

The Utah Story: Rapid Growth of Utility Demand-Side Management Programs in the Intermountain West

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ABSTRACT

Two investor-owned utilities—Rocky Mountain Power (RMP), a division of PacifiCorp, and Questar Gas Company (QGC)—provide most of the electricity and natural gas consumed in Utah. Both utilities have greatly scaled up their demand-side management (DSM) programs in recent years. RMP spent about 4 percent and QGC spent about 6 percent of its retail sales revenue on DSM programs in 2009 (note QGC implements programs for its full service gas customers only). Both utilities saved more than 1 percent of their retail energy sales from DSM programs implemented in 2009 alone.

This paper reports on the growth in the level of energy savings and peak demand reduction being achieved, the funding for and key elements of electric and natural gas utility-sponsored DSM programs in Utah. It describes the drivers for DSM as well as the policy and regulatory framework in Utah that has enabled the programs to grow. These policies include convenient cost recovery, decoupling of sales volume and fixed cost recovery in the case of the QGC, and integrated resource planning. The paper also discusses how the two utilities have worked together, in conjunction with the state of Utah to implement some programs in a coordinated and synergistic manner. Finally, it describes the challenges that the two utilities are facing as they try to maintain their program budgets and high levels of energy savings going forward, and how these challenges are being addressed.

Introduction

Utah is an energy-producing state and as such has relatively low energy prices. Utah produces 63 percent more electricity than it consumes and 70 percent more natural gas than it consumes. Utah is also a coal-producing state with about 82 percent of electricity generation coming from coal-fired power plants. The average price of electricity in Utah in 2008 was 6.55 cents per kWh, 33 percent below the national average. Residential consumers paid 8.3 cents per kWh, commercial consumers 6.7 cents per kWh, and industrial consumers 4.6 cents per kWh. Residential consumers also paid \$9.00 per thousand cubic feet for natural gas in 2008, 34 percent below the national average. And industrial consumers paid \$7.21 per thousand cubic feet, 25 percent below the national average.

In spite of low energy prices and an emphasis on energy production, utility demand-side management (DSM) efforts greatly expanded in Utah in recent years. This is true for the state's leading electric utility—Rocky Mountain Power (RMP) as well as the state's natural gas utility—Questar Gas Company (QGC). Considering metrics such as the fraction of sales revenues spent on DSM programs or the fraction energy sales saved through these programs, Utah now ranks among the top states in the nation. This paper reports on the growth in funding,

level of energy savings and peak demand reduction being achieved, and key elements of electric and natural gas utility-sponsored DSM programs in Utah. It discusses the policy and regulatory framework in Utah that has enabled the programs to grow. The paper also describes the challenges that the utilities are facing as they try to maintain their DSM program budgets and high levels of energy savings, and how these challenges are being addressed.

Policy and Regulatory Framework

The Utah Public Service Commission (PSC) first adopted Integrated Resource Plan (IRP) requirements and rules for electric utilities in 1992. These rules require biennial resource plans and stated that the Total Resource Cost test be used as the primary test for determining if DSM programs are cost effective. In 2009, the rules were changed to indicate that the Utility Cost test be used as the primary test for determining DSM program cost effectiveness. This change generally results in more energy efficiency programs being viewed as cost effective in a state such as Utah where marginal electricity supply costs are relatively low.¹ Utility DSM programs are individually approved by the PSC and may be continued indefinitely once they are approved, as long as they continue to be cost effective. While not a stated policy, the Utah PSC has generally supported implementation of all cost-effective DSM programs proposed by RMP.

RMP obtains DSM cost recovery through a tariff rider that allows contemporaneous cost recovery for approved DSM programs. This policy, sought by PacifiCorp, was approved by the PSC in 2003. Prior to this, cost recovery occurred in individual rate cases. This led to uncertainty about whether cost recovery would be approved as well as a time lag between DSM expenditures and cost recovery. The tariff rider amount is approved by the PSC and remains fixed until changed at the request of RMP or another party. DSM expenses and revenues are tracked in a balancing account.

