

CUSTOMER AND GAS DEMAND FORECAST

System Total Temperature-Adjusted Dth Sales and Throughput Comparison – 2011 IRP and Actual Results for 2011

On a weather normalized basis, Questar Gas' actual natural gas sales during 2011 totaled 112.5 million Dth. This compares with the 109.2 million Dth that were projected in last year's IRP. Average usage per system-wide General Service (GS) customer on an annual basis increased to 111.0 Dth instead of decreasing to last year's base-case forecast of 108.0 Dth. This increase accounts for the higher total in actual sales and is likely due to the lower than expected price of natural gas coupled with the lower than expected number of GS customer additions.

Temperature-adjusted system throughput (sales and transported volumes) was 165.0 million Dth in 2011 compared to last year's IRP forecast of 170.0 million Dth for the same period. Transported volumes were lower than projected, particularly in the electric generation sector.

Customer additions are anticipated to improve modestly in 2012 and then begin a pattern of significant growth as economic conditions improve and the demand for new residential and commercial construction returns. Average GS usage is expected to decline in 2012 because of a large number of commercial customers in Utah that will move from sales to transportation service, but the decline should be tempered by the low level of natural gas prices that is expected to persist throughout the year. Non-GS commercial and industrial consumption is expected to grow modestly with the pace of economic recovery. Electric generation is expected to increase substantially in 2014 and beyond with major power plant expansions.

Temperature-Adjusted Dth Sales and Throughput Summary – 2012 IRP

This year's forecast of temperature-adjusted system sales is anticipated to increase from 111.0 million Dth in 2012 to 120.0 million Dth in 2022 (see Exhibit 3.11). This projection is lower than last year's projection and reflects the expected switching of large sales customers to transportation service in July of 2012.

The new forecast projects 1,156,710 system GS customers by the end of 2022, with annual Utah GS usage per customer at 96.5 Dth (see Exhibits 3.1 and 3.2) and annual Wyoming GS usage per customer at 113.9 Dth (see Exhibit 3.5). The annual usage per Utah residential customer is projected to be 72.3 Dth (see Exhibit 3.3) at the end of 2022, and average annual usage per Utah GS commercial customer is expected to be 428.8 Dth by the end of 2022 (see Exhibit 3.4). The annual usage per Wyoming residential customer is projected to be at 75.6 Dth by the end of 2022 (see Exhibit 3.6), and annual usage per Wyoming commercial customer is projected to be at 420.5 Dth (see Exhibit 3.7) for the same period.

System throughput in this year's forecast is expected to increase from 165.0 million Dth in 2011 to 205.0 million Dth in 2022 (see Exhibit 3.10). The current forecast includes the anticipated throughput for existing electric generation customers.

Residential Usage and Customer Additions

Utah

Utah residential GS customer additions in 2011 totaled 8,772, a decrease of 749 additions from 2010. Expectations of modest improvement in residential construction result in a forecast of about 9,500 residential customer additions in 2012. Current expectations of continued economic improvement lead to notable increases in customer additions beginning in 2013 with 12,300 additions followed by 16,300 additions in 2014. The rate of annual additions is expected to return to pre-recession levels of over 20,000 in 2016.

Actual temperature-adjusted residential usage per customer for the twelve months ending December 2011 was 83.5 Dth, an increase of about 1 Dth from year-end 2010 when the first six months of 2010 are adjusted to reflect the temperature and elevation provisions that took effect in August of the same year. The increase is likely due to the unusually low commodity price of natural gas coupled with the lowest number of residential additions since the beginning of the recent recession. A modest increase in the number of annual customer additions in 2012 that include a larger proportion of multi-dwelling units is expected to bring a slight decrease of 0.6 Dth in the average annual usage, but the low commodity price of natural gas that is expected to persist through the year should minimize overall decline this year. The overall downward trend in average consumption will continue, however, as the pace of new dwelling construction increases and energy efficiency programs continue to incentivize greater efficiency (see Exhibit 3.3).

The primary modeling tool for residential usage is an end-use model that estimates consumption for space heat, water heating, and other gas appliance use (based on appliance efficiency and housing characteristics). The model incorporates estimates of housing characteristics, natural gas appliance saturation by efficiency rating throughout the residential customer base, customer growth projections, and projected changes in economic variables that affect use per customer such as the average residential gas bill and household income. The model is maintained in Microsoft Excel. The model also addressed effects on use per customer from the Company's energy efficiency programs based on past and projected participation. The forecasting process also utilized statistical time series projections along with the end-use model.

