ENERGY-EFFICIENCY PROGRAMS

Utah Energy-Efficiency Results 2015

The Company's 2015 Commission-approved energy-efficiency programs and measures were similar to those in 2014, but also included new measures, changes to qualifying equipment, and changes to rebate levels. In 2015 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 to refine the comparison characteristics of the ThermWise® Energy Comparison Report and delivered it to over 230,000 customers in 2015.

ThermWise results for 2015 were strong with participation rates in the Builder and Business programs surpassing 100% of original projections. The Appliance program, Home Energy Plan, Weatherization, Low Income Efficiency and Business Custom programs finished the year short of expected participation.

Spending for the 2015 program year totaled $24.2 million or 85% of the $28.5 million Commission-approved ThermWise® budget. Actual expenditures in the Appliance, Home Energy Plan, Business Custom, Weatherization and Low Income Efficiency programs were lower than budgeted. The market transformation expenditures were also lower than expected (70% of budget) in 2015. Primarily because 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 76% of total ThermWise® spending in 2015 (73% in 2015 budget) and resulted in annual natural gas savings of more than 760,000 Dth. Actual natural gas savings were 84% of the amount projected in the Company's 2015 budget filing.

Utah ThermWise® Appliance Rebates

The Company continued this program in 2015 with changes related to appliance efficiency and the addition of new equipment to overall rebate offerings. The Company proposed adding a smart thermostat measure in 2015. Because the smart thermostats have the potential to achieve natural gas savings through features like the ability to cycle a furnace based on an occupancy sensor (tied to a homeowner's smart phone) or to change a home's temperature remotely through an online dashboard and/or internet connected application. In addition to those features, the Company required rebate qualifying smart thermostats to have WiFi capability.

The Company also proposed to change the annual fuel utilization efficiency (AFUE) requirement for the 98% efficient furnace measure in 2015. When the measure was proposed in 2014, the Company set the required AFUE level precisely at 98%. The Company found throughout 2014 that only one manufacturer produced a furnace model at 98% AFUE. However, the Company learned that several other manufacturers made models at 97.5% AFUE which were essentially functioning at the 98% AFUE level. The Company proposed in 2015 to continue to market the rebate for this measure as 98% AFUE but to adjust the minimum AFUE requirement in the Tariff to 97.5% AFUE.

In 2015 the Company began monitoring United States Department of Energy (DOE) proposed changes to water heating standards. These proposed changes required higher minimum Energy Factor (EF) ratings on residential gas, electric and oil-fired water heaters. Changes for natural gas models include additional insulation, incorporation of newer flue baffling technologies (including flue dampers) and the incorporation of electronic ignition in lieu of a standing pilot. Those proposed changes went into effect for manufacturers beginning April 2015, though lower efficiency models continued to be available for customer purchase through the majority of the year.

CLEAResult, Inc. assisted with design, outreach, marketing and technical assistance for the 2015 program year. Blackhawk Engagement Solutions performed rebate processing work for this program in 2015.

Utah ThermWise® Builder Rebates

The Company continued this program in 2015 with several changes. The Company eliminated the Builder Option Package (BOP) rebates in 2016 as the rebate qualifications became code-required with the State's adoption of the 2012 International Energy Conservation Code (IECC). The Company also introduced a 10% above-code rebate in place of the BOP rebates in 2015. The Company also introduced the smart thermostat rebate and adjusted the AFUE requirement for the 98% efficient furnace rebate for the reasons given in the Appliance Program discussion.

CLEAResult, Inc. assisted with design, outreach, marketing and technical assistance for this program. Blackhawk Engagement Solutions performed rebate processing work for this program in 2015.

Utah ThermWise® Business Rebates

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

Nexant assisted with design, outreach, marketing and technical assistance for this program. Blackhawk Engagement Solutions performed rebate processing work for this program in 2015.