QGC obtains cost recovery through amortization of DSM expenditures over 12 months. Costs are tracked in a deferred account as they are incurred, and this deferred account is amortized and added to rates twice a year.

Former Utah Governor Jon Huntsman Jr. adopted an ambitious statewide energy efficiency goal in 2006, namely to increase energy efficiency statewide 20 percent by 2015.² This goal applies to all energy types and sectors of the state economy. In addition, the Utah legislature approved a non-binding joint resolution in 2009 that supports the goal of saving at least one percent of retail electricity sales through DSM programs each year.³ The resolution also encourages adoption of decoupling of utility sales and fixed cost recovery as well as performance-based incentives for utility shareholders. The PSC had not acted on this resolution as of May 2010. But the resolution along the Governor Huntsman's energy efficiency goal provided a favorable context for scaling up utility DSM programs.

The IRP requirements also helped to advance RMP's DSM programs. In particular, PacifiCorp completed a system-wide DSM potential study in 2007 that identified substantial

¹ With the Utility Cost test, participant contributions to the cost of energy efficiency measures are not accounted for the benefit-cost analysis.

² Governor's Executive Order 2006-0004: Improving Energy Efficiency.
www.rules.utah.gov/execdoks/2006/ExecDoc113478.htm

³ H.J.R. 9. Joint Resolution on Cost-Effective Energy Efficiency and Utility Demand-Side Management. 2009.
<http://le.utah.gov/~2009/bills/hbillenr/hjr009.pdf>

cost-effective energy savings potential and led to greater reliance on DSM in subsequent system-wide resource plans.

Regarding QGC, Questar requested the approval of a set of gas DSM programs for its full service customers along with sales and revenue decoupling in 2006. This proposal was approved by the PSC, with the decoupling mechanism (known as the Conservation-Enabling Tariff) initially approved on a three-year pilot basis (2007-09).⁴ DSM programs began in 2007 in conjunction with the decoupling mechanism. QGC submits annual DSM plans to the PSC showing that proposed programs are expected to be cost effective. The plans are then approved by the PSC.

In 2009, QGC requested and was granted a one-year extension of the Conservation-Enabling Tariff for calendar year 2010. In 2010, the Utah PSC will decide whether or not to make gas sales-revenue decoupling permanent in response to a request by QGC to do so. In addition, the joint resolution approved by the legislature in 2009 supports the goal of saving at least 0.5 percent of retail gas sales through gas DSM programs each year.

Rocky Mountain Power DSM Efforts and Results

RMP is the only investor-owned electric utility in Utah and it accounts for slightly more than 80 percent of electricity sales in the state. RMP now implements a diverse set of DSM programs including:

- Residential compact fluorescent lamp (CFL) program (in-store discounts)
- Home energy retrofit incentives
- ENERGY STAR new homes incentives
- High efficiency residential air conditioner incentives
- Air conditioner load control
- Refrigerator pickup and recycling
- Low-income weatherization
- Prescriptive incentives for business customers
- Custom incentives for business customers
- Commercial building re-commissioning
- Irrigation load control
- Industrial self-direction

In addition to these incentive programs, RMP expanded its DSM customer outreach and communications efforts starting in mid-2009. The stepped up advertising, community outreach, and online messaging campaign is being implemented under the “*wattsmart*” brand name.

Table 1 shows the trends in DSM program funding, energy savings, and peak demand reduction for RMP. Programs began to ramp up significantly in 2003 following the approval of the tariff rider cost recovery mechanism. The budget grew from about \$10 million in 2003 to over \$58 million in 2009. The latter value represents about 4% of RMP’s retail sales revenue in 2009. As of 2009, about 80 percent of the total budget was spent on energy efficiency programs and 20 percent on load control (peak reduction) programs.⁵ The jump in budget in 2009 was due

⁴ Order in Docket No. 05-057-T01. Public Service Commission of Utah. Jan. 16, 2007.