Wyoming

Wyoming added 157 residential GS customers in 2011, 57 percent less than the prior year's additions. Economic conditions restraining the demand for new construction are expected to begin easing in 2012, and the forecast of customer additions reflects this

modest improvement with about 225 additions expected. Anticipation of continuing economic improvement will gradually increase customer additions to over 370 by 2015.

Wyoming residential annual usage per customer was 87.1 Dth at the end of 2011, an increase of 2.2 Dth over year-end 2010 and likely due to the extremely low commodity price of gas and the unusually low level of customer additions. As in Utah, a general trend toward greater housing and appliance efficiency accelerated by participation in the energy efficiency programs is expected to perpetuate the general decline in usage per customer through the forecasted period. Average usage is projected to return to the 2010 level of 84.5 Dth by 2013 and continue to decline through 2022 (see Exhibit 3.6).

Small Commercial Usage and Customer Additions

Utah

Temperature-adjusted Utah GS commercial usage per customer for the twelve months ended December 2011 was 465.2 Dth. This year's forecast reflects a continuation of a general downward trend that will be amplified in 2012 and 2013 with the departure of a substantial number of high-consumption customers shifting to transportation service. Average annual consumption is projected at 458.9 Dth at the end of 2012 and 449.2 Dth at the end of 2013 (see Exhibit 3.4).

Utah GS commercial customer additions are expected to change in direct proportion to the changes in Utah GS residential customer additions. Historically, the relationship of commercial customers to residential customers has remained stable. As we add residential customers, commercial customers are added to provide services to them. It is anticipated that approximately 684 customers will be added in 2012. The rate of annual additions will follow residential customer additions and gradually increase to 1,200 additions and above per year from 2016 on.

Wyoming

Usage for commercial GS customers in Wyoming for the twelve months ending December 2011 was 463.7 Dth. Average usage is projected to end 2012 at 445.6 Dth and to continue its general decline through the forecast period.

The forecast projects about 21 commercial customer additions in 2012 and a gradual increase to roughly 50 additions in 2016 as economic conditions improve. As with Utah, these projections are driven primarily by residential customer increases.

Large Commercial, Industrial and Electric Generation Gas Demand

As shown in Exhibit 3.8, annual gas demand among large commercial and industrial customers will gradually increase with the anticipated pace of economic

recovery. Demand is expected to grow from 46.4 million Dth in 2012 to 48.4 million Dth in 2022.

Annual demand among electric generation customers is projected to grow moderately through 2013 and then increase substantially beginning in 2014 with the completion of significant power plant extensions.

Firm Customer Design-Day Gas Demand

As in prior years, the design-day demand projections are based on a one-in-twenty year (five occurrences in 100 years) weather event. More specifically, the design-day firm customer gas demand projection is based on a theoretical day where the mean temperature is –5 degrees Fahrenheit at the Salt Lake Airport weather station and corresponding design-day temperatures are seen coincidentally across the Company’s service territory.

Wind speed, average December, January and February Utah GS sales, and prior days’ temperatures and sales are factors that have been statistically significant in predicting daily gas send-out during the winter heating season. The design-day demand projections distinguish between firm sales customers and firm transportation customers for gas supply and system capacity planning purposes.

As shown in Exhibit 3.9 and as required by Utah Commission order, the firm sales and firm transportation for the years 2008-2012 reflect send out volumes where peak-day conditions did not occur. The customer design-day gas supply projection for the 2012-2013 heating season is 1.474 million Dth. The design-day projection grows to a level of 1.713 million Dth in the winter of 2021-2022.

Periods of Interruption

It is estimated that under peak conditions 59,000 Dth could be curtailed across the system, 50,000 Dth of interruptible transportation and 9,000 Dth of interruptible sales.

The Utah Questar Gas Tariff states, “At times there may be a need for interruption on an isolated portion of the Company’s system.” In 2009 the Company performed an analysis to determine if isolation of certain system segments could alleviate pressure concerns while limiting the impact on customers that are neither affected by nor can affect pressures on that segment.