Utah ThermWise® Weatherization Rebates

The Company continued this program with one change in 2015. This program had incented the purchase and installation of windows with a U-value of .30 or lower since 2008. This measure has seen increasing levels of participation and market adoption since that time. The Company proposed elimination of the .30 window as a rebate-eligible measure in 2015 because market data and feedback suggested that .30 windows had become the standard in the marketplace. The

Company continued to incent .22 or lower U-value windows in 2015 in an effort to continue the advancement of windows efficiency in Utah.

The Company had contracts in place for, but did not require assistance with, design, outreach marketing or technical assistance for this program in 2015. Blackhawk Engagement Solutions processed rebates for this program in 2015.

Utah ThermWise® Home Energy Plan

The Company continued this program in 2015 with no major changes.

Utah Low-Income Efficiency Program

The Company continued funding the Low-Income Efficiency Program in 2015 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 continued the direct rebate payment process for approved non-profit or governmental agencies in 2015. Additionally, Blackhawk Engagement Solutions performed work related to rebate processing for this program in 2015.

Utah ThermWise® Business Custom Rebates

The Company continued this program with the addition of steam traps to the simplified analysis rebate measures in 2015. A steam trap 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 was added in order to advance natural gas savings through the replacement of failed steam traps.

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

Utah ThermWise® Energy Comparison Report

The Company moved this program from the Market Transformation Initiative and launched 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 2015 (Group D – 100,000 customers). In 2015 the Company sent the report, via U.S. and electronic mail, to more than 230,000 of its customers. The Company also maintained 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 were able to generate and view a copy of their Comparison Report through their online account at www.questargas.com.

A summary of the projected and actual benefit/cost (B/C) ratios for each of the 2015 ThermWise® programs is shown below.

Table 8.1 – Utah 2015 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	
	2015 Projected B/C	2015 Actual B/C	2015 Projected B/C	2015 Actual B/C	2015 Projected B/C	2015 Actual B/C	2015 Projected B/C	2015 Actual B/C
ThermWise® Appliance Program	1.50	1.19	4.89	3.52	1.45	1.54	0.80	0.82
ThermWise® Builder Program	0.87	0.76	2.43	2.07	1.26	1.28	0.75	0.76
ThermWise® Business Custom Program	1.04	0.15	9.90	1.21	1.17	0.20	0.79	0.18
ThermWise® Business Program	1.05	0.79	3.66	2.63	1.37	1.08	0.86	0.73
ThermWise® Weatherization Program	1.04	1.00	2.81	2.72	1.20	1.26	0.74	0.76
ThermWise® Home Energy Plan	0.95	1.24	36.38	72.30	0.94	1.23	0.62	0.73
Low-Income Efficiency Program	0.99	0.63	4.85	2.17	1.04	0.71	0.66	0.51
Energy Comparison Report	1.14	1.24	4.47	4.42	0.94	1.24	0.57	0.64
Market Transformation	0.00	0.00	N/A	N/A	0.00	0.00	0.00	0.00
TOTALS	**1.03**	**0.91**	**3.29**	**2.77**	**1.19**	**1.22**	**0.73**	**0.74**

Actual benefit/cost results for 2015 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 2015 ThermWise budget filing (Docket No. 14-057-25).

Customer participation in the ThermWise® programs remained high in 2015 (77,897 actual rebates paid) finishing the year at 91% of the Company's original 2015 estimate (85,402). Actual participation surpassed estimated participation in the Builder (16,799) and Business (2,980) programs. The Weatherization and Appliance programs had the highest total number of participants (35,525 and 21,591 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, 2015, July 16, 2015 and September 24, 2015.

Energy Efficiency Effects on Peak Day

In Docket No. 13-057-04 the Commission ordered the Company to discuss the "…effect of energy efficiency programs on peak demand and the need for new infrastructure and how energy efficiency 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 DSM Advisory Group meeting held March 19, 2015 and again at the IRP meeting held on April 30, 2015. 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 2016 IRP." (Report and Order dated October 8, 2015, 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 has continued to study this topic since the last public discussions. The Company continues to believe, and data supports, that some rebate-eligible equipment has little or no impact on peak-*hour* usage (either by reducing or increasing). However, installing energy-efficient equipment reduces usage over the entire *peak day*.