⁵ Demand-Side Management Annual Report for 2009-Utah. Rocky Mountain Power, March 31, 2010.

largely to growth in the home energy retrofit program, in particular the very high customer response to joint electric and gas utility incentives for home insulation (see further details below).

Estimated first year energy savings increased from about 65 GWh per year (0.34 percent of retail electricity sales) for programs implemented in 2003 to 248 GWh per year (about 1.1 percent of sales) in 2009. Savings in 2002 were relatively high compared to the budget due to a one-time CFL giveaway program. The programs contributing the most energy savings in 2009 were business prescriptive and custom rebates, home energy retrofit, CFLs, and refrigerator recycling. The energy savings values in Table 1 are gross savings prior to any net-to-gross adjustment. Third party evaluation of most programs was underway in early 2010.

Table 1. Expenditures, Energy Savings and Incremental Peak Demand Reduction of Rocky Mountain Power’s DSM Programs

Year	Expenditures (million \$)*	First Year Energy Savings (GWh/yr)**	Incremental Annual Peak Demand Reduction (MW)
2001	3.1	16.7	3.2
2002	6.4	74.2	14.0
2003	10.0	72.7	25.2
2004	16.6	99.9	35.3
2005	18.4	113.0	41.1
2006	25.4	121.1	65.9
2007	26.9	149.0	39.0
2008	36.4	193.3	32.7
2009	58.2	247.8	119.3

Notes:

* Expenditures include credits issued under Self-Direction business program.

** GWh/yr are measured at generator (grossed up for line losses).

Table 1 includes estimates of incremental peak demand reduction from both energy efficiency and load management measures installed each year. Load management includes residential air conditioner cycling as well as an irrigation load control program that was greatly expanded in 2009.

RMP’s DSM programs are very cost effective in spite of relatively low energy prices and avoided costs in Utah. The utility estimates that programs implemented in 2009 in aggregate had a benefit-cost ratio of 1.95 under the Utility Cost test, 2.0 under the Total Resource Cost (TRC) test, and 1.02 under the Rate Impact test. The net benefits of the programs implemented in 2009 alone under the TRC are estimated to be about \$109 million.⁶ The programs have been well-received by both residential and business customers for the most part. During 2009, approximately 104,000 households and 691 businesses participated in energy efficiency programs. An additional 143,000 customers participated in load management programs. For reference, RMP serves a total of about 780,000 customers. Furthermore, large industrial customers have implemented 176 projects under a self-direction option available since 2004.

⁶ *ibid.*

To complement its own program performance, avoid market confusion, and further facilitate electric efficiency in the state, RMP works closely with the Utah Association of Municipal Power Systems (UAMPS) in helping UAMPS design and promote DSM programs among their member utilities. Initially UAMPS made available three residential offerings fashioned after RMP's successful air conditioner efficiency, appliance recycling, and lighting and appliance programs. UAMPS is working on growing their offerings in 2010 to include RMP's prescriptive business program which targets commercial lighting, HVAC equipment, and motors.

Questar Gas Company DSM Efforts and Results

QGC is the only investor-owned gas utility in Utah. QGC began implementing DSM programs for full service residential and commercial customers in 2007 under the ThermWise[®] campaign and brand name. Programs are not offered to or paid for by larger customers that purchase gas in the wholesale market. QGC offered the following DSM programs as of 2009:

- Home energy audits
- Home retrofit incentives
- ENERGY STAR new home incentives
- High efficiency gas appliance incentives
- Multi-family building incentives
- Low-income home weatherization
- Prescriptive incentives for business customers
- Custom incentives for business customers
- Promotion and market transformation activities

Table 2 shows the trends in DSM program funding and energy savings for QGC. The ThermWise[®] programs ramped up tremendously over the three-year period 2007-09, with more than a six-fold increase in budget from the first to the third year. The amount spent in 2009, \$47.4 million, is equal to about 6 percent of QGC's retail sales revenue from its general service residential and commercial customers. As was the case for RMP, the jump in budget in 2009 was due largely to growth in the home energy retrofit program, in particular the very high customer response to utility incentives for home insulation.