The Company is working to improve its interruption processes to ensure the reliability of service while also limiting the impact upon interruptible customers.

Source Data

Where available, the Company has obtained economic, demographic and other data from state and local sources such as the University of Utah (Bureau of Economic and Business Research) and the Utah Governor's Office of Planning and Budget. When current local data were not available, nationally recognized sources such as the U.S. Energy Information Administration, the U.S. Census Bureau and IHS Global Insight were used.

The Utah and Wyoming Economic Outlook

Below is a review of recent history and the economic outlook:

Summary of Utah Economy Annual Percentage Change

| Description | 2006 – 2011 | 2011 - 2012 | 2011 - 2016 | 2011 – 2019 |
|------------------------------|-------------|-------------|-------------|-------------|
| Population | 2.2% | 1.6% | 1.8% | 1.9% |
| Personal Income | 4.0% | 4.6% | 5.4% | 5.4% |
| Construction Employment | -7.2% | 5.3% | 7.4% | 6.0% |
| Manufacturing Employment | -1.5% | 4.3% | 2.4% | 1.8% |
| Non-Manufacturing Employment | 0.3% | 2.3% | 2.4% | 2.2% |
| Total Employment | 0.1% | 2.5% | 2.4% | 2.2% |
| Average Housing Starts | 13,903 | 10,467 | 17,397 | 20,311 |

Source: Based on Spring, 2012 long-term forecasts by IHS Global Insights.

Summary of Wyoming Economy Annual Percentage Change

| Description | 2006 – 2011 | 2011 - 2012 | 2011 - 2016 | 2011 – 2019 |
|------------------------------|-------------|-------------|-------------|-------------|
| Population | 1.6% | 1.1% | 0.8% | 0.7% |
| Personal Income | 3.2% | 4.3% | 4.4% | 4.4% |
| Construction Employment | -2.7% | 0.3% | 4.2% | 3.2% |
| Manufacturing Employment | -2.3% | -1.1% | 0.3% | 0.1% |
| Non-Manufacturing Employment | 0.7% | 1.6% | 1.2% | 0.9% |
| Total Employment | 0.6% | 1.6% | 1.2% | 1.9% |
| Average Housing Starts | 2676 | 1849 | 2279 | 2381 |

Source: Based on Spring, 2012 long-term forecasts by IHS Global Insights.

The U.S. Economic Outlook

Below is a review of recent history and the consensus economic outlook:

| U.S. MACROECONOMIC FORECAST | | | | | | | |
|---|----------|------|-------|-------|------|------|------|
| Source: IHS GLOBAL INSIGHT Review of the U.S. Economy – April, 2012 | | | | | | | |
| | Forecast | | | | | | |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| Real Gross Domestic Product ^{1/} | 2.7 | 1.9 | -0.3 | -3.5 | 3.0 | 1.7 | 2.2 |
| GDP Price Index - Chain Wt. ^{1/} | 3.2 | 2.9 | 2.2 | 1.1 | 1.2 | 2.1 | 1.4 |
| CPIU ^{1/} | 3.2 | 2.9 | 3.8 | -0.3 | 1.6 | 3.1 | 2.2 |
| Real Disposable Income ^{1/} | 4.0 | 2.4 | 2.4 | -2.3 | 1.8 | 1.3 | 1.1 |
| Pre-tax Profits ^{1/} | 10.5 | -6.1 | -17.4 | 9.1 | 32.2 | 7.9 | 1.1 |
| Unemployment Rate ^{3/} | 4.6 | 4.6 | 5.8 | 9.3 | 9.6 | 9.0 | 8.2 |
| Housing Starts ^{4/} | 1.8 | 1.3 | 0.9 | 0.6 | 0.6 | 0.6 | 0.7 |
| 3-month Treasury Bills ^{3/} | 4.7 | 4.4 | 1.4 | 0.2 | 0.1 | 0.1 | 0.1 |
| 30-Year Fixed Mortgage Rate ^{3/} | 6.4 | 6.3 | 6.0 | 5.0 | 4.7 | 4.5 | 4.0 |
| Trade Balance ^{2/} | -801 | -710 | -677 | -377 | -471 | -473 | -559 |
| Vehicle Sales – Total ^{4/} | 16.5 | 16.1 | 13.2 | 10.4 | 11.6 | 12.7 | 14.2 |
| Real Non-Res Fixed Investment ^{1/} | 8.0 | 6.5 | -0.8 | -17.9 | 4.4 | 8.8 | 6.8 |
| Industrial Production ^{1/} | 2.2 | 2.5 | -3.5 | -11.4 | 5.4 | 4.0 | 4.6 |

