

# **Report on Changes to the Questar Gas Line Extension Policy**

**Report to the  
Utah Public Service Commission**

**April 1, 2015**

**Submitted by  
Utah Division of Public Utilities**

**Chris Parker  
Artie Powell  
Doug Wheelwright  
Eric Orton**

## **EXECUTIVE SUMMARY**

A main or service line extension is required when a new customer requests natural gas service and a connection to the Questar Gas system. The requirements for a line extension are unique to each property and the cost is determined by the individual requirements and the distance from the existing natural gas infrastructure.

The cost for main and service line extensions is intended to be shared between the new customers and Questar Gas (Company) in an approximate 50/50 cost sharing arrangement. Line extensions include both internal and external costs and could include a number of different items. The type of internal costs paid by the Company could include; pre-construction engineering, determining proper pipe sizing, surveys, mapping, accounting, taxes and inspections. External cost paid to third party contractors could include; pipe, trench, installation labor, shade, backfill, pressure testing, asphalt/concrete, service meter and related installation costs.

The annual results from 2014 have been provided by the Company and show that, as approved, new customers would pay 65% of the total cost for line extensions as opposed to the 50/50 split represented in the general rate case. In order to better allocate costs between the new customers and the Company (existing customers), the Company has agreed to include the meter and bracket with the internal costs paid by the Company for service line extensions. This accounting change has been included in the tariff revision that was approved by the Commission on March 25, 2015.

The current policy for line extension has been determined to be beneficial to rural counties in Utah and is also working well in builder portion of the Demand Side Management, THERMISE® energy conservation program. This Report fulfills the Division requirement to provide a report on the impact of changes to the line extension program for 2014. Additional reports will be provided to the Commission during the term of the pilot program, which runs through 2016.

## **BACKGROUND**

A main or service line extension is required when a new customer requests natural gas service and a connection to the Questar Gas system. A “main line” is an intermediate high pressure natural gas line (as defined by the Company) and is typically the pipe buried beneath streets. The main lines generally run at about 45 psi and typically serve multiple customers. A “service line” extension is understood to be a branch or connection from the main line in the street that would terminate at the customer meter.

The line extension requirements are unique to each property and the requirements and costs are determined by the individual circumstances and the distance from the existing natural gas infrastructure. In all situations, the specific requirements for connection to the system are

determined by Questar Gas engineers, completed by qualified contractors and inspected by Questar Gas employees. All line extensions must comply with all applicable federal, state and Company standards.

In the general rate case Docket No 13-057-05, Questar Gas requested a number of changes to the line extension policy and on February 21, 2014, the Public Service Commission of Utah (Commission) approved the proposed changes.<sup>1</sup> In testimony, the Company indicated that the new guidelines would maintain the policy of sharing incremental new connection costs 50/50 (on average) between new and existing customers and allocate costs more equitably. The Company looks at the cost for line extensions in total for the entire system and does not look at main extensions or service line extensions in isolation. The total cost for line extensions is divided by the total distance of the lines completed to calculate the average cost per foot. The actual cost for main and service line extensions in 2014 has been used to calculate the average cost in this report.

The approval of the new line extension guidelines included a number of monitoring and reporting requirements. The Division of Public Utilities (Division) was directed to convene a workgroup with interested parties to review and evaluate changes to the Company's line extension policy and provide an annual report to the Commission no later than April 1<sup>st</sup> for each year of the pilot program. The specific requirements for both main and service line extensions were recently revised and approved by the Commission as the Questar Gas tariff PSCU 400 Section 9.03 – 9.06.<sup>2</sup>

### **MEETINGS AND ISSUES**

In compliance with the Commission order, the Division assembled a workgroup of the interested parties to discuss the policy change. Due to the requirements for this Docket and the ongoing legislative discussions for line extension guidelines, the interested parties met on multiple occasions. The workgroup held meetings on May 22, 2014, July 7, 2014 and January 22, 2015. The workgroup's meetings discussed main and service line extension projects and examined costs paid to third party contractors as well as costs incurred by the Company. The primary focus of the discussions was the reporting requirements and the record keeping the Company would need to maintain in order to monitor the internal cost component.

The external costs for line extensions can be totaled from the invoices paid to installation contractors and includes items such as: pipe, trench, installation labor, shade, backfill, pressure testing, asphalt/concrete and related installation costs. External costs will vary depending on the length of the project and the ground conditions in the installation area. The internal costs are paid by the Company and generally include: pre-construction engineering, proper pipe sizing,

---

<sup>1</sup> Docket No. 13-057-05.

