BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF QUESTAR GAS COMPANY TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS	Docket No. 13-057-05

DIRECT TESTIMONY OF AUSTIN C. SUMMERS

FOR QUESTAR GAS COMPANY

July 1, 2013

QGC Exhibit 4.0

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I. INTRODUCTION

Q. Please state your name and business address.

A. Austin C. Summers, 333 South State Street, Salt Lake City, Utah 84111.

Q. By whom are you employed and in what capacity?

A. I am employed by Questar Gas Company (Questar Gas, QGC or Company) as the Supervisor of Regulatory Affairs. I am responsible for cost allocation, rate design, gas cost adjustments and forecasting. My qualifications are detailed in QGC Exhibit 4.1.

Q. Were your attached exhibits QGC Exhibit 4.1 through QGC Exhibit 4.12 prepared by you or under your direction?

A. Yes.

Q. What general areas will your testimony address?

A. I will discuss several matters including (1) the Company's class cost-of-service (COS) study; (2) the Company's rate design proposal; (3) proposed changes to the Company's tariff provision governing FT-1 qualifying criteria; (4) proposed changes to the Company's tariff governing the Basic Service Fee; (5) the Company's proposed changes to its tariff governing customer contributions in aid of construction on mains, services and meter sets; and (6) the proposed allowed revenue under the Conservation Enabling Tariff.

II. CLASS COST-OF-SERVICE STUDY

A. Class Cost of Service Study

Q. How did you begin your analysis?

A. I performed a complete COS study for the General Service (GS), Firm Sales (FS), Interruptible Sales (IS), Transportation Service (TS), Firm Transportation (FT-1), and Natural Gas Vehicle (NGV) rate classes. It should be noted that two customers, the one Municipal Transportation (MT) customer and the transportation special contract (FT2-C) customer are included in the TS class for the COS study. These two customers are both transportation customers.

Q. Later in your testimony, you propose revising the qualification criteria for the FT-1 rate class. Have you included the impact of that proposal in your class COS study?

A. Yes. The COS study includes in the FT-1 class only those customers that would continue to qualify for the FT-1 class. The FT-1 customers that would no longer qualify for this rate have been moved to the TS rate class. In every case where an allocation factor is affected by this change, two versions of that allocation factor have been developed. The COS model has the built-in option to select either the current FT-1 criteria or the proposed FT-1 criteria. The resulting COS model output will reflect that selection.

Q. Which COS study is the Company proposing?

A. The Company is proposing the COS study that includes the modified FT-1 qualifications.

B. Allocation Factors

Q. Please describe the allocation factors used in the COS study?

A. The Company uses 29 allocation factors in the COS study. QGC Exhibit 4.2 provides a brief description of each allocation factor. I will describe in greater detail the Distribution Plant Factor, the Distribution Throughput Factor and the Peak-Day Factor.

C. Distribution Plant Factor Study

Q. Will you please describe the Distribution Plant Factor Study?

A. The Distribution Plant Factor Study is an analysis of distribution plant installed to provide service to customers in each rate class. The types of distribution plant analyzed are meters, regulators, service lines and small diameter (6 inches and smaller in diameter) intermediate high pressure (IHP) main lines. The Distribution Plant Factor Study uses a non-proportional stratified random sample of active meters to measure the average investment for each plant category. In response to recommendations from the Cost-of-Service and Rate Design Task Force established in Docket No. 02-057-02, larger capacity meters are sampled at much higher rates than smaller capacity meters. Studies of this nature have been a central aspect of the Company's COS studies since the mid-

1960s.

Q. Please describe the changes to the Distribution Plant Factor Study since the COS task force?

A. In instances where the study analyzes a sample of a population, the sample remained the same. Where the study analyzes the entire population, the data was updated to include new additions to the population. Current cost levels for each type of facility in the analysis have also been updated. Finally, the book values as of December 31, 2012 for each plant category were used to keep the various aspects of the analysis in balance.

Q. Please describe how the Distribution Plant Factor is developed?

A. The Distribution Plant Factor begins with a non-proportional stratified random sample of installed meters to determine the average amount of plant installed for each meter type. QGC Exhibit 4.3, page 1, columns E and B shows the current meters by meter rating and number sampled.

