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Department of Commerce
Division of Public Utilities

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M E M O R A N D U M

To: Public Service Commission

From: Division of Public Utilities
Philip Powlick, Director
Energy Section
Marlin H. Barrow, Technical Consultant
Artie Powell, Manager

Date: December 16, 2008

Subject: Action Request Docket No. 05-057-T01, Investigate QGC request for higher 2008 DSM expenditure levels.

ISSUE:

On October 29, 2008, Questar Gas Company (QGC) filed a report with the Utah Public Service Commission (PSC) indicating that expenditures for the 2008 DSM programs are expected to exceed 2008 budget levels. The PSC requested an investigation by the Division to see if the requested expenditures are in the public interest.

RECOMMENDATAION: **APPROVE EXPENDITURES**

The Division finds the increased expenditures are in the public interest and recommends approval of the additional DSM funds for 2008.

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DISCUSSION:

Since there was no required tariff change resulting from the report sent by QGC to the PSC, the Division requested an extension of the due date from December 8th to December 15th in order to receive additional information from the Company regarding the total projected DSM expenditures for 2008. The Commission granted that extension of time via an e-mail notification. The Division also notes that it believes the more appropriate docket for this action request should be Docket No. 07-057-08, which is the Docket for the 2008 QGC DSM budget. Docket No. 05-057-T01 was the docket in which the Conservation Enabling Tariff was approved on a pilot programs basis and in which approval for the creation of the three year DSM pilot program was granted by the PSC.

The Company has furnished the requested information and the Division has had time to review the data furnished and based on that review finds the additional expenditures are in the public interest and can recommend expenditure of the additional funds.

The table below summarizes the results of the forecasted expenditures. The table shows all programs have Benefit Cost ratios greater than 1.0 on a Total Resource Cost basis (Low Income Weatherization and Market Transformation programs are excluded since Dth savings cannot be attributed directly to these programs at this time). The Thermwise Home Energy Audit program drops just below 1.0 in the Ratepayer Impact Test but is still greater than 1.0 in the Total Resource Cost test.

DEMAND SIDE MANAGEMENT 2008 PROJECTED RESULTS - PROGRAM PORTFOLIO DESCRIPTIONS (1 Year)

	Base Case	**Total Resource Cost**		**Participant Test**		**Utility Cost Test**		**Ratepayer Impact Measure Test**		**Total Partici-pants**
	PROGRAMS	NPV	B/C	NPV	B/C	NPV	B/C	NPV	B/C	1 Years
1	Thermwise Appliance Rebate	$6,007,556	1.9	$8,979,220	2.2	$8,448,779	2.9	$6,134,857	1.9	31,970
2	Thermwise Business Rebates	$3,816,034	4.3	$3,926,021	4.5	$4,216,844	6.5	$3,655,012	3.7	889
3	Thermwise Builder Rebates	$3,652,637	1.8	$5,706,502	2.4	$5,151,058	2.9	$3,743,100	1.9	3,789
4	Thermwise Weatherization Rebates	$7,582,496	2.5	$10,371,988	2.7	$8,139,860	2.7	$5,959,899	1.9	14,342
5	Thermwise Home Energy Audit	$145,772	1.2	$845,490	19.1	$139,790	1.2	-$10,205	1.0	3,593
6	Low Income Weatherization	$7,108	1.0	$197,712	0.0	$7,108	1.0	-$37,319	0.9	135
7	Thermwise Multi-Family Rebates	$413,213	1.3	$1,235,031	2.0	$763,748	1.7	$436,295	1.3	2,859
8	Thermwise Business Custom Rebates	$181,606	1.7	$329,022	2.2	$263,206	2.3	$205,583	1.8	20
9	Market Transformation	-$1,224,860	0.0	$0	N/A	-$1,224,860	0.0	-$1,224,860	0.0	850,000
10	Totals	$20,581,561	2.0	$31,590,986	2.6	$25,905,533	2.6	$18,862,362	1.8	907,597

Note: B/C = Net Present Value of Benefits divided by Net Present Value of Costs

In reviewing these data, the Division notes the first year gas costs used in determining the benefit cost ratios was $7.84/ Dth. The Division updated this first year gas cost information with the average of the 12 month Rocky Mountain purchase prices projected in the last pass-through application in Docket No. 08-057-23. This amount was $5.21/Dth (the average projected cost for the time period of November 2008 through October 2009). The following table shows the changes to the benefit cost ratios with this updated first year price information from the latest pass-through docket.[1]