Table 2. Budget and Energy Savings Questar Gas Company's DSM Programs

Year	Budget (million \$)	First Year Energy Savings (Thousand Dtherms/yr)
2007	7.4	203.5
2008	18.1	428.3
2009	47.4	1,086.2

Estimated first year energy savings increased by a factor of five from about 203,500 dekatherms per year from programs implemented in 2007 to 1.09 million dekatherms per year in 2009. The latter represents about 1.1 percent of annual gas sales to general service residential and commercial customers. These savings values are also net energy savings, meaning they are

adjusted to account for free-ridership based on program assumptions. However, they are deemed savings values. Measurement and verification studies to estimate actual net savings during 2007-09 were underway in the first half of 2010. Based on deemed savings values, the programs contributing the most energy savings in 2009 were home retrofit incentives and high efficiency gas appliance incentives. It is also worth noting that estimated actual savings far exceeded annual goals since the programs began, with estimated actual savings in both 2008 and 2009 more than twice planned savings.

In total, there were 234,800 participants in the programs during 2007-09 (note: some customers may have participated more than once). For comparison, QGC serves a total of about 870,000 residential and commercial customers. Adjusting for customers that participated more than once, QGC estimates that about 18 percent of all general service customers participated in at least one DSM program during 2007-09.

QGC's DSM programs are very cost effective. The utility estimates that during 2007-09, all programs combined had an overall benefit-cost ratio of 2.8 under the Utility Cost test and 2.1 under the Total Resource Cost (TRC) test. Furthermore, the portfolio of programs is passing the ratepayer impact test with an overall benefit-cost ratio of 1.9 as of 2009. The total net economic benefits from DSM programs implemented during 2007-09 are estimated to be about \$132 million. These values are based on engineering estimates of energy savings and assumed net-to-gross savings adjustments; third party evaluation of the 2007-09 programs was underway in 2010.

Home Insulation: Achieving Large Scale Market Impacts through High Incentives

Most homes in Utah have a sizable heating load as there are 5,765 heating degree-days in Salt Lake City. There are also about 1,050 cooling degree-days and use of central air conditioning has been growing as well. However, many older and even some newer homes are poorly insulated. Starting in 2007, both RMP and QGC offered incentives for home energy retrofits, in particular for insulation and other building envelope improvements. In the case of RMP, only homes with central air conditioning are eligible for these rebates. The home retrofit programs initially evolved as separate offerings at different times however since introduction the utilities have worked in a coordinated manner to align the program requirements specific to each utility and account for the presence of the overlapping program benefits. Each utility conducts its own marketing and provides rebates as part of its overall portfolio of DSM programs. Likewise each utility evaluates energy savings and calculates cost effectiveness for its fuel type. Nonetheless the utilities are in regular contact and coordinate changes in program design.

Initially the combined rebate for adding insulation was \$0.70/ft² when it was estimated the installed cost was approximately \$0.75-1.00/ft². In late 2007, as a result of the declining new construction market and plentiful supplies of low cost insulation, insulation contractors increased their marketing efforts to existing homeowners discovering that if they focused on attic insulation only they could complete insulation retrofits for approximately the cost of the combined incentive. Consequently, many contractors marketed "free insulation jobs" to customers. Not surprising, consumer demand increased rapidly with over 14,000 projects completed in the fourth quarter of 2007 compared to only about 4,600 in the second quarter of

that year. A total of about 27,000 insulation retrofits were completed in all of 2007; most were for attic insulation.⁷