Q. How was the amount of plant required to serve customers estimated?

A. Each meter selected in the sample was evaluated using information from the Company's Customer Care and Billing (CC&B) system, engineering files, and the Graphical Information System (GIS). Based on current cost estimates, the costs to reproduce the meter set, service line and the portion of main line attributable to the sampled meter were determined.

Q. How did you determine the amount of main line attributable to the sampled meters?

A. The study examines the main line directly connected to the service line serving a sampled meter. The study examines the main line within 1,000 feet of a service-tap point. Usually this translates into 500 feet in each direction. The length of each size of main line within the 1,000 feet is recorded, along with the number of service-line taps within the 1,000 feet. QGC Exhibit 4.3, page 2, shows the map from the GIS for an individual sampled meter. The map for this sampled meter, designated with a star, includes the measurements for main (1,000 feet of two-inch main line, with 25 service taps), and service line (41 feet of half-inch service line). The main line attributable to this meter (1,000 feet/25 taps, or 40 feet) is then priced at current cost.[1] The cost associated with the identified main line divided by the service-line taps is included in the Distribution Plant Factor Study.

Q. Why was 1,000 feet selected for the main line measurements?

A. One thousand feet was selected as the measured length in order to capture the character of the area surrounding a customer premises, including street crossings. Experience has shown that longer measurement lengths have a tendency to include dissimilar neighborhoods while shorter lengths tend to capture too few or no intersection crossings. Also, the effort required to perform this analysis increases substantially as the measurement length increases. One thousand feet produces reliable information regarding the size of mains installed in the vicinity of a customer, as well as the local density of customers attached to the same main. Additionally, the use of 1,000 feet is consistent with the methodology employed since the early 1980s.

Q. How is the service line cost determined?

A. The length and size of service line for each sampled meter is recorded. For the sampled meter shown on QGC Exhibit 4.3, page 2, the service line associated with this meter was 41 feet of half-inch pipe. The length of service line is then multiplied by current cost for the identified pipe size.

Q. How are the meter and regulator costs determined?

A. For each active meter installed in the system, a comparable model is identified. The current cost for the comparable model, along with standard ancillary facilities, was determined. These current cost amounts are then assigned to the sampled meters.

[1] The only exception is that if main with a diameter greater than six inches is found in the sample, the excess cost above the cost of six-inch main line is excluded. These excess costs are allocated using the Distribution Throughput Factor that is discussed below.

Q. How were the current cost levels established?

A. The cost estimates were provided by distribution engineering. The costs for IHP main and service lines are based on the actual pricing in effect for 2012, weighted by the footage installed in 2012. The costs for high-pressure service lines are based on recent actual projects adjusted to 2012 price levels. The current costs for meter sets are based on current engineering estimates for standard meter sets of like size. QGC Exhibit 4.3, page 3, lists the cost data for main, service line and meter sets used to price the facilities identified through the sample measurements.

Q. How is the sample used to establish the small-diameter IHP main investment by rate class?

A. QGC Exhibit 4.3, page 4, shows the calculation of plant investment for small-diameter mains for each rate class. Column C, lines 1-29, shows the average investment in mains by nominal meter rating at current cost. These average values are multiplied by the number of active meters in each rate class. The product of these calculations is shown in columns D through I, lines 1-29. The total for each rate class is shown on line 30. The sum of the values on line 30 is shown in column J. The total in column J, line 30, represents the total main-line investment at current cost attributable to the customers receiving service under the rate classes included in the COS study. The next step is to proportion this total to match the book investment for small-diameter mains (column K, line 31). The percentage reduction required to proportion the unadjusted total investment (column J, line 31) to equal the book investment is then applied to each line of column K to arrive at the adjusted class totals shown on line 31.

Q. How is the sample used to establish the service-line and meter/regulator investment by rate class?

A. QGC Exhibit 4.3, page 5, shows the calculation of plant investment for service lines for each rate class. QGC Exhibit 4.3, page 6, shows the calculation of plant investment for meters/regulators for each rate class. The service-line and meter/regulator investment by rate class is calculated the same way as described above for small diameter IHP mains.

Q. Why are the plant investment values, calculated at current cost, proportioned down to match book cost?

A. This step is part of this study to ensure that no component of plant is given too much weight when the three components of the Distribution Plant Factor Study are combined.

Q. What costs are allocated using the Distribution Plant Factor?

A. The costs allocated using this factor include: 1) the rate-base related costs, including return, taxes and depreciation; 2) operation and maintenance expenses related to distribution activities; and 3) a portion of administrative and general expense.

Q. What is the result of the Distribution Plant Factor Study?

A. The results are shown in QGC Exhibit 4.3, page 7, columns B-H, rows 5-7. The Distribution Plant Factor Study shows that 98.29% of distribution facilities are installed to serve GS customers, 0.40% are installed to serve FS customers, 0.21% are installed to serve IS customers, 0.93% are installed to serve TS customers, 0.16% are installed to serve FT-1 customers and 0.01% are installed to serve NGV customers.

D. Distribution Throughput Factor Study

Q. Please describe the Distribution Throughput Factor Study.

A. The Distribution Throughput Factor Study develops an allocation factor based on the commodity volumes delivered through the IHP distribution system. The factor is developed by identifying customers that are not connected to the IHP system and then subtracting the Dths delivered to those customers from the commodity-throughput numbers.

Q. What costs are allocated using the Distribution Throughput Factor?

A. The costs associated with large-diameter IHP main lines (greater than 6 inches in diameter) are allocated using the Distribution Throughput Factor. These facilities are generally sized for more than just local delivery requirements and, therefore, are excluded from the Distribution Plant Factor Study. The Distribution Throughput Factor is based on throughput quantities that reflect the underlying purpose of these facilities. Large-diameter main lines installed within the IHP system are typically designed to move gas from the high-pressure feeder-line system to the smaller distribution lines. These facilities benefit all customers connected to the IHP system. Customers that are not connected to the IHP system receive no benefit from these facilities and are allocated none of these costs. The booked cost of the large-diameter main lines is used to determine the portion of the distribution cost associated with these facilities.

Q. What are the results of the Distribution Throughput Factor Study?

A. The factor developed from the study is shown on QGC Exhibit 4.4 on line 7, columns B through H. The study shows on line 7 that some rate classes, such as the Transportation Service rate class, have very few customers connected to the IHP distribution system, while in the case of the GS class, nearly all of the customers are served from the IHP system. As a result, transportation customers are allocated a relatively small portion of costs associated with large-diameter mains.

E. Peak-Day Factor Study

Q. What is the Peak-Day Factor Study?

A. The Peak-Day Factor Study attributes responsibility for the design peak day between the rate classes. This factor is used to allocate costs related to the coincident peak demand of customers.

Q. Will you please explain the history of allocating some of the peak-day factor to interruptible customers?

A. Yes. The Commission's order in Docket No. 07-057-13 said that, "we are persuaded by the Division that interruptible customers contribute to peak demand and therefore these customers should receive some allocation of peak demand in the company's next cost-of-service study." In the Company's 2009 General Rate Case, it modified the Peak-day Factor Study to allocate to interruptible customers the costs associated with the portion of the design peak day that exceeds the average peak requirements of the firm customers.

Q. What is the Company's proposal regarding the inclusion of Interruptible customers in the Peak-Day Allocation Factor in this case?

A. The Company does not believe that interruptible customers should be assigned peak demand responsibility. Arguably, an interruptible customer benefits from being on a system built to handle a peak day because peak days are infrequent and, consequently, interruptions are also infrequent. However, in an actual peak day event, the interruptible customer will be curtailed and won't be contributing to the costs incurred in the peak day. If interruptible loads are included in the peak-day study, there is a risk that an excessive level of cost will be allocated to interruptible customers. Additionally, the Company believes the interruptible test Mr. McKay explains in his testimony will support assigning no peak-day costs to the interruptible classes.

Q. What design peak day is used in developing the Peak-Day Factor?

A. I have used the 2014 peak day from the 2013 IRP as the basis for this study. The Utah design peak day, updating for transportation contracts, for 2014 is projected to be 1,479,231 Dth.

Q. How is the Peak-Day Factor calculated?

A. The first step is to determine the portion of the design peak day that can be assigned directly to specific rate classes. These are the TS, FT-1 and NGV rate classes. The contract demand attributable to customers served under the FT-1 and TS rate classes is directly assigned. The total firm-contract demand for these two classes is 129,935 Dth. The NGV class is assigned 2,662 Dth of peak demand based on the average use per work day. The balance of the design peak day attributable to the GS and FS classes is 1,231,444 Dth. These calculations are shown on QGC Exhibit 4.5, lines 1 and 2.

Q. How is the 1,231,444 Dth of design peak day apportioned between the GS and FS rate classes?

A. An analysis of the population for these classes was performed using data from the Company's billing system to establish the proportionate responsibility for each class. This study involved estimating the contribution to peak for customers grouped by weather zones within the two remaining rate classes. The total estimated design peak day was calculated using individual customer data and was then summed by rate class. The remaining design peak day is allocated between these two classes based on their share of the calculated peak.

Q. What is the result of the Peak-Day Factor Study?

A. The results are shown on page 1, line 2 of QGC Exhibit 4.5. The GS class is responsible for 87.9% of the design peak, the FS class is responsible for 2.4%, the transportation classes are responsible for 9.5% and the NGV class is responsible for .20%.

Q. Are the results of the Peak Day Factor Study consistent with your expectations?

A. Yes. I have also shown on QGC Exhibit 4.5, line 4, the resulting load factor for each of the firm-sales classes. This shows that the GS class has an average load factor of 22.5% and the FS customers have an average load factor of 40.56%. These load factors are consistent with the requirements of the FS rate class (40% minimum load factor requirement) and historical experience for the GS class.

F. Cost-of-Service Results

Q. Please describe the results of the COS study.

A. QGC Exhibit 4.6 shows the results of the COS study. Lines 1-48 are a summary of the revenues, expenses and rate base allocated to the different rate classes using the factors explained above. Lines 49 and 50 show the Rate of Return and Return on Equity by class before the deficiency. Line 52 shows how the deficiency needs to be assigned to each class in order to avoid inter-class subsidies. Line 53 is the FT-1 COS adjustment that I will discuss below. Line 54 represents the total revenue requirement (COS with deficiency). Line 56 shows the revenue that needs to be collected from each class after giving each class a credited share of the general related revenues.

Q. You mention an FT-1 COS adjustment above. Is the Company proposing that the FT-1 class contribute less than their full COS?

A. Yes. The FT-1 rate class has historically been designed to recover revenue that exceeds the variable cost to serve, but falls short of fully allocated cost. With the adoption of the recommended criteria for FT-1 qualification, only those customers truly capable of bypass will be left on this schedule. The Company believes that in the interest of avoiding bypass this rate should be designed to cover less than the fully embedded cost-of-service.

Q. How was the proposed FT-1 COS adjustment derived?

A. The rates were calculated to collect 50% of the class cost of service. This adjustment is shown on QGC Exhibit 4.6, column G, line 53. This results in an FT-1 rate that is reasonable and does not represent an undue level of discrimination.

Q. In the past, the Company's NGV rate has recovered less than its full cost-of-service. Is this still being proposed?

A. No. As explained in Mr. McKay's testimony, the Company is proposing the NGV rate recover the full cost-of-service.

Q. Do you believe the proposed changes to the FT-1, TS, and NGV rate classes should be made gradually?

A. No. The principal of gradualism is often mentioned as a way to reduce rate shock to customers who may be moved to a higher rate. However, while rate stability is an important principal of rates, it isn't the most important principle in establishing rates that are fair and equitable. In his book, Principles of Public Utility Rates, James Bonbright mentions eight criteria that are needed to create a desirable rate structure. Of the eight, he lists three as being "primary, not only because of their widespread acceptance but also because most of the more detailed criteria are ancillary thereto."[2] The three criteria he lists as primary are:

1. Fairness of the specific rates in the apportionment of total costs of service among the different consumers.
2. Effectiveness in yielding total revenue requirements under the fair-return

2 (Bonbright, 1962)

standard.

3. Efficiency of the rate classes and rates blocks in discouraging wasteful use of service while promoting all justified types and amounts of use.

Criteria two and three can be obtained even with interclass subsidies, but the fairness objective fails when subsidies exist.

Q. Have there been obvious problems caused by the inter-class subsidy to the TS class?

A. Yes. Having TS rates that were below cost-of-service, coupled with the low market prices of gas for the last few years has allowed customers in the GS and FS class to arbitrage the rates and take advantage of the subsidy in the TS class. This inter-class subsidy has been with us for over two, going on three decades. Because of the "percentage increasing" of rates, little if any improvement in the inter-class subsidy has occurred. These customers have enjoyed over two decades of "gradualism" (i.e. lower than full cost-of-service). It is time to resolve these issues.

III. RATE DESIGN

Q. Please summarize your testimony of how the Company's rate design proposals are developed.

A. I will discuss the functionalization of costs and the development and use of cost curves. I will describe the Company's proposals for basic service fees, and I will demonstrate that declining block rate designs coupled with graduated basic service fees are effective rate design components for matching the cost to serve individual customers.

A. Functionalization of Costs

Q. Will you please explain the methodology used to design the proposed rates?

A. The first step in the rate design process is to categorize the components of the COS (O&M expenses, depreciation, taxes, and return on rate base) into functional categories. The three categories used are:

1. **Customer Costs:** Those costs that are driven by the number of customers

served. While these costs are primarily customer-related, they frequently increase with the size of the load being served.

2. **Demand Costs:** Those costs that are driven by the design peak day requirements of firm customers.

3. **Throughput Costs:** Those costs not specifically assigned to the customer or demand categories.

B. Development of Cost Curves

Q. How are cost curves developed?

A. The next step in the process is to develop an equation that captures the behavior of the three categories of costs over the pertinent usage range for each rate class. The first functional category is Customer Costs. Customer Costs vary by customer, with costs increasing at a decreasing rate as usage levels increase. These are the costs that justify the use of basic service fees and declining blocks to accurately track cost recovery to individual customers. The form of equation that best describes the behavior of these costs is a power function ($A \times X^{B}$ where X is annual usage, A and ^{B} are constants derived from a regression analysis). The second functional category is Demand Costs. These costs are related to the peak responsibility of each class. Demand Costs are recovered over winter usage from firm sales customers and in the form of a demand charge from firm transportation customers. These costs are included in the cost curves on an equal cents per Dth basis. The third functional category is Throughput Costs. These costs are reflected in the cost curve on an equal cents per Dth basis. The cost curve for each rate class can then be graphed to illustrate the behavior of the cost curve for that rate class over the range of usage expected for that class. Rates are then designed, including fixed charges, and volumetric rates (including declining block rate structures), to affect revenue recovery that follows the cost per Dth as closely as possible. QGC Exhibit 4.7, pages 1-2 show the cost curves for the GS and FS rate classes and the revenue per Dth collected from the proposed rates.

Q. Why didn't you show cost curves for the TS and IS classes?

A. Due to the current intra-class subsidies, the Company (see Mr. Mendenhall's testimony) chose to do a customer specific analysis of the TS and IS classes. Rather than comparing the rate design to a cost curve that is used for the entire system, Mr. Mendenhall's analysis calculates two cost curves specific to the TS class and IS class, respectively. His testimony provides a more thorough and detailed analysis for the rate design issues at hand.

Q. What do the cost curves in exhibit 4.7 illustrate?

A. The revenue or rate curve should follow the cost curve as closely as possible. When the rate curve deviates from the cost curve the customer at that given usage level is either paying more than or less than the cost of the service they are receiving. The goal of good rate design is to minimize this type of intra-class subsidy.

C. Basic Service Fee

Q. Are you proposing any changes to the Basic Service Fees (BSF)?

A. Yes. After extensive analysis in the COS task force and after reviewing the results of the updated Distribution Plant Study, the Company is proposing to "fine tune" the categories for the basic service fees to better group similar customers. Similar customers were determined by comparing meter capacity and investment in service line and main. The new categories are based on data from the updated Distribution Plant Factor Study. Attached as QGC Exhibit 4.8, page 1, is a table detailing the new Basic Service Fee categories as proposed.

Q. Can you provide further explanation as to why these categories were chosen?

A. Yes. QGC Exhibit 4.3 page 1 displays, in column H, the average total investment for each meter type. On QGC Exhibit