth year of the Wyoming ThermWise® programs.

Utah Energy-Efficiency Plan 2014

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 2013 as well as the ThermWise® Market Transformation initiative. The ThermWise® energy-efficiency programs continuing in 2014 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 Audit Program; 6) funding of \$500,000 for the Low-Income Weatherization Assistance Program administered by the Utah Department of Workforce Services; and 7) the ThermWise® Business Custom Rebates Program.

Utah ThermWise® Appliance Rebates

The Company will continue this program in 2014 with the reinstatement of 92% \leq 94.9% 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% \leq 91.9%, Tier 2 - 92% \leq 94.9%) as eligible rebate measures for two reasons. First, by mid-2009 the 95% efficient furnaces had become the dominant furnaces rebated in the program. Second, the Department of Energy (DOE) had promulgated a direct final rule (DFR) in 2011 to move the minimum efficiency standards for furnaces from 80% and to make 90% AFUE furnaces the minimum allowed to be sold in the Company's service territory. This rule was scheduled to become effective on May 1, 2013. However, 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 expects 80% AFUE furnaces to maintain a strong local market share for the foreseeable future. The Company will also add a higher tier furnace (\geq 98% AFUE with ECM) to the rebate measure mix in 2014.

PECI will continue to assist with design, outreach, marketing and technical assistance for this program. Due to the acquisition of Helgeson, rebate processing work for this program will transition to Parago in 2014.

Utah ThermWise® Builder Rebates

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

PECI will continue to assist with design, outreach, marketing and technical assistance for this program. Due to the acquisition of Helgeson, rebate processing work for this program will transition to Parago in 2014.

Utah ThermWise® Business Rebates

The Company will continue this program in 2014 with several changes. The Company believes that significant savings are available to business customers through the high-efficiency pre-rinse spray valve rebate measure. However, this measure has had no participation since it was first introduced in 2007. In order to promote market adoption of the pre-rinse spray valve, the Company will implement a direct-install program in early 2014. The program will be aimed at overcoming the barriers that businesses have historically faced in purchasing and installing the valves. The Company will reinstate the 92% AFUE furnace as a rebate measure for the reasons listed in the 2014 Appliance program discussion. The Company will also add a higher tier furnace rebate (\geq 98% AFUE with ECM) in 2014.

Nexant will continue to assist with design, outreach, marketing and technical assistance for this program. Due to the acquisition of Helgeson, rebate processing work for this program will transition to Parago in 2014.

Utah ThermWise® Weatherization Rebates

The Company will continue this program in 2014 with no significant changes. All residential weatherization incentives will continue to be administered under a single program. In 2014 the weatherization program will include all residences receiving service on the GS rate schedule. A qualifying single-family residence is defined as a new structure of up to four residential dwelling units. A qualifying multifamily residence is defined as an existing structure having five or more residential dwelling units. Incentives in 2014 will be paid, tracked, modeled for cost effectiveness, and reported as single or multifamily. For qualifying multifamily residences, a pre-qualification inspection will continue to be required.

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. Due to the acquisition of Helgeson, rebate processing work for this program will transition to Parago in 2014.

Utah ThermWise® Home Energy Plan

The Company will continue this program in 2014 with no major changes. 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 LIWAP in 2014 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 change the program name from “Low-Income Weatherization Assistance Program” to “Low-Income Efficiency Program” in 2014, in an effort to make the program name more reflective of its purpose and because the program has expanded beyond weatherization only measures. The Company will continue the direct rebate payment process for approved non-profit or governmental agencies in 2014. In order to qualify for the direct payment process, the approved entities must satisfy certain requirements. Equipment rebated through the direct payment process will be tracked, modeled for cost effectiveness, and reported through the Company’s Low-Income program. Due to the acquisition of Helgeson, rebate processing work for this program will transition to Parago in 2014.

Utah ThermWise® Business Custom Rebates

The Company is continuing this program with one significant change. The Company will implement 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 strategic energy management service will be available to all commercial GS customers seeking to participate in the Business Custom program. The Company will actively market the service to customers (using the 2012 Commercial Customer Segmentation study and current billing analysis) with the greatest opportunity for natural gas savings. A qualified energy expert will conduct a detailed commercial energy plan as part of the service and provide an informational report using a tablet based analysis tool. Businesses must contract with the Company to implement the findings from the energy management service before analysis and support is provided.

Nexant will continue to assist with design, outreach, marketing and technical assistance for this program. Due to the acquisition of Helgeson, rebate processing work for this program will transition to Parago in 2014.

A summary of the cost-effectiveness used in the energy-efficiency model for each ThermWise® program as provided with the 2014 budget filing is shown in Table 8.2 below.