In 2008, demand for wall and other non-attic insulation showed a slight increase however the majority of the 58,100 residential insulation projects completed in the calendar year were for attic insulation. The utilities exceeded their home retrofit program budgets by a wide margin and began to be concerned about paying more than the full cost of insulation retrofits. As the majority of this increased activity didn't become apparent until the September/October timeframe, no action was taken to reduce incentive levels in 2008. The demand for insulation retrofits continued to rise in early 2009, with over 35,000 projects completed in the first quarter alone. The utilities began to reduce their rebate amounts moving first to a combined rebate of \$0.55/ft² and later to \$0.40/ft². Due to required regulatory processes, an additional 45,500 insulation projects were completed in the second quarter of the year before program design changes could be implemented and the rebate amounts reduced. At \$0.40/ft², some level of participant contribution is required and demand for insulation projects dropped off to 28,000 projects in the fourth quarter of 2009. In 2010, RMP is lowering its incentives again to ensure cost effectiveness and both utilities are shifting to multiple incentive tiers depending on the amount of insulation added.

In total, about 229,000 insulation rebates were paid by the utilities during 2007-09. This represents more than one rebate for every four households served by the two utilities. This was a very positive result from the perspective of maximizing energy savings, net economic benefits, and program participation. But both RMP and QGC greatly exceeded their overall DSM program budgets in 2009 mainly due to the high demand for attic insulation rebates. Neither utility was required or had the ability by tariff to cap program participation or expenditures. However, RMP was in a position where its DSM tariff rider was insufficient to cover its ongoing DSM expenses, with the amount of unrecovered costs growing from month to month.

This situation came to a head in the summer of 2009 when RMP proposed raising the DSM tariff rider from 2.1 percent to 6.16 percent. The increase was necessary to fund ongoing DSM program expenses as well as to compensate the utility for the unrecovered program costs incurred in previous months. Not surprisingly, some customer representatives reacted negatively to the Company's proposal. After negotiations in the tariff rider docket, the parties agreed to increase the tariff rider to 4.6 percent on average and the PSC approved this settlement. The PSC also agreed to a phase two portion of this docket in which a series of workshops on key DSM policies in the state would be discussed. This portion of the docket was underway in the latter part of 2009 and early 2010.

This experience provides a number of lessons. First, it shows that when utilities pay all or close to the entire first cost for viable DSM measures, trade allies and customers can and will respond on a large scale. Second, it shows that utilities working together not only need to carefully establish incentive levels but constantly track market conditions to ensure they are not providing incentives greater than necessary and or in excess of the installed cost of efficiency measures. And third, it shows that what some may view as DSM success may be perceived by others as a failure. Unexpected and large changes in DSM budgets and consequently utility bill surcharges to pay for the programs are viewed unfavorably by some parties, irrespective of the cost effectiveness or long term benefits of the programs.

⁷ The data in this section are based on gas utility rebate payments; some but not all projects qualified for both gas and electric utility rebates.

Company Perspectives and Issues Looking Forward

RMP ramped up DSM programs in Utah because of state policies such as IRP requirements and adoption of a convenient and reliable DSM cost recovery mechanism, as well as the increasing costs and complexities associated with building new power plants. Utah is a high growth state; electricity consumption increased by 36 percent during 1997-2007, an average annual growth rate of 3.2 percent per year. RMP no longer has excess generating capacity meaning there is greater need for new resources, and DSM is the least cost resource in Utah as well as in other states.

Given this growing demand for electricity there is a continuing requirement for capital investment in the utility's generation, transmission and distribution systems. While DSM is relied upon by RMP to assist in reducing and or deferring capital investments, DSM also reduces utility revenues in the short run; i.e., in between rate cases. Consequently, RMP/PacifiCorp supported the Resolution adopted by the Utah legislature in 2009. Also, RMP has been asking the Utah PSC to address the issue of the short-term impact on revenues when the company implements highly effective DSM programs. The Commission in turn organized a series of workshops on DSM policies and perspectives in the latter part of 2009 and early 2010.

In the midst of these discussions, the Division of Public Utilities (DPU, the official name for PSC staff in Utah) proposed the adoption of a partial decoupling mechanism in a RMP rate case in February, 2010. The proposed mechanism would decouple sales and distribution system fixed cost recovery from residential customers on a three-year pilot basis.⁸ The mechanism is very similar to the decoupling mechanism in place for QGC (see below), which the DPU views as a success. Removing the financial disincentive for RMP implementing strong, highly effective DSM programs is a key rationale for the DPU's proposal. The PSC is expected to reach a decision regarding decoupling for RMP by June 2010.