<sup>2</sup> Docket No. 14-057-13, Report and Order dated March 25, 2015.

surveys, mapping, accounting, taxes and inspections. Internal costs are not allocated to specific jobs but are allocated to the general category of “line extensions”. A service line extension also includes the cost for the appropriate customer meter, riser and bracket.

During the 2014 Utah legislative session, HB 171 was passed and was codified in Utah Code Annotated § 58-55-308.1. This bill enables qualifying third party contractors to install natural gas facilities. The language in the law indicates that the standards and specifications for the installation would be included in the gas corporation’s tariff approved by the Public Service Commission. When the legislation was passed, the guidelines and specifications were not included or explained in the existing tariff and on June 20, 2014, the Company filed PSCU Tariff 400 requesting approval to modify the tariff to comply with the provisions of HB 171. Over the next several months, the Company worked with the Utah Home Builders Association to establish the requirements and guidelines and on February 27, 2015, the Company filed an amended tariff. The amended tariff was approved on March 25, 2015.

### **COMMISSION ORDERED AREAS FOR REVIEW**

In addition to forming a workgroup to study the issues related to the new line extension program, the Commission ordered several specific items to be monitored and included in an annual report.

#### **1. Provide an evaluation of the ratio of internal and external costs.**

In the general rate case testimony, the Company indicated that the internal and external costs represent a 50/50 split in the total cost of main and service line extensions.<sup>3</sup> External costs can be totaled and reviewed from invoices of zone bidders (outside contractors) that are hired to complete the line extension work. Internal costs for the Company are gathered from work orders, labor and other costs that are allocated to line extension work. The internal and external costs are totaled and reviewed on an annual basis. The totals for both the internal and external costs of main and service line extensions are then divided by the total distance of completed projects to calculate the average internal and external cost per foot. The cost per foot calculations are then used to determine the ratio of internal and external cost.

During 2014 the Company completed 784 main line extensions and added 1.2 million feet (226 miles) of main line pipe for an average main line extension of 1,524 feet. The Company also completed 10,549 service line extensions and added 518,455 feet (98 miles) of service line pipe for an average service line extension of 49 feet.

Exhibit 1 was prepared by Questar Gas and provides the cost per foot for main and service line extensions with both internal and external cost for 2014. The external (contractor) cost for main line extensions and was calculated to be \$8.18 per foot compared to \$9.49 per foot for service

---

<sup>3</sup> Direct Testimony of Austin C. Summers, Docket No. 13-057-05, p. 20, line 511.

line extensions. The Company calculated the internal cost for main line extensions to be \$3.78 per foot compared to \$10.69 per foot for service line extensions. Pages 2 and 3 of Exhibit 1 provide the detail for the internal cost included in main and service line extensions. A major component of the internal cost is related to the allocation of operational and inspection costs.

Page 4 of Exhibit 1 provides a cost ratio comparison for main and service line extension as presented in the general rate case compared to the cost allocation using the 2014 expenses. The results for 2014 show that as approved in the general rate case, new customers would pay 65% of the cost for new line extensions as opposed to the 50/50 cost sharing represented in the general rate case. (Exhibit 1, Column B, Line 13) The primary reason for the difference between the values used in the general rate case and the 2014 actual is due to the different mix of main and service line extensions and a more accurate allocation of internal cost.

The disparity between the cost sharing represented in the general rate case and the actual results for 2014 was addressed by the Company during the discussions for the tariff revision. The original testimony provided in the general rate case stated that “Under the proposed policy, existing customers would pay about half the cost through rate base.”<sup>4</sup> In order to more accurately allocate costs and achieve an approximately 50/50 sharing of costs between the new customers and the Company (existing customers), the Company agreed to include the meter and bracket cost with the internal cost paid by the Company. The amended tariff language also removes the reference to applicable taxes being paid by the new customer. This accounting change will help to equalize the cost for service line extensions between the Company paid cost and the customer paid cost. Column C & D of page 4 calculates the impact of the revised tariff change using the cost calculations from 2014. With the meter and bracket assigned to the Company’s internal cost, the new customer would pay 53% of the total cost before the tax calculation and 48% including the tax calculation. The Division will continue to monitor the impact of the accounting change on the actual results for 2015.

