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**Questar Gas Company**

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**Barrie L. McKay**  
General Manager, Regulatory Affairs

September 1, 2009

**HAND-DELIVERED**

Ms. Julie Orchard  
Commission Secretary  
Public Service Commission of Utah  
Heber M. Wells Building  
160 East 300 South  
Salt Lake City, Utah 84134

Dear Ms. Orchard:

*Re: In the Matter of Questar Gas Company's Application for a Tariff Change  
for the Third-year Budget for Demand Side Management (DSM) Programs  
and Market Transformation Initiative, Docket No. 09-057-T04*

On March 11, 2009, Questar filed an application to change the rebate amounts for insulation related rebate measures in the ThermWise Weatherization Rebates Program and the ThermWise Multifamily Rebates Program (Docket No. 09-057-T04). These changes were approved by the Commission in an Order issued on March 31, 2009 (the Order). In the Order, the Commission said, "Questar shall analyze if and how rebate levels and rebate eligibility should be adjusted for regionality, and report back to the Commission within 150 days after entry of this Order."

Questar submits this report, in compliance with the Order. Questar's analysis shows that current rebate levels and rebate eligibility for insulation related rebate measures are consistent with approved DSM program design based on individual rebate measures and overall cost-effectiveness. In addition, customer participation in the ThermWise insulation rebate measures across all regions of the state, closely matches the Questar customer-base mix for these regions.

Given that the individual insulation rebate measures, individual programs and the portfolio of programs overall are all cost effective, Questar believes that changing rebate levels and/or rebate eligibility requirements for insulation rebate measures based on regional variations in deemed decatherm savings would not be useful and the administrative costs weight against such a change.

Questar engaged implementation contractors, Nexant, Inc. (Nexant) and Portland Energy Conservation, Inc. (PECI) to assist with regional savings analysis for insulation rebate measures in the ThermWise Weatherization Rebates and Multifamily Rebates Programs. Nexant and PEGI analyzed rebates for attic insulation, wall insulation and floor insulation.

Regionality was determined by using the three climate zones in Utah as defined by the 2006 International Energy Conservation Code (IECC). Table 1, below, lists the Utah Counties in each of the IECC Climate Zones.

**Table 1 Counties Included in IECC Climate Zones**

IECC Climate Zone	3	5	6
Counties Included	Washington	Beaver, Davis, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Piute, Salt Lake, San Juan, Sanpete, Sevier, Tooele, Utah, Wayne, Weber	Box Elder, Cache, Carbon, Daggett, Duchesne, Morgan, Rich, Summit, Uintah, Wasatch

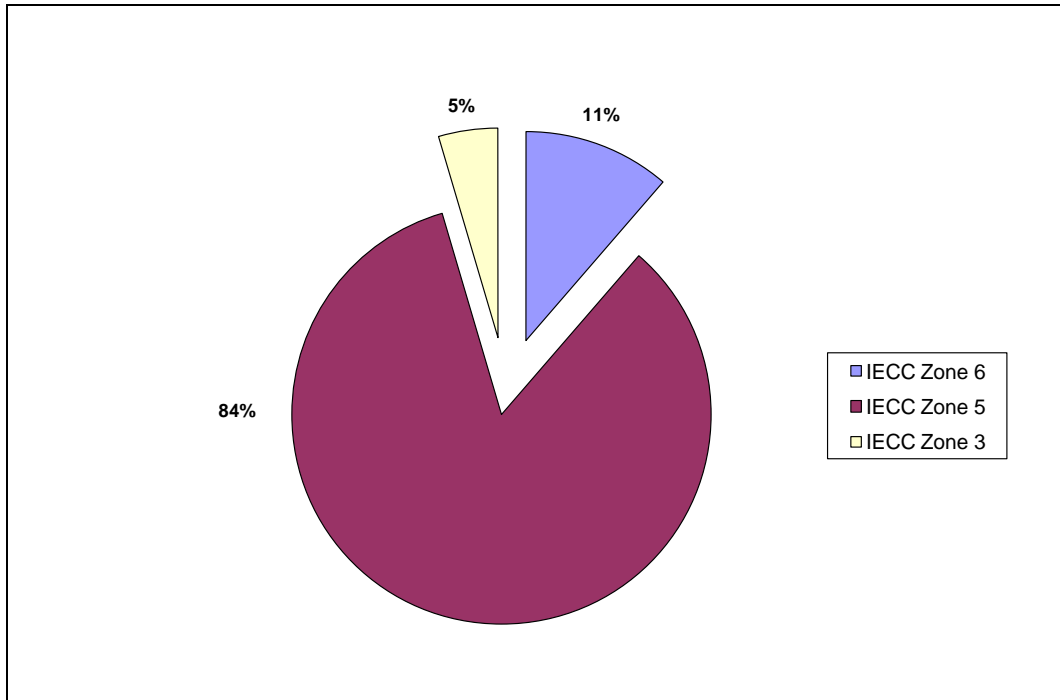
A RESNET Accredited Software Program, EnergyGauge USA v.2.8 was the primary instrument used to develop the single-family energy simulation model used to determine natural gas usage across regions. Baseline inputs were matched as closely as possible to those used in Questar’s ThermWise Weatherization Rebates program filing. Savings estimates were weighted based on the number of Questar customers in the respective climate zones. Savings were calculated for the insulation rebates measure based on seven Utah weather zones in the three IECC Climate Zones listed above. Table 2 below lists these weather station locations and their respective IECC Climate Zones.

