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**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF UTAH**

APPLICATION FOR EXPEDITED APPROVAL)  
OF DEMAND SIDE MANAGEMENT )  
PROGRAMS AND A MARKET )  
TRANSFORMATION INITIATIVE )

Docket No. 05-057-T01

**I. INTRODUCTION**

1. Pursuant to the Commission's October 5, 2006, Order approving the Settlement Stipulation in this docket, Questar Gas Company (Questar Gas or Company) requests expedited approval of its application for DSM programs and a market transformation initiative.

2. The Commission has general jurisdiction to decide this matter pursuant to Utah Code Ann. § 54-4-1 (2000), § 54-1-10 and § 54-3-1.

3. Questar Gas is a Utah corporation doing business as a public utility engaged in the distribution of natural gas to customers in the states of Utah, Wyoming

and Idaho. Questar Gas' Utah and Idaho public utility activities are regulated by the Commission and conducted in accordance with its Utah Tariff. A copy of the Company's Articles of Incorporation and its Utah Tariff are on file with the Commission.

## **II. PROCEDURAL BACKGROUND**

4. On October 5, 2006, the Utah Public Service Commission (Commission) issued an order approving the Settlement Stipulation in Docket No. 05-057-T01, "In the Matter of the Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for the Approval of the Conservation Enabling Tariff Adjustment Option and Accounting Orders." The Settlement Stipulation provided for the establishment of a Conservation Enabling Tariff (CET) balancing account (Account 191.9), a Demand Side Management (DSM) deferral account (Account 182.4) and tariff sheets related to the CET and DSM. The Settlement Stipulation also provided for the transfer of \$1.3 million of available research and development funds to the DSM deferral account, and \$1.1 million credit balance to the CET balancing account.

5. In its order approving the Settlement Stipulation, the Commission also approved the Natural Gas DSM Advisory Group (DSM Advisory Group) and provided that it collaborate with the Company to file an application no later than 60 days following the date the Settlement Stipulation was approved, requesting expedited approval of DSM programs and energy-efficiency initiatives. Since the approval of the Settlement Stipulation, the DSM Advisory Group, which has been open to all who desired to participate, met on three occasions: November 1, November 21 and on December 1 where the final program designs were reviewed. Additionally, interested parties met on

November 29 to review the Company's DSM Model. The DSM Advisory Group has provided significant input and guidance to the Company during the 60 days since the issuance of the order approving the Settlement Stipulation.

### **III. OVERVIEW OF DSM PROGRAMS AND INITIATIVES**

6. The Company retained Nexant, Inc. (Nexant) to prepare a market characterization report to identify target markets and DSM programs expected to provide savings for customers in 2007 and beyond. Nexant was asked to recommend best practices for Questar Gas to design its programs. This report was made available for review to members of the DSM Advisory Group. QGC DSM Exhibit 1.1 details the best practices identified by Nexant. Questar Gas has incorporated these recommendations in its initial program designs.

7. Based on input from Nexant and from the DSM Advisory Group, Questar Gas is proposing comprehensive energy-efficiency programs and initiatives for Commission approval. The Company is proposing five DSM programs targeting specific market segments. In addition, the Company is proposing a market transformation initiative to support the five programs and to begin the process of transforming the Utah natural gas market to one that demands more energy-efficient appliances, products, buildings and practices.

8. The five DSM programs are: 1) the **Residential Appliance Program** administered by Portland Energy Conservation, Inc. (PECI); 2) the **ENERGY STAR® New Homes Program** administered by PECI; 3) the **Commercial Rebate Program** administered by Nexant; 4) the **Residential Home Energy Audit and Weatherization**

**Program** administered jointly by Nexant and Questar Gas; and 5) increased funding from the existing \$250,000 to a total annual funding level of \$500,000 for the **Low Income Weatherization Assistance Program** (LIWAP) administered by the Utah Department of Community and Economic Development (DCED).

#### **IV. DSM PROGRAMS**

9. **Residential Appliance Program.** The Company is proposing to offer a Residential Appliance Program to Questar Gas residential GS customers in Utah. This program will be delivered to customers in the Company's Utah service territory and administered by PECL. Monetary incentives will be offered on qualified program measures and mailed to the participating customer upon proof of purchase and installation.

10. Program measures will include high-efficiency space and water-heating appliances, high-efficiency natural gas clothes dryers and ENERGY STAR qualified clothes washers.

11. The program will be delivered through local retail and distributor channels. These are many of the same trade allies participating in Rocky Mountain Power's Home Energy Savings Program providing the opportunity to leverage implementation resources and coordinate offerings between the programs. The complete program description is included in QGC DSM Exhibit 1.2.