As noted above, the growth of RMP's DSM budget and the tariff rider that pays for the programs has raised some concerns by customers and other stakeholders in Utah. In September 2009, the tariff rider was raised to an average rate of 4.6 percent of customers' bills. This amount pays for ongoing programs, which are budgeted at around four percent of revenues and also provides for recovery of the uncollected balance on previous DSM expenditures. The amount in this deferred account reached \$27 million as of July 31, 2009. Energy efficiency advocates and RMP both point out that DSM spending even at four percent of revenues is avoiding more costly supply-side investments and yielding substantial net economic benefits for customers. This discussion continues among interested parties and won't likely be resolved until later this year.

Like most electric utilities with aggressive DSM programs, RMP is constantly evolving its DSM portfolio in order to improve performance and deliver DSM savings consistent with those identified and selected through the integrated resource planning process. One example is RMP's efforts to maintain aggressive DSM targets in the face of new federal lighting standards that begin in 2012. RMP is striving to replace savings from CFLs with savings from emerging technologies as well as greater participation in other DSM programs. RMP's new *wattsmart* promotion and consumer education program is one such strategy. In 2010, RMP plans to spend about \$1.5 million on stepped up advertising, promotions with the Utah Jazz basketball team, digital marketing including making use of social networking, and other promotional efforts. The expectation is that this will increase program awareness and bring in some customers who have

⁸ See Pre-filed direct rate design testimony of William A. Powell, Utah Division of Public Utilities, Docket 09-035-23, Feb. 22, 2010.

not participated in DSM programs previously. In addition, RMP is revising its ongoing programs to include newer products such as specialty CFLs and advanced windows, as well as aligning with new ENERGY STAR and Consortium for Energy Efficiency (CEE) performance levels. Last but not least, RMP is planning to implement other new DSM programs in 2010, programs that are being procured through a competitive “Request for Program Proposals” process.

QGC’s delivery of DSM programs is closely linked to its desire to obtain continued approval of sales-revenue decoupling and thereby align utility and customer interests regarding energy efficiency and conservation. Like many gas distribution utilities, QGC experienced declining sales per customer over the past twenty years and consequently was not able to obtain its allowed rate of return prior to approval of the Conservation-Enabling Tariff. Since the company proposed and received approval for the Conservation-Enabling Tariff, it has voluntarily pursued well-funded and effective DSM programs. The fact that decoupling was approved for a three-year pilot period (later extended to four years) meant that QGC was able to deliver meaningful energy efficiency programs and help customers reduce energy use and utility bills, without harming the company financially. A decision by the Utah PSC on the continuation of the Conservation-Enabling Tariff is expected in May 2010.

Looking ahead, RMP has adopted a DSM budget of \$55.5 million in 2010, slightly less than the amount spent in 2009. This is due mainly to the fact that incentives for attic insulation have been reduced substantially and fewer insulation program participants are expected in 2010. On the other hand, some ongoing programs are expanding and a few new programs are likely to be introduced as well. Regarding energy savings, RMP is projecting a minimum first year savings of 197.5 GWh from programs implemented in 2010, about 20 percent less than savings achieved in 2009. However, this may be a conservative estimate that could be exceeded; RMP exceeded its savings goal for 2009 by a wide margin.