**Table 2 - Questar Gas Customer Information**

Utah City	IECC Climate Zone	Questar Gas Heating Degree Days	Questar Gas Customer Counts	IECC Zone Weighting
Park City	6	7,793	33,743	0.344
Vernal		7,207	11,467	0.117
Logan		6,886	36,544	0.373
Price		6,130	16,264	0.166
Richfield	5	6,083	15,687	0.022
Cedar City		5,871	22,264	0.031
Salt Lake City		5,535	688,038	0.948
St. George	3	2,868	39,435	1.000

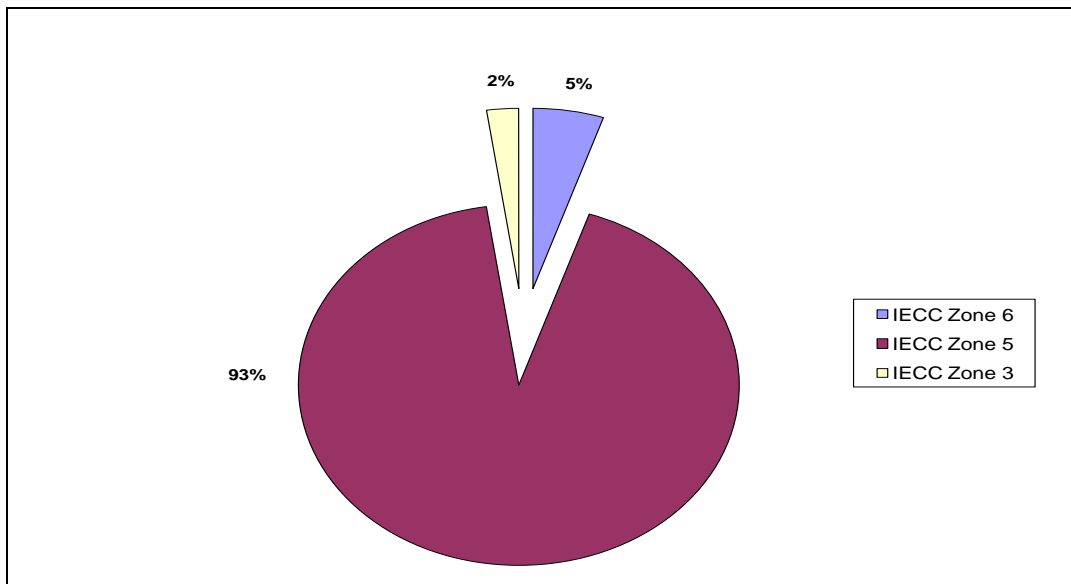
An analysis was performed on the total number of Questar customers in each of the three climate zones referenced above. More than 80% of Questar customers are located along the Wasatch

Front in Climate Zone 5. Figure 1 below provides a breakdown of the percentage of customers in each of the three climate zones.



**Figure 1 - Questar Gas Customers by IECC Climate Zone**

In addition to the overall Questar customer mix by climate zone, Figure 2 below provides a breakdown of the percentage of ThermWise insulation rebates participants from January 1, 2007 through June 30, 2009 for each of the three climate zones.



**Figure 2 - ThermWise Weatherization Program Participants by IECC Climate Zone**

More than 90% of the ThermWise insulation rebate measure participants are along the Wasatch Front in IECC Climate Zone 5. This data indicates that program participation is consistent with the overall Questar customer base mix, IECC Climate Zone 5 is the primary location of program participants, deemed savings and program cost-effectiveness, and changing rebate levels and/or eligibility requirements in either IECC Climate Zone 3 or 6 would not make a material difference in program cost-effectiveness. Given the limited significance of the IECC Climate Zones 3 and 6 data to the program's over-all cost effectiveness, Questar does not believe it justifies changing rebate levels based on regionality.