12. **ENERGY STAR® New Homes Program.** The Company is proposing to offer an ENERGY STAR® New Homes Program to be administered by PECL. The program will be available to residential builders in the Questar Gas Utah service territory

and include incentives for installing natural gas energy-efficiency measures in newly constructed residences receiving service on a GS rate schedule. A qualifying residence is a structure that has up to and including four separately metered residential dwelling units. Incentives under the program will be paid directly to a home builder or owner-builder (Builder) for ENERGY STAR whole house certification and/or installing specific energy-efficient natural gas measures, including high-efficiency natural gas space heating and water heating appliances.

13. This program is designed to leverage marketing and delivery directly to Builders through Questar Gas Home Builder Marketing Representatives. Development, implementation, training, support and administration will be provided by PECI in coordination with Questar Gas. Incentives will be paid directly to Builders upon completion of program requirements.

14. To the extent practical, this program has been designed to take advantage of synergies and coordination with Rocky Mountain Power's ENERGY STAR home builder program, including aligning the ENERGY STAR certification requirements for Builders and Home Energy Rating System (HERS) raters. The complete program description is included in QGC DSM Exhibit 1.3.

15. **Commercial Rebate Program.** The Commercial Rebate Program is a comprehensive program that offers rebates to Questar Gas GS commercial customers through its program administrator, Nexant. Rebates are available for purchasing and installing qualifying gas efficiency measures at separately metered commercial units. Qualifying measures include those that target cost-effective natural gas savings including retrofits of existing systems and first time installations. Monetary incentives will be paid directly to participating customers.

16. Initial program measures include high-efficiency space-and water heating applications, high-efficiency clothes washers and gas dryers, programmable thermostats, high-efficiency gas unit heaters, gas-infrared heaters, boiler controls and tune-ups, and low flow pre-rinse spray valves.

17. This program is designed to leverage the marketing access and existing delivery channels of local businesses, wholesalers and retailers. Primary program delivery functions have been contracted to Nexant. Questar Gas will support the program delivery by identifying customer installation opportunities and assisting customers with program requirements where applicable.

18. Where measures overlap with those offered under Rocky Mountain Power's "FinAnswer Express" program, efforts have been made to align eligibility requirements and key measure assumptions. The complete program description is included in QGC DSM Exhibit 1.4.

19. **Residential Home Energy Audit and Weatherization Program.** The Residential Home Energy Audit and Weatherization Program, through joint implementation between Questar Gas and its program administrator, Nexant, targets separately metered residences receiving service on a GS rate schedule. A qualifying residence is a structure that has up to and including four separately metered residential dwelling units. This program includes two primary components: home energy audits and rebates for weatherization measures.

20. The home energy audit includes two separate delivery channels. Customers will be able to request a self-completed mail-in audit survey at no charge, or request that a Questar Gas technician perform an in-home audit. Questar Gas will require customers to pay a \$25 fee per residence for the in-home audit, which is fully refundable

upon implementation of any Questar Gas recommended energy-efficiency measure not provided in conjunction with the Home Energy Audit.

21. Customers participating in either in-home or mail-in home energy audits will receive a customized report recommending home improvements that can be implemented to reduce natural gas usage. During the in-home audit, Questar Gas technicians will provide certain energy-efficiency measures at no charge or with a rebate in the case of the programmable thermostat. Customers choosing to complete the mail-in audit survey will receive, at no charge, a packet containing appropriate low-cost energy-efficiency measures for installation in their residences.

22. This program will also offer incentives for qualifying weatherization measures. While audit activities offered through this program will help customers identify opportunities for weatherization measures, participation in the audit portion of the program will not be a prerequisite to qualify for weatherization-measure incentives. Weatherization-measure delivery will leverage the marketing access and existing delivery channels of local businesses, wholesalers and retailers. For some measures, customers will be required to have measures installed by a pre-qualified contractor in order to qualify for incentives.

23. Where weatherization measures overlap with those offered under Rocky Mountain Power's Home Energy Savings program, coordination between the programs has been made to align eligibility requirements and key measure assumptions. The complete program description is included in QGC DSM Exhibit 1.5.

24. **Low Income Weatherization Assistance Program.** In the stipulation in Docket No. 05-057-T01, approved by the Commission on October 5, 2006, the parties agreed to an additional funding of \$250,000 to be utilized by the state's Low Income

Weatherization Assistance Program. The stipulation provides, “At least \$250,000, subject to Commission approval, of the amount spent on DSM in the first year of the Pilot Program will be allocated to the Low-Income Weatherization Program that the Company currently funds or other low-income energy-efficiency programs.” The Company proposes to disburse \$125,000 every six months, with the first disbursement of these DSM funds to occur within 30 days following approval of the program. The complete program description is included in QGC DSM Exhibit 1.6.