Wyoming Energy-Efficiency Results for 2015

The Company filed for approval (Docket No. 30010-141-GT-14) of a sixth year of Wyoming ThermWise® programs on October 28, 2014. The sixth-year Wyoming programs were modified to closely align with the proposed 2015 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 sixth-year programs (December 23, 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 sixth full program year (January through December 2015) the Wyoming ThermWise® programs had 318 participants or 1.3% of the Company's December 31, 2015 Wyoming residential GS customer base.

Utah Energy-Efficiency Plan for 2016

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 eight energy-efficiency programs from 2015 as well as the ThermWise® Market Transformation initiative. The ThermWise® energy-efficiency programs continuing in 2016 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; 7) the ThermWise® Business Custom Rebates Program; and 8) the ThermWise® Energy Comparison Report.

Utah ThermWise® Appliance Rebates

The Company will continue this program in 2016 with changes to the rebate-eligible storage water heater and clothes washer measures. In April of 2015 the United States Department of Energy (DOE) implemented new standards for water heating appliances. These changes compelled manufacturers to implement higher minimum Energy Factor (EF) ratings on all residential gas, electric, and oil fired storage water heaters. For natural gas models, the rated storage volume of the water heater is used to determine the minimum efficiency of a given water heater. As an example, the minimum allowable efficiency for a 50 gallon water heater is determined through the DOE formula (0.675-(0.0015 x rated storage volume)) to be .60 EF. Using the same formula, the minimum allowable efficiency for a 40 gallon water heater is determined to be .615 EF. As a result of these changes, the Company will eliminate the tier 1 storage water heater (.62 EF) as a rebate-eligible measure in 2016. The Company will continue rebating the > .67 EF storage water heater in 2016 using a lower deemed savings estimate to reflect the change in the baseline water heating equipment. The Company will also increase the standard for rebate-eligible clothes washers from 2.6 Modified Energy Factor (MEF) in 2015 to 2.74 Integrated Modified Energy Factor (IMEF) in 2016.

CLEAResult, Inc. 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 2016.

Utah ThermWise® Builder Rebates

In 2016, the Company will eliminate the tier 1 storage water heater (.62 EF) as a rebate-eligible measure for the reasons outlined in the Appliance Program discussion. The Company will also adjust the deemed savings for the > .67 EF storage water heater reflect the change in the baseline water heating equipment in 2016.

CLEAResult, Inc. 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 2016.

Utah ThermWise® Business Rebates

The Company will continue this program in 2016 with the following changes: 1) introduce charbroilers, conveyor ovens, gas dryers with moisture sensors and solar-assisted water heaters (for pools) to the rebate measure mix; 2) eliminate retrofit windows (≤ .30 U value) as eligible rebate measures; 3) eliminate the current tier 1 storage water heater (.62 EF) for the reasons outlined in the Appliance Program discussion; and 4) move the on-site measure level facility assessments (commercial energy plan), along with the associated costs, from the Business Custom Program to the prescriptive Business Program. Additional details regarding proposal number four are provided in the Business Custom Program discussion.

The Company will also introduce a pilot high-efficiency spray valve installation initiative to the Business Program in 2016. Though the high-efficiency spray valve offers significant natural gas savings, the measure has historically seen low participation. The Company expects to increase participation in this measure by installing high-efficiency valves in 1,000 businesses during 2016. Nexant will implement the pilot initiative, in close coordination with the Company. Nexant will also be responsible to identify and target businesses that would benefit from installation of the high-efficiency spray valves. Nexant will also be responsible to procure and install the valves at the pinpointed customer facilities. This measure will be installed free of charge and no rebate will be paid to the customer, though for the purposes of cost-effectiveness measurement, an incentive of $32 per valve will be included in the ThermWise® Cost Effectiveness Model (Model). Administrative costs related to this pilot program will only be incurred upon measure installation.