The 2014 internal and external cost information has recently been compiled and has not been audited by the Division. As part of the ongoing review of this program the Division will complete an audit of the 2014 historical information and report any significant findings to the Commission.

**2. Determine whether the new policy has resulted in an increase in gas service in rural counties.**

Representatives from Millard County and Emery County participated in the workgroup meetings and indicated that the new line extension policy would be beneficial to line extension projects in rural Utah. Two projects in Millard County and one project in Emery County were identified by the Company and the estimated cost savings under the new tariff were calculated. Based on

---

<sup>4</sup> Surrebuttal Testimony of Austin C. Summers, Docket No. 13-057-05, p. 7, line 141.

these estimations, all three projects were less expensive and had an expected savings of between 25% and 32%. While the cost savings have been projected, none of the projects are moving forward at this time due to reasons unrelated to the line extension policy. Exhibit 3 is a copy of the July 7, 2014 PowerPoint presentation and includes the rural county benefit calculation on page 4.

### **3. Identify the impacts to customers with various line extension lengths**

The goal of having a 50/50 cost sharing percentage calculation for line extensions is done on an average basis and is calculated annually. The calculation is done at the Company level and includes the averages of both main and service line extensions. On a case by case basis, the cost sharing for individual projects with only a service line extension or only main line extension will not represent an equal sharing of the cost between the new customer and the Company.

To review the cost impact of various main and service line lengths, the Division has prepared Exhibit 2. This report provides a summary of the expected costs for both the customer and Company for main and service line extensions of various lengths. Exhibit 2 separates the cost for main and service line extensions and calculates the estimated cost for various extension lengths. The shaded area in the middle of the report (Column D) matches the information provided by the Company in Exhibit 1.

The top portion of the report (lines 1 – 18) calculates the cost for service line extension with lengths ranging from 25 to 95 feet. This report calculates the cost to new customers for service line extension to be between 30% and 38% of the total cost. Column D, calculates the total cost for a 45 foot service line extension to be \$1,474. Of the total project cost, the customer would be expected to pay the variable cost plus the cost of the riser calculated to be \$505 or 34% of the total project cost (Line 15 & 16). The Company or other ratepayers would be responsible to pay for the internal costs plus the meter, bracket and taxes for a total of \$969 or 66% of the total project cost. The 45 foot length has been used as an example since the Company used 46 feet as the average length in the rate case and 49 feet has been calculated as the average length in 2014. This calculation would be representative of the cost to a builder or home owner to add a new home (service line).

The bottom portion of the report (lines 19 – 28) calculate the cost for a main line extension with lengths ranging from 75 to 1,500 feet. This report calculates the cost to new customers for main line extensions to be 61% of the total cost. Column D, calculates the total cost for a 110 foot main line extension to be \$1,474. Of the total project cost, the customer would be expected to pay the variable cost calculated to be \$900 or 61% of the total project cost (Line 25 & 26). The Company (other ratepayers) would be responsible to pay for the internal cost and taxes for a total of \$574 or 39% of the total project cost. This calculation would be representative of the cost to a developer for a short main line extension or a main line extension to a higher usage commercial property. As indicated above, the average main line extension in 2014 was 1,500 feet. Main line

extensions of any length are charged the variable cost per foot and the new customer would be responsible for 61% of the total project cost.

The combination of both the main line and service line extensions for various lengths along with the percent of contribution has been calculated on lines 29 – 32. On a total Company basis, the ratio of customer and Company paid cost represents approximately a 50/50 cost sharing percentage. This ratio will likely vary in future periods depending on the number and length of the main and service line extensions that are completed in any given year.

**4. Determine whether the new policy is resulting in an increase in participation in the THERMWISE® program.**

The builders energy efficiency program (2.11 THERMWISE® BUILDER REBATES) allows the builder to apply the rebate for installing energy efficiency measures toward the cost of the service line extension cost. The tariff reads as follows;

Builders may elect to receive either a rebate check or a rebate credit for installing furnaces and/or 2 x 6 exterior walls which meet the minimum efficiency qualifications listed in the Builder Rebates Table. A rebate credit will be applied against the Company-assessed meter and service line costs (as defined in section 9.04). In the case where the rebate credit exceeds the meter and service line costs, a rebate check will be issued to the Builder for the overage.<sup>5</sup>

This program is intended to encourage builders to promote energy efficient construction practices. As an example, a new home could be built with 2 x 6 exterior walls and apply for a \$350 rebate along with installing a high efficient furnace and apply for an additional rebate of \$200 - \$450. Using the example of a 45 foot service line extension cost, the contractor would be responsible for \$505 of the line extension charge but could be eligible for energy efficiency rebates of \$800.