25. **Tariff Sheets.** Tariff sheets for these five programs are attached in both legislative and proposed formats as QGC DSM Exhibit 1.7. The Company proposes that these tariff sheets become effective January 1, 2007. Any customer or builder may qualify to receive an incentive for qualifying measures and appliances purchased any time after the tariff sheets become effective.

26. **Three Year DSM Pilot Program.** A goal of these initial DSM programs is to provide options that reach each market segment within the GS rate class over the three year DSM Pilot Program. The Company, with input from the DSM Advisory Group, will add or modify programs during the DSM Pilot Program. Current discussions have included adding specific measures to the initial programs such as high-efficiency residential boiler systems, a new custom commercial program, a program targeting multi-family dwellings, a quick response program, a grade school outreach program and other low-cost broad-implementation measures.



## V. MARKET TRANSFORMATION

27. An overriding goal of the Company is to provide energy-efficiency programs that are cost-effective and support Governor Huntsman's goal of reducing energy consumption in Utah by 20% by 2015. To support this goal, a transformation in the natural gas market needs to take place. Market transformation involves ongoing and lasting changes to the natural gas appliance and home building markets.

28. In addition to the five DSM programs, Questar Gas is proposing a comprehensive market transformation initiative with four distinct components. The first component is a market awareness campaign designed to introduce the Company's involvement in energy-efficiency promotion.

29. The second component is a market awareness campaign designed to change consumer and market participant behaviors and to encourage persistent demand for energy-efficient products and practices.

30. Third, the State Energy Program, a sub-division of the Utah Geological Survey, has proposed to conduct building code training to support the upcoming adoption of more stringent building codes associated with the current International Energy Conservation Code (IECC 2006). The IECC 2006 standards become effective in Utah on January 1, 2007. The training is scheduled to be held in early to mid 2007. The State Energy Program will work with an outside vendor to design and conduct the training. The Company proposes to help fund this initiative by contributing \$50,000 to the State Energy Program. A description of the proposed training is included as QGC DSM Exhibit 1.8.

31. Fourth, the Company will launch an energy-efficiency website. The website will provide consumers with DSM program descriptions and applications, information regarding the economics of energy efficiency, resources available to consumers to help them reduce their energy consumption, an on-line energy audit tool, and links to useful websites related to energy efficiency.

32. The Company will pursue strategies to influence each market segment in the GS rate class to adopt higher levels of energy-efficiency. Initial market transformation goals include: 1) achieving higher penetration of high-efficiency furnaces and water heaters in new and existing buildings; 2) recruiting trade allies to deliver a complete line of energy-efficiency products; 3) encouraging trade allies to price the higher-efficiency products competitively with lower-efficiency products; 4) positioning energy-efficiency products as the market leaders; and 5) working with code enforcement officials to ensure energy-efficiency aspects of the building codes are understood and adopted by builders.

## **VI. BUDGET**

33. Budgets for each of the individual programs have been included in the program descriptions, QGC DSM Exhibits 1.2 – 1.6. The total budget for the first year of the Questar Gas DSM programs and market transformation initiative assumes a full year of operation and is estimated at \$7.0 million and is shown in QGC DSM Exhibit 1.9. Of that amount, \$1.3 million is already in the DSM account as a result of the Settlement Stipulation. Therefore, the estimated net cost will be \$5.7 million.

34. The budget estimate is predicated on the participation level provided by each program administrator. To the extent actual participation levels differ from the projected levels, actual costs will differ from budget. As the first year progresses, the Company will apprise the Division of actual participation levels relative to projections, so that the Division can prepare its quarterly reports.

35. The Company will keep detailed records of DSM expenditures that will be deferred to Account 182.4. The DSM costs deferred will be tracked by the programs and initiatives for which they were spent.

## **VII. COST EFFECTIVENESS**

36. Questar Gas is committed to proposing and implementing energy-efficiency measures that are cost-effective for the Company and our customers. To further this commitment, the Company prepared an Excel-based model to facilitate the screening of DSM measures and programs (DSM Model).

37. The DSM Model is based on the California Standard Practice Manual (Standard Practice Manual) for the Economic Analysis of Demand-Side Programs and Projects, dated October 2001. The DSM Model has been reviewed by Nexant and the DSM Advisory Group. The Standard Practice Manual identifies four primary tests for evaluating the cost effectiveness of DSM measures and programs. QGC DSM Exhibit 1.10 provides a definition of each test along with an algebraic equation. Although the Total Resource Cost (TRC) test is generally used in this and other jurisdictions, the

Advisory Group agreed that all four tests should be provided in the analysis of the DSM programs.<sup>1</sup>

38. The DSM Model has been demonstrated and made available to interested parties, including the Division, the Committee of Consumer Services and the Commission Staff. A meeting of interested individuals representing many members of the DSM Advisory Group was held on November 29, 2006 to provide a detailed overview of the operation and use of the DSM model.