The results of the energy simulation model indicate that there is a variation in decatherm savings levels from one climate zone to the next within the State of Utah. As might be expected, the model produces higher annual natural gas savings for IECC Climate Zone 6 and lower annual natural gas savings for IECC Climate Zone 3. Exhibit 1 contains charts showing savings for each insulation rebate measure by climate zone. Exhibit 1, Chart 1 shows annual Attic Insulation savings of .009 Dth per square foot for IECC Climate Zone 6, .007 Dth per square foot for IECC Climate Zone 5 and .004 Dth per square foot for IECC Climate Zone 3. The current deemed annual savings for Attic Insulation in the Commission approved Questar DSM filing is .007 Dth per square foot. Exhibit 1, Charts 2 and 3 show similar results for annual savings estimates for Wall and Floor Insulation rebate measures, respectively.

Based on the estimated savings from the energy simulation model (as described above), further analysis was completed on the cost-effectiveness of the individual insulation rebate measures for each climate zone. The Questar DSM Cost Effectiveness Model was used to calculate the cost-effectiveness of each measure based on the "Utility Cost Test" as described in the Questar DSM filing. A Benefit/Cost Ratio (B/C) is calculated in the Model based on the Net Present Value of the measure costs and benefits over the life of the measure. Any B/C result above "1" indicates a positive cost-effectiveness score. IECC Climate Zone 5 results are indicative of the current B/C for the insulation rebates measures as approved by the Commission in Questar DSM filing. The results for each measure in each climate zone are provided in Table 3 below.

**Table 3 Utility Cost Test - Insulation Rebate Measures Benefit / Cost Ratio by Climate Zone**

Rebate Measure	IECC Climate Zone		
	B/C Zone 3	B/C Zone 5	B/C Zone 6
Attic Insulation	2.7	4.8	6.2
Wall Insulation	1.8	3.2	4.1
Floor Insulation	2.7	6.2	7.5

Based on information and analysis provided above, Questar recommends maintaining the current schedule and design of insulation rebate measures within the ThermWise programs,

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including current rebate levels and eligibility requirements. Changing rebate levels and/or rebate eligibility requirements based on regional natural gas savings differences would not materially improve the cost-effectiveness of the ThermWise programs. These types of changes would, however, increase costs associated with the program re-design, implementation and administration. These types of changes would also cause customer and market confusion and likely lower customer participation overall.

Questar Gas recommends that no changes be made to the insulation rebate measures in the ThermWise Weatherization Rebates or the ThermWise Multifamily Rebates programs as a result of regional savings variations.

Very truly yours,

Barrie L. McKay

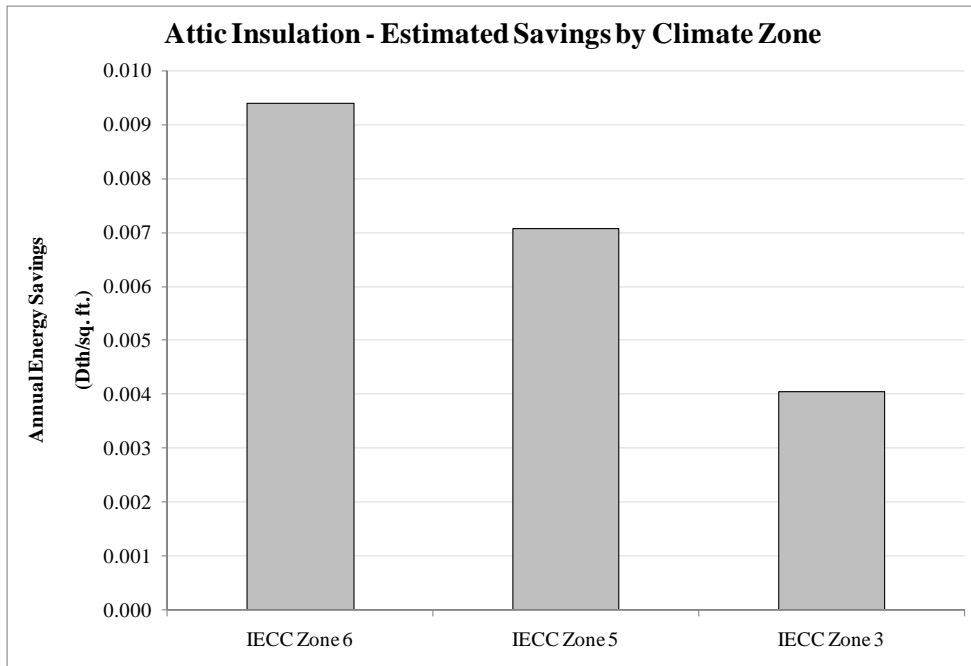
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## CERTIFICATE OF SERVICE