^{1/} Annual Rate of Change (Percent)

^{2/} Billions of 1996 chained dollars

^{3/} Percent

^{4/} Million Units

Long-term U.S. Economic Outlook

Source: IHS GLOBAL INSIGHT Review of the U.S. Economy – April, 2012

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|------|------|------|------|------|------|------|
| Real Gross Domestic Product <u>1/</u> | 2.4 | 3.4 | 3.2 | 2.8 | 2.6 | 2.4 | 2.5 |
| GDP Price Index - Chain Wt. <u>1/</u> | 1.4 | 1.7 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 |
| CPIU <u>1/</u> | 1.7 | 1.9 | 1.9 | 1.9 | 1.7 | 1.8 | 1.7 |
| Real Disposable Income <u>1/</u> | 1.8 | 3.0 | 2.7 | 2.8 | 2.6 | 2.5 | 2.6 |
| Pre-tax Profits <u>1/</u> | 0.2 | 4.2 | 0.3 | -1.6 | -1.0 | 1.3 | 2.4 |
| Unemployment Rate <u>3/</u> | 7.9 | 7.3 | 6.6 | 6.2 | 5.9 | 5.8 | 5.7 |
| Housing Starts <u>4/</u> | 1.0 | 1.4 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 |
| 3-month Treasury Bills <u>3/</u> | 0.1 | 0.1 | 1.3 | 3.2 | 3.8 | 3.8 | 3.8 |
| 30-Year Fixed Mortgage Rate <u>3/</u> | 4.2 | 4.4 | 5.0 | 6.1 | 6.4 | 6.4 | 6.4 |
| Trade Balance <u>2/</u> | -512 | -501 | -531 | -566 | -556 | -492 | -433 |
| Vehicle Sales - Total <u>4/</u> | 14.9 | 15.7 | 16.2 | 16.6 | 16.7 | 16.5 | 16.6 |
| Real Non-Res Fixed Investment <u>1/</u> | 6.1 | 7.9 | 6.9 | 5.1 | 4.4 | 3.2 | 3.4 |
| Industrial Production <u>1/</u> | 3.1 | 3.5 | 3.2 | 2.6 | 2.4 | 2.3 | 2.5 |

1/ Annual Rate of Change (Percent)

2/ Billions of 1996 chained dollars

3/ Percent

4/ Million Units

Alternatives to Natural Gas

Questar Gas customers have alternatives to using natural gas for virtually every application. Some energy applications are dominated by another fuel (cooking, clothes drying) while others are dominated by natural gas (space and water heat). A material shift in customer preference would affect future demand and load profiles.

Solar

It is not anticipated that solar space or water heat will have a significant impact in the Company's service territory. The large investment required does not allow for an attractive payback, thereby limiting the potential.

Air-Source Heat Pumps

Air-source heat pumps are becoming more competitive. There are significant risks to the Company and its customers if these devices proliferate. The load placed on the system by a customer with air-source heat pumps is substantially lower than a similar

customer with conventional natural gas space and water heat, yet the investment to serve the customer will not be any lower. Most air-source heat pumps require a back-up heat source for those times when the outside air temperature is too low for the heat pump to meet the load. Since natural gas is the most economic heat source, natural gas would likely be selected by most consumers for the back-up role.

The first risk arises because these customers will increase the peak demand on the system. This risk is especially troubling because it will be very difficult to estimate the additional peak requirement caused by these customers. There are only a handful of days each winter when temperatures are too low for these units to operate efficiently. As a result the potential for peak load attributable to these units will not be evident in the load data used to predict peak requirements.

The second risk is more significant for other customers. The cost to serve customers with air-source heat pumps is essentially identical to the cost to serve a similarly situated traditional customer. With the current rate design, the Company will only recover a portion of the cost to serve from air-source heat pump customers. The direct effect of this under collection will be that other customers will be required to make up the difference. This may lead to a material cross subsidy between traditional customers and the air-source heat pump customers. The Company is monitoring the penetration of air-source heat pumps.

