

QUESTAR GAS
Energy Efficiency Roadmap
August 1, 2006 Draft

I. Goal:

- Short Term: Assist customers with lowering bills through demand side management programs and energy efficiency measures.
- Long Term: Accelerate market transformation through synergistic efforts and support of major market participants.

II. Overview:

Questar Gas will lead and manage, with input and participation from the DSM Advisory Group, a comprehensive natural gas energy efficiency plan.

III. Target Market

- Initial target market includes all Questar Gas Utah GS-1 customers.

IV. DSM Programs and Energy Efficiency Measures

- Residential prescriptive program
- Increased funding for LIWAP
- Energy Star-new homes programs
- Residential low cost measures
- Fee-based residential weatherization and audits
- Energy efficiency education and awareness
- Commercial prescriptive program
- Commercial custom / audit program
- Commercial low cost measures

V. Cost Effectiveness for DSM Programs

- Four standard DSM tests:
 - 1) Total Resource Costs (TRC)
 - 2) Rate Impact Test (RIM)
 - 3) Program Administrator Cost Test (PAC)
 - 4) Participant Cost Test

VI. Proposed Funding

- Year 1 -\$2.0 to \$5.0 million
- Year 2 -\$4.0 to \$8.0 million
- Year 3 -\$5.0 to \$10.0 million

VII. Implementation and Timing

- Prescriptive DSM Program(s) will be filed within 60 days of CET approval.
- Prescriptive DSM Program(s) will be implemented upon approval by Utah PSC.
- Increase funding for LIWAP upon CET and Utah PSC approval.
- Develop / implement energy efficiency awareness campaign upon CET approval.
- Begin ongoing RFP process for additional programs upon CET approval.

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- Develop Energy Star New Homes program within 180 days of CET approval.
- Develop Commercial Energy Audit program within 180 days of CET approval.
- Annual evaluations and reporting will be completed 120 days following the end of Questar Gas' heating season.

Program Research, Design & Implementation

- Program Identification
- Best Practices / Existing Programs Comparisons
- Geographic / Market Based Adjustments
- Strategy Development
- Program Analysis Template
 - Description & Overview
 - Objective
 - Targeted Market Segment(s)
 - Measures
 - Incentives
 - Promotion / Marketing
 - Estimated Market Penetration (Participation)
 - Implementation Plan
 - Costs, Budget & Funding
 - Synergies
 - Rate Impact
 - Measurement, Evaluations & Tests
 - SWOT (Strengths Weaknesses Opportunities Threats)
 - Baseline Measures
 - TRC, RIM, PAC, PCT
 - Participant Tracking & Measurement
 - Follow-up Research / Measures
 - Estimated Savings
 - Participants
 - Customers
 - Gas (Dth)
 - Extraneous Benefits
 - Societal Benefits
 - Non-monetary Benefits
 - Other Issues
- Some or all of program research, design, implementation and/or measurement and evaluation may be contracted to 3rd party vendors and may include:
 - Pay for Performance / Incentive Based
 - Based on reduction in Dth

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- As with all QGC Energy Efficiency (DSM) initiatives, program research, design, implementation and evaluation will be a collaborative effort with the DSM Advisory Group.

Original Program Master List

This is a list of potential programs / initiatives that may be implemented pending further research, evaluation and approvals.

- Programmable Thermostat (GDS)
- Water Heater Blanket (GDS)
- Energy Star Clothes Washer (GDS)
- Energy Star Windows (GDS)
- High Efficiency Gas Space Heating (GDS)
- Residential Weatherization & Insulation – Non Low Income (GDS)
- Low Income Residential Weatherization & Insulation (GDS)
- Energy Star Homes Program (GDS)
 - New Construction
 - Existing Retrofit & Renovation
- High Efficiency Water Heating Equipment (GDS)
- Residential Energy Audits
- Insulation Upgrade
- Commercial Building Envelop Audit
- Commercial Boiler Tuning
- Self-directed / Installed Energy Conservation Measures
 - Residential and/or Commercial
- Education Programs & Advertising
 - School Programs
 - Community Programs
 - “Ask A Tech”
 - Technology Information Center (SW Gas)
- Multi-family New Construction
- Multi-family Retrofit
- Commercial Dishwasher Spray Nozzles
- High Efficiency Commercial Food Service Equipment
- Low Flow Shower Heads
- Tank less Water Heaters
- Ground Source Heat Pumps
- Direct Use Geothermal Heat Source Applications

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Supplemental Solar Air & Water Heating??

- *Distributed Generation (Load Balancing / Fuel Switching / Source Efficiency)??*
 - *Residential CHP*
 - *Commercial DG & CHP*