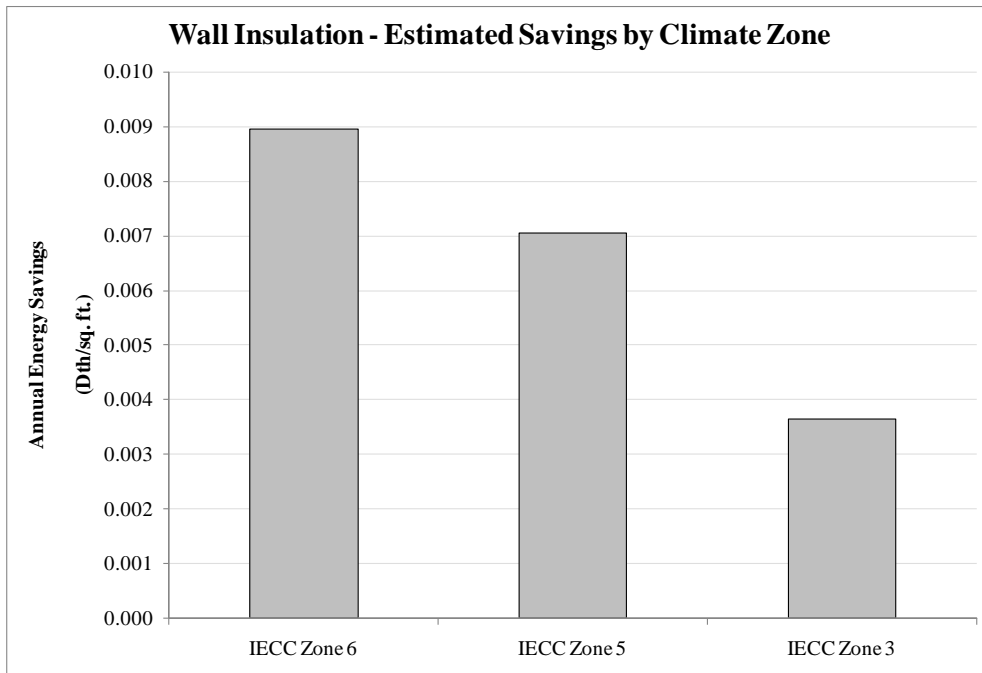
I, Evelyn Zimmerman, certify that a true and correct copy of the foregoing Letter to Julie Orchard in Docket No. 09-057-T04 was served upon the following by electronic mail on September 1, 2009:

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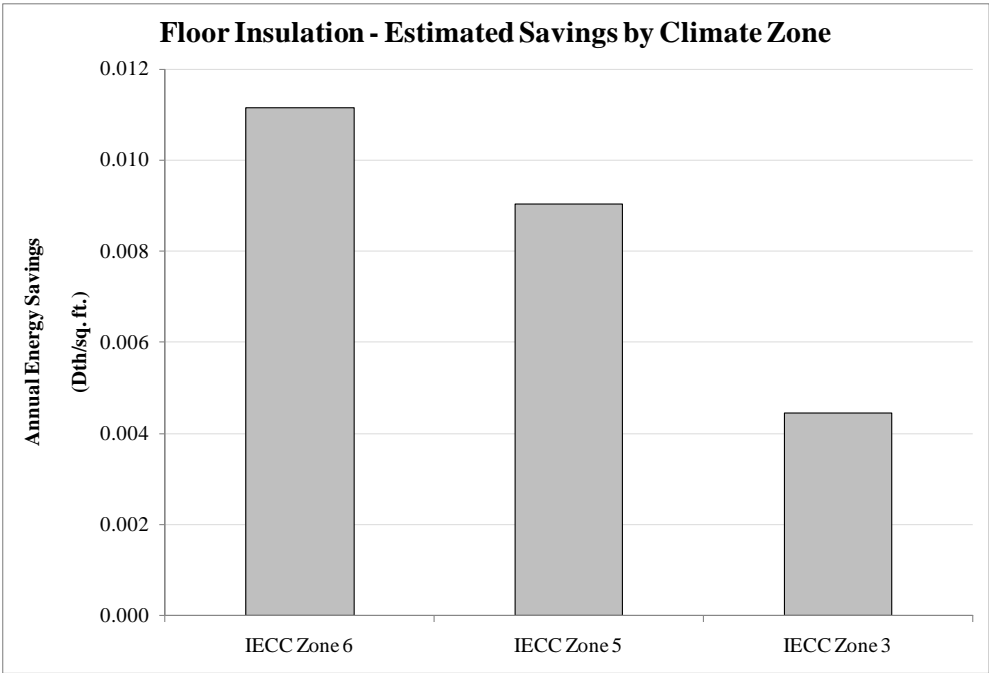
Exhibit 1



**Chart 1 - Annual Savings for Attic Insulation by Climate Zone**



**Chart 2 - Annual Savings for Wall Insulation by Climate Zone**



**Chart 3 - Annual Savings for Floor Insulation by Climate Zone**