39. The model has the capability of running sensitivity analyses on various inputs and assumptions such as the discount rate and participation levels. The cost-effectiveness tests included in this application have been calculated using a 7% discount rate. This rate is consistent with the Company's IRP report. In the IRP process, the Company goes through a thorough discount rate sensitivity analysis. (See page 9-4 of the May 2006 IRP Report).

40. The Company has relied on specific market reports, industry studies, and the expertise of PEGI and Nexant to arrive at the savings levels, measure life and incremental customer cost for each measure of each program. QGC DSM Exhibit 1.11, which is a six page exhibit, provides the source for the estimated gas savings (page 1-2), measure life (pages 3-4), and incremental cost (pages 5-6) for each measure of each program. Also included in QGC DSM Exhibit 1.11 is a reference to the source of these estimates.

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<sup>1</sup> It should be noted that the societal cost test has not been included. This test starts with the same components as the TRC test, and also includes societal benefits such as water savings and improved air quality. As a direct result of considering additional benefits, the societal cost test always results in better benefit-cost ratios than the TRC test. The DSM Advisory Group generally agreed that this test could be reviewed and possibly used in the future.

41. A summary of the cost-effectiveness for each program is attached as QGC DSM Exhibit 1.12. This is a 6 page exhibit. Page 1 of the exhibit summarizes the test results of the five proposed programs along with the market transformation initiative. Although the market transformation initiative does not lend itself to the same economic analysis as the five DSM programs, it has been included so that the overall impact of all programs can be measured and analyzed. As can be seen on page 1, line 7, column C of QGC DSM Exhibit 1.12, the overall benefit-cost ratio for the TRC test of the five programs and the market transformation activities is 1.3. A benefit-cost ratio greater than 1 is indicative of benefits exceeding costs, and therefore “passes” the test. Additionally, on line 7, columns E, G and I it shows that the participant cost test passes at 2.5, the utility cost test passes at 1.9 and the ratepayer impact test passes at 1.3.

42. The cost-effectiveness tests for each measure of the Residential Appliance Program, which as a whole achieves a TRC benefit-cost ratio of 1.4, are summarized on page 2 of QGC DSM Exhibit 1.12.

43. The cost-effectiveness tests for each measure of the Commercial Rebate Program, which as a whole achieves a TRC benefit-cost ratio of 2.8, are summarized on page 3 of QGC DSM Exhibit 1.12.

44. The cost-effectiveness tests for each measure of the ENERGY STAR® New Homes Program, which as a whole achieves a TRC benefit-cost ratio of 1.4, are summarized on page 4 of QGC DSM Exhibit 1.12.

45. The cost-effectiveness tests for each measure of the Residential Home Energy Audit and Weatherization Program, which as a whole achieves a TRC benefit-cost ratio of 1.1, are summarized on page 5 of QGC DSM Exhibit 1.12.

46. The Low-Income Weatherization Assistance Program achieves a TRC benefit-cost ratio of 1.0, also summarized on page 6 of QGC DSM Exhibit 1.12.

## **VIII. PROGRAM EVALUATION**

47. The Company will perform program evaluations over the life of the programs. An in-depth, independent evaluation will be conducted once the programs have been operating for a reasonable period of time. A limited evaluation will be conducted following the one year anniversary of approved DSM programs. The costs for this limited evaluation are included in the budget as shown on QGC DSM Exhibit 1.9, line 18. The limited evaluation will focus primarily on customer awareness, participation levels, process efficiency and customer satisfaction. The results from evaluations will be used to refine the existing programs and to increase the accuracy of future DSM modeling.

## **IX. PRAYER FOR RELIEF**

48. Questar Gas believes it has taken all necessary and reasonable steps to implement DSM programs in anticipation of receiving Commission approval of the five proposed DSM programs and a market transformation initiative. Questar Gas respectfully requests an order from the Commission, effective as of January 1, 2007, granting approval of this DSM application including the five DSM programs, the market transformation initiative, the tariff sheets and the budget.

DATED this 5th day of December, 2006.

Respectfully submitted,

QUESTAR GAS COMPANY

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**CERTIFICATE OF SERVICE**

I, Evelyn Zimmerman, certify that a true and correct copy of the foregoing

Application was served upon the following by electronic mail on December 5, 2006:

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