QGC has a DSM budget of \$36.1 million in 2010, also significantly less than actual expenditures in 2009. However, projected energy savings is expected to be nearly the same and the benefit-cost ratio for the portfolio of programs higher than that in 2009. QGC has exceeded its DSM budget every year and in 2009 by more than 150 percent. At the \$36.1 million budget level, QGC is projecting first year energy savings of about 980,000 dekatherms, approximately 1 percent of energy sales to full service customers. The portfolio of programs is essentially the same as in 2009 with changes in details such as tiered incentives for attic insulation and revisions aimed at increasing energy savings from duct sealing and insulation. Nonetheless, the utility is projecting over 91,000 home energy retrofit projects in 2010 with the bulk of its total budget and energy savings still coming from this program. Given the changes being made, QGC is projecting that the benefit-cost ratio for its portfolio of programs will increase from 2.86 in 2009 to 3.21 in 2010 (Utility Cost test basis). Regarding DSM plans after 2010, the company is waiting for the PSC’s decision regarding continuation of the Conservation-Enabling Tariff. In addition, a third party evaluation of all 2007-09 programs will be available in mid-2010 and will influence DSM programs going forward.

Conclusion

There is very good news on the utility DSM front in Utah. Both Rocky Mountain Power and Questar Gas Company greatly scaled up their DSM programs in recent years. RMP spent about 4 percent and QGC spent about 6 percent of its retail sales revenue on DSM programs in 2009. More important, both utilities cut their energy sales about 1.1 percent from DSM programs

implemented in 2009 alone (first year net energy savings as a fraction of retail sales). In addition, the programs are highly cost effective with benefit-cost ratios of 2.0 or greater under the TRC test.

The key factors underlying growth in RMP's programs include the Company's commitment to sustainability and least cost resource acquisition, its resource deficit position, adoption of favorable cost recovery mechanism and cost effectiveness tests, the state's IRP requirements, and lastly the company's desire to avoid capital-intensive supply-side investments. RMP has not received more than dollar-for-dollar cost recovery or had decoupling of sales and fixed cost recovery in place to date. But the latter has been proposed in a rate design docket underway in the first half of 2010.

The key factors underlying the growth in QGC's programs include adoption of a sales-fixed cost recovery decoupling mechanism, and the company's linking approval of this policy to implementation of comprehensive DSM programs. Also, the approval of decoupling on a pilot basis has provided additional impetus for QGC to implement highly effective programs, both to benefit its customers and bolster support for maintaining decoupling over the long term.

Helping homeowners insulate their homes has been an area of success but also concern for QGC and RMP. During 2007-09, QGC provided 229,000 insulation rebates and RMP provided rebates to a significant fraction of these homes as well (RMP only provides rebates if a home has central air conditioning). In total there was more than one insulation project for every four households served by the utilities during this time period. While the program has been cost-effective and extremely well-received by contractors and the public, it was not intended to provide "free" insulation retrofits. The concerns of the utilities range from quality assurance to "cherry picking" of energy savings. Both utilities believe that when customers pay a portion of project costs, attentiveness to project quality improves. In addition, both utilities recognize that installing attic insulation alone reduces the ability to treat the home again and justify less cost effective measures such as wall insulation. In retrospect, had the utilities been able to predict the market effects that led to the low/no cost insulation activity, they could have revised program designs at the outset to lower rebate amounts and/or require or incentivize adoption of multiple efficiency measures by those customers who desired attic insulation.

The success of the utility DSM programs in Utah has been due to a combination of strong marketing, close coordination between utilities, and strong support from the state, customers and DSM advocates. Utilities actively engage local businesses and trade associations in the delivery and promotion of DSM programs. QGC in particular has implemented a very effective advertising and promotion campaign since the inception of its programs. RMP has worked hard to build up its network of active trade allies and also ramped up advertising and communications starting in 2009. Both utilities now have a line item in their DSM budgets for marketing and consumer education, with no direct energy savings attributed to these activities. But these efforts are considered critical to the overall success of the DSM programs of the utilities.

Looking ahead, the future for DSM efforts in Utah looks very bright. There is broad awareness of the benefits that these programs are providing and consequently support for the programs, although there is growing concern about the short-term rate impacts. The awareness of benefits and support extends to the Utah PSC. While decisions have not been reached yet, there are good prospects that the PSC will approve decoupling of sales and fixed cost recovery for both QGC and RMP going forward. If these approvals are obtained, they should result in continued strong internal support for DSM on the part of RMP and QGC, and continuation of well-funded, highly effective DSM programs across the state.