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 2016.

Utah ThermWise® Weatherization Rebates

The Company will continue this program in 2016 with no significant changes. This program will continue to be available to existing residential customers in the Company's Utah service territory. The Company will continue to have contracts in place for assistance with design, outreach marketing or technical assistance with this program. Blackhawk Engagement Solutions will perform rebate processing work for this program in 2016.

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: an in-home energy plan performed by trained and experienced Questar Gas Auditors and a "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 Low-Income Efficiency Program in 2016 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 also eliminate the tier 1 storage water heater (.62 EF) in 2016 for the reasons outlined in the Appliance Program discussion. Blackhawk Engagement Solutions will perform rebate processing work for this program in 2016.

Utah ThermWise® Business Custom Rebates

The Company will continue this program in 2016 with the simplification of some Tariff language. The revised Tariff language clarifies the overall program description. The Company will also move the onsite measure level facility assessments (also referred to as the commercial energy plan) along with the associated costs to the prescriptive Business Program in 2016.

Since introduction of the Business Custom Program in 2008, the Company has offered a commercial energy plan (referred to as the on-site measure level facility assessments in section 2.16 of the 2015 Tariff) to eligible commercial customers seeking assistance in identifying complicated natural gas savings opportunities. However, over the past eight years, the Company has found that the commercial energy plan has predominantly been successful in identifying prescriptive measure savings opportunities. As a result of these findings, the Company will move the commercial energy plan to the prescriptive Business Program in 2016. The Company believes this better aligns program costs with the program generating the natural gas savings benefits.

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 2016.

Utah ThermWise® Energy Comparison Report

The Company will deliver the Comparison Report to 230,000 customers in 2016. The Company has found that customers not only change behaviors to save natural gas as a result of the Comparison Report, but they are also more likely to participate in other ThermWise® Programs if they've received the report. An analysis conducted by the Company in 2014 showed that, when compared with a control group of non-recipients, customers who had received their Comparison Report were more likely to participate in a ThermWise® rebate and/or request a Home Energy Plan. The Company will continue to target the Comparison Report to customers with higher usage relative to conditioned square footage and to launch another report group in the fall of 2016.

While proposed program participants remain stable from 2015, natural gas savings are projected to increase by 45% in 2016. The reason for the increase in savings has to do with the realization studies conducted by the Company in 2014 and 2015. The 2014 study focused on second-year recipients of the report (Group B) and showed weather-normalized usage reductions per participant of .53 Dth/year. The 2015 study focused on both second and third-year participants (Groups B & C) and showed weather-normalized usage reductions per participant of .76 Dth/year. As a result, the natural gas savings number was updated in the 2016 model to reflect the results of the most recent realization study.

A summary of the cost-effectiveness used in the energy-efficiency model for each ThermWise® program as provided with the 2016 budget filing is shown in Table 8.2 below.

Table 8.2 – Utah 2016 projected NPV & B/C ratios by program and California Standard Practice Test

2016 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	$2.73	1.50	$20.28	4.89	$2.52	1.45	-$2.03	0.80
ThermWise® Builder Program	-$.97	0.87	$11.66	2.43	$1.29	1.26	-$2.07	0.75
ThermWise® Business Custom Program	$.02	1.04	$1.07	9.90	$.08	1.17	-$.16	0.79
ThermWise® Business Program	$.14	1.05	$5.84	3.66	$.78	1.37	-$.47	0.86
ThermWise® Weatherization Program	$.41	1.04	$24.07	2.81	$1.95	1.20	-$4.17	0.74
ThermWise® Home Energy Plan Program	-$.04	0.95	$2.33	36.38	-$.06	0.94	-$.54	0.62
Low-Income Efficiency Program	-$.01	0.99	$1.91	4.85	$.04	1.04	-$.47	0.66
ThermWise® Energy Comparison Report	$.05	1.14	$1.28	4.47	-$.03	0.94	-$.29	0.57
Market Transformation Initiative	-$1.42	0.00	0.00	N/A	-$1.42	0.00	-$1.42	0.00
TOTALS	**$.90**	**1.03**	**$68.45**	**3.29**	**$5.15**	**1.19**	**-$11.62**	**0.73**