Ground-Source Heat Pumps

While ground-source heat pumps may have similar risks to the air-source heat pumps, the potential for significant penetration is very low because there is a large capital investment required for these installations. Commercial customers with adequate acreage have begun adopting this technology but smaller users have not.

Gas Lost and Unaccounted For

The portion of gas that is lost or unaccounted for is calculated using a moving three-year average of annual proportions that are derived by dividing the total of system receipts for the twelve-month period ending June 30 into the sum of Company use gas (accounts 810 and 812), loss from tear-outs, and volumes that are unaccounted for during the same period. The most recent average of 1.225 percent is notably lower than the average reported last year and reflects meter-level compensation for temperature and elevation in the Utah service territory that began in August of 2010.

The current calculation for the most recent 3 years is included in the following table.

| QGC Estimated Company Use and Lost-and-Unaccounted-For-Gas Calculation | | | | | | | | |
|--|-----------------------------|-------------------------|--------------------|---|-----------------------|--------------------------|--------------------------------|---|
| Three Year Rolling Average | | | | | | | | |
| Year | QGC Customer Sales | QGC Customer Transport. | Total Receipts | QGC Sales & Transportation | QGC Use Acct. 810&812 | QGC Loss Due To Tearouts | QGC Loss & Unaccounted For Gas | Total Sales, Transport, Company Usage and L&U |
| 2008-2009 | 110,423,554 | 62,770,745 | 173,194,299 | 171,352,596 | 271,987 | 24,889 | 1,517,105 | 173,166,577 |
| 2009-2010 | 118,608,835 | 57,431,097 | 176,039,932 | 172,275,992 | 241,077 | 23,346 | 3,444,397 | 175,984,812 |
| 2010-2011 | 115,784,799 | 54,875,429 | 170,660,228 | 169,816,873 | 236,702 | 16,335 | 590,318 | 170,660,228 |
| Total | 344,817,188 | 175,077,271 | 519,894,459 | 513,445,461 | 749,766 | 64,570 | 5,551,820 | 519,811,617 |
| | Lost-&Unaccounted-For-Gas % | | 1.068% | Company Use and Lost-&Unaccounted-For-Gas % | | 1.225% | | |

Questar Gas has implemented the following practices to minimize the volume of gas that is lost or unaccounted for:

- **Temperature and elevation compensation.** In August of 2010, the Company began compensating for temperature and elevation in the computation of Decatherms in its Utah service territory as ordered by the Utah Commission. The effect has been a reduction in the volume of gas that is unaccounted for.
- **Maintenance work on high pressure feeder lines.** When scheduled maintenance work requires the feeder line to be blown down, the line is allowed to feed down to the lowest possible pressure before being completely blown down. This minimizes the amount of gas that is blown down to the atmosphere. The pressure is recorded to allow the amount of gas that is blown down to be calculated.
- **Feeder line replacement project.** The feeder line replacement project replaces aging infrastructure to ensure the safety and reliability of the distribution system.
- **Hot tapping.** The Company utilizes hot taps when making branch connections on the feeder line system to eliminate the need to blow down sections of the feeder line. The hot tapping process allows this work to be completed while the line remains in service.
- **Excess flow valves.** The Company installs an excess flow valve on any new or replaced service line serving a single-family residence (when commercially available). The excess flow valve is designed to limit the amount of gas lost in the event of the service line being severed (i.e. third party damage).
- **Leak survey and repair.** The Company regularly conducts leak surveys and performs system maintenance as required. Additional leak surveys are conducted in accordance with applicable regulations in high consequence areas or areas with aging infrastructure.

- **Response time to leak calls.** The Company continues evaluating ways to reduce response time to gas leak calls through efficiencies in how employees are dispatched to these gas leaks. The Company is implementing a GPS system to allow dispatchers the ability to dispatch personnel based on their geographic location with respect to the leak.
- **Leak detection equipment.** The Company utilizes advanced technologies for locating and identifying leaks. Examples include the remote methane leak detection (RMLD) and the Rover (gas detector).
- **Research and Development.** The Company participated in a Gas Technology Institute study to identify factors for fugitive emissions from various types of facilities.

Forecast Exhibits

The following charts summarize the 11-year customer and gas demand forecast.