	DEMAND SIDE MANAGEMENT 2008 PROJECTED RESULTS - PROGRAM PORTFOLIO DESCRIPTIONS (1 Year)									
	Current Price Forecast	**Total Resource Cost**		**Participant Test**		**Utility Cost Test**		**Ratepayer Impact Measure Test**		**Total Partici-pants**
	PROGRAMS	NPV	B/C	NPV	B/C	NPV	B/C	NPV	B/C	1 Years
1	Thermwise Appliance Rebate	$1,657,487	1.2	$8,979,220	2.2	$4,098,710	1.9	$1,784,788	1.3	31,970
2	Thermwise Business Rebates	$2,139,994	2.8	$3,926,021	4.5	$2,540,805	4.3	$1,978,972	2.5	889
3	Thermwise Builder Rebates	$1,014,552	1.2	$5,706,502	2.4	$2,512,973	1.9	$1,105,015	1.3	3,789
4	Thermwise Weatherization Rebates	$3,280,767	1.6	$10,371,988	2.7	$3,838,131	1.8	$1,658,170	1.2	14,342
5	Thermwise Home Energy Audit	-$111,099	0.8	$845,490	19.1	-$117,081	0.8	-$267,077	0.7	3,593
6	Low Income Weatherization	-$79,329	0.7	$197,712	0.0	-$79,329	0.7	-$123,756	0.6	135
7	Thermwise Multi-Family Rebates	-$222,515	0.8	$1,235,031	2.0	$128,020	1.1	-$199,434	0.9	2,859
8	Thermwise Business Custom Rebates	$27,357	1.1	$329,022	2.2	$108,957	1.6	$51,335	1.2	20
9	Market Transformation	-$1,224,860	0.0	$0	N/A	-$1,224,860	0.0	-$1,224,860	0.0	850,000
10	Totals	$6,482,353	1.3	$31,590,986	2.6	$11,806,326	1.7	$4,763,155	1.2	907,597

Note: B/C = Net Present Value of Benefits divided by Net Present Value of Costs

The Thermwise Home Energy Audit and the Thermwise Multi-Family Rebate programs benefit cost ratios both drop below 1.0 on a Total Resource Cost test. Similar results were obtained when this price change was measured against the 2009 DSM Budget request in Docket No. 08-057-22. As noted in the Division's memo dated December 1, 2008 regarding the 2009 DSM Budget, the Thermwise Home Energy Audit program is the gateway for most participants to realize the benefits of the Thermwise Weatherization Rebates program. The Thermwise Multi-Family Rebates program is new for 2008 and is just beginning to ramp-up. The early indications for this program show that there is more interest in this program than was reflected in the 2009 Budget request.

It should be noted that at some point, as the price of natural gas drops, all programs will begin fail these benefit cost tests. As shown in the above table, the benefit cost ratios for all the programs for all of the tests are still above 1.0. If the first year price were to drop to $3.99/Dth,

[1] Assumes the projected rate of change in future prices remains the same as originally forecasted in base case.

only the Thermwise Business Rebates and Thermwise Weatherization programs would maintain benefit cost ratios greater than 1.0 for the Total Resource Cost test. At a first year price of $3.19/Dth, the Thermwise Weatherization Rebates program drops below 1.0 and it would take a first year price of $1.84/Dth to drop the Thermwise Business Rebates program benefit cost ratio below 1.0.

In today's natural gas market environment, it is unlikely that the average price of natural gas for a given 12 month time period will drop to the target levels just mentioned. However, it does emphasize the fact that the DSM programs now being undertaken by QGC will need to be monitored on an ongoing basis to ensure that the programs remain cost effective.

The rate required to amortize an average annual cost of $18.5 million in DSM programs is $0.20341/Dth[2], which means that an typical GS-1 customer, assuming an average annual usage of 80 Dth, will pay $16.31 per year for the cost of the DSM programs.

The Division finds that the program cost overruns reported by QGC have been due to greater-than-expected participation levels by consumers, resulting in more incentive payments than anticipated. Because a higher percentage of program dollars has gone toward energy-savings measures than expected, the number of decatherms saved per dollar expended by these programs has been higher than expected. These results are symptomatic of a successful program. Cost overruns have not been due to excessive administrative costs, but rather to high levels of participation by consumers. Because such participation saves money for both individual customers and ratepayers generally, we find that these additional program costs are in the public interest and should be permitted by the Commission.

SUMMARY:

The methods used to measure these decatherm savings is an area the Division will be scrutinizing as that report becomes available from the Cadmus group. Currently the Division

[2] Based on the same projected sales volumes used in the calculation of the current DSM amortization rate in Docket No. 08-057-25. This assumes that new customer growth will offset the decline in usage achieved through the DSM programs.

believes the projected costs, as measured against the projected decatherm savings, is in the public interest and recommends continued approval by the Public Service Commission.