*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 2016 NPV & B/C ratios using gas cost forward curve from SENDOUT model

2016 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	$2.51	1.46	$20.28	4.89	$2.30	1.41	-$2.25	0.78
ThermWise® Builder Program	-$1.12	0.85	$11.66	2.43	$1.14	1.23	-$2.22	0.73
ThermWise® Business Custom Program	-$0.00	0.99	$1.07	9.90	$0.06	1.12	-$0.18	0.75
ThermWise® Business Program	$0.05	1.02	$5.84	3.66	$0.69	1.33	-$0.56	0.83
ThermWise® Weatherization Program	$0.19	1.02	$24.07	2.81	$1.73	1.17	-$4.39	0.73
ThermWise® Home Energy Plan Program	-$0.11	0.88	$2.33	36.38	-$0.12	0.86	-$0.60	0.57
Low-Income Efficiency Program	-$0.03	0.97	$1.91	4.85	$0.02	1.02	-$0.50	0.65
ThermWise® Energy Comparison Report	-$0.2	0.93	$1.32	4.57	-$0.97	0.76	-$0.38	0.45
Market Transformation Initiative	-$1.42	0.00	$0.00	N/A	$1.42	0.00	-$1.42	0.00
TOTALS	**$.04**	**1.00**	**$68.48**	**3.29**	**$4.29**	**1.16**	**-$12.50**	**0.71**

*Shown in millions

Wyoming Energy-Efficiency Plan for 2016

The Company expects seventh-year participation in the portfolio of Wyoming ThermWise® programs to reach 748 customers which would be an increase of 135% from 2015 participation levels. This projected increase is mainly due to inroads the Company made into the builder and business communities toward the end of 2015. The Company also expects self-install attic insulation participation to increase in 2016.

SENDOUT Model Results for 2016

The Company entered projections from the approved 2016 energy-efficiency budget into the SENDOUT model in response to the Utah Commission's request. Data entries for the 2016 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 2016 participation and administration costs as the baseline for its analysis of each program. For each program, the model examined what would happen if participation reduced to 25% or increased to 150% of the 2016 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 2016 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 2016 ThermWise® Weatherization program at 25% of 2016 projected participation if administration costs were increased to 200% of the 2016 budget projection. The model accepted the Builder programs at 50% of participation and 200% of the 2016 budget projection. The model accepted the Appliance program at 50% of participation and 150% of the 2016 budget projection. The model accepted the Business program at 75% of participation and 100% of the 2016 of projected administration costs. The model accepted the Home Energy Plan, Energy Comparison Report, and Business Custom program at 100% of participation and 100% of the 2016 budget projection.

Another way to view the results of the SENDOUT model is to analyze how much administration costs could increase and still be accepted if participation was held at 100% of the 2016 projection. In this scenario, the administration costs for the Weatherization program could increase by eight times the 2016 budget projection and still be accepted. The Builder program could increase projected administration costs by four times and still be accepted. The Appliance program could increase administration costs by three times 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 2016 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.

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 DSM Advisory Group and the Utah Commission's review. The 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 2016 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 940,293 Dth in 2016. This analysis resulted in a projected potential total energy-efficiency spending limit of $31 million per year using the Utility Cost Test. The currently-approved $26.7 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 2015, the avoided gas cost attributable to energy-efficiency was calculated to be $33.7 million. For 2016, the avoided gas cost attributable to energy efficiency is estimated to be $31 million. This gas is valued at the same price that is used for purchased gas in the IRP modeling.