Table 8.2 – Utah 2014 projected NPV & B/C ratios by program and California Standard Practice Test

2014 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	0.63	1.06	16.61	2.55	4.01	1.68	-1.56	0.86
ThermWise® Builder Program	-0.56	0.87	5.55	2.24	0.88	1.32	-1.11	0.77
ThermWise® Business Custom Program	0.64	1.64	2.70	6.39	0.89	2.18	-0.03	0.98
ThermWise® Business Program	1.57	1.53	8.56	4.18	2.56	2.29	0.02	1.00
ThermWise® Weatherization Program	2.28	1.16	30.00	2.78	4.29	1.34	-4.61	0.79
ThermWise® Home Energy Plan	0.07	1.09	1.96	34.45	0.06	1.08	-0.43	0.67
Low Income Efficiency Program	0.14	1.14	1.92	4.68	0.22	1.25	-0.39	0.74
Market Transformation	-1.65	0	0.00	N/A	-1.65	0	-1.65	0
TOTALS	3.13	1.09	67.30	2.88	11.27	1.41	-9.77	0.80

*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 2014 NPV & B/C ratios using gas cost forward curve from SENDOUT model

2014 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	0.52	1.05	16.61	2.55	3.90	1.66	-1.67	0.85
ThermWise® Builder Program	-0.66	0.85	5.55	2.24	0.78	1.28	-1.21	0.75
ThermWise® Business Custom Program	0.64	1.63	2.70	6.39	0.89	2.17	-0.04	0.98
ThermWise® Business Program	1.51	1.51	8.56	4.18	2.50	2.26	-0.05	0.99
ThermWise® Weatherization Program	1.50	1.10	30.00	2.78	3.51	1.28	-5.40	0.75
ThermWise® Home Energy Plan	0.09	1.11	1.96	34.45	0.08	1.10	-0.42	0.68
Low Income Efficiency Program	0.12	1.12	1.92	4.68	0.20	1.22	-0.41	0.72
Market Transformation	-1.65	0	0.00	N/A	-1.65	0	-1.65	0
TOTALS	2.05	1.06	67.30	2.88	10.19	1.37	-10.85	0.78

*Shown in millions

Wyoming Energy-Efficiency Plan 2014

The Company expects fifth year participation in the portfolio of Wyoming ThermWise® programs to increase to 1,294 which would exceed the participation high of 1,042 participants achieved in the second program year (July 2010 to June 2011). 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 will allow residential properties with more than four dwelling units to participate in the programs. The Company believes that multi-family dwelling represent an underserved market segment where customers could realize significant savings.

SENDOUT Model Results for 2014

Projections from the approved 2014 energy-efficiency budget were entered into the SENDOUT model in response to the Utah Commission's request. Data entries for the 2014 energy-efficiency programs included participants and deemed lifetime Dth savings per program measure. Incentive (variable) and administration (fixed) costs for each program measure were also incorporated into the SENDOUT model.

The SENDOUT model used the projected 2014 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 2014 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 2014 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 2014 ThermWise® Appliance, Builder, Business and Weatherization programs at 25% of 2014 projected participation if administration costs were increased to 200% of the 2014 budget projection. The model accepted the Business Custom program at 50% of participation and 200% of projected administration costs. The model accepted the Home Energy Plan program at 100% of participation if administration costs were increased to 200% of the 2014 budget projection.

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 2014 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 2014 budget projection and still be accepted. The Business Custom program could increase projected administration costs by four times and the Home Energy Plan program could increase administrative costs by 50% and SENDOUT would still accept the programs.

In summary, the SENDOUT model results indicate that as a gas supply resource at the approved budget and participation levels, the 2014 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 2014 budget levels.

In addition to the SENDOUT model which is a comprehensive resource planning and evaluation tool, the Company developed the Questar Gas Energy-Efficiency model with the assistance of the Questar Gas Energy-Efficiency Advisory Group and reviewed by the Commission, is used 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 to evaluate energy-efficiency program cost effectiveness (based on the California Standard Practices Model).

The Company utilized the Energy-Efficiency model to analyze the approved 2014 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. This analysis resulted in a projected potential total energy-efficiency spending limit of \$37.6 (UCT) million per year versus the current approved \$27.4 million per year for the 2014 projected natural gas savings of 759,717 Dth. 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 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 2013, the avoided gas cost attributable to energy-efficiency was calculated as \$41 million. For 2014, the avoided gas cost attributable to energy-efficiency is estimated to be \$37.6 million. The avoided purchased gas is valued at the same price level as used in the IRP modeling.