This portion of the builder rebate program has only been in place since October 2014 and has not had sufficient time to be thoroughly implemented or evaluated. During the last three months of 2014 there were 38 homes constructed that took advantage of the builder rebate program. It is anticipated that additional builders will utilize this program in 2015. The Division will continue to monitor this program through the regular Demand Side Management reports and the DSM advisory group meetings.

**5. Review the tariff to determine if language changes are needed to improve transparency and or clarity**

---

<sup>5</sup> Questar Gas Company, PSCU 400, 2.11 THERMWISE BUILDER REBATES, p. 2-22.

During 2014 Utah legislative session, HB 171 was passed and was codified in Utah Code Annotated § 58-55-308.1. The language in the law indicates that the standards and specifications for the installation would be included in the gas corporation's tariff approved by the Public Service Commission. When the legislation was passed, the guidelines and specifications for main and service line extensions were not clearly explained in the existing tariff. On June 20, 2014, the Company filed PSCU Tariff 400 requesting approval to modify the existing tariff to comply with the provisions of HB 171.<sup>6</sup> Over the next several months, the Company worked with the Utah Home Builders Association to establish the requirements and guidelines. On February 27, 2015, the Company filed a motion to amend the proposed tariff language. The changes were approved by the Commission on March 25, 2015 and are effective April 1, 2015. No additional changes to the tariff language are needed at this time

**6. How the new policy may impact developers and the decisions for the proper sizing of main line extensions for future development.**

One of the concerns expressed during the general rate case was the proper sizing of main line extensions in order to accommodate future development. Under the previous program, the developer or land owner that paid for the line extension would be eligible for a credit if additional users were added to the main line extension within the next 5 years. This program became difficult for the Company to administer and was discontinued in the last general rate case.

The Questar tariff section 9.05, which was recently approved, clearly states that "The Company will be responsible for planning, designing and engineering the facilities in accordance with the Company's standards for materials, design and construction. Under the terms specified, the Company will be involved in the design and sizing of all projects and will be able to plan for future growth needs similar to what has occurred in the past.

**7. The bidding process for main line extensions that exceed \$200,000. The work group was asked to evaluate the issues raised regarding the self-installation of pipelines and whether the \$200,000 threshold should be lowered.**

In the general rate case order, the Commission requested that this issue be reviewed and addressed by November 1, 2014. Due to the ongoing negotiations between the Company and the Utah Home Builders Association (UHBA) along with the passage of HB 171, the issue could not be addressed in November and now appears to have been resolved.

For Company installed main line extensions, the current tariff language states the following;

If the main extension costs are estimated to exceed \$200,000, then the customer may request that the Company bid the job. Under such circumstances, the

---

<sup>6</sup> Docket No. 14-057-13



customer may review, at the Company's premises, the bids submitted from the Company's contractors.<sup>7</sup>

Based on the language already in the tariff, any main line extension with costs over \$200,000 may go through a bidding process at the customer's request. In addition, Section 9.05 of the current tariff allows all main and service line extensions to be completed by qualified installers (as defined by the Company) that are retained by the builder/developer. Under this program, developers could contract directly with qualified contractors to install main or service lines extensions in order to obtain the best price for the service needed.

#### **8. Self-installation of line extensions.**

As noted above, this issue has been resolved and clarified with the recent tariff change under Docket No. 14-057-13 and approved on March 25, 2015. The revised tariff includes language and defines the requirements for builder/developer retained qualified installers.

### **CONCLUSION**

The cost for main and service line extensions is intended to be shared between the new customers and the Company (existing customers) in an approximate 50/50 cost sharing arrangement. With the approved changes to the tariff to include the customer meter and bracket and taxes as internal costs, the intended sharing is more balanced and appears to be working as designed.

The new policy for line extension has been determined to be beneficial to rural counties in Utah and is also working well in conjunction with the THERMISE® energy conservation program. The Division will continue to monitor this program and will provide additional reports to the Commission over the course of the pilot program.

---

<sup>7</sup> Questar Gas Company, Utah Natural Gas Tariff PSCU 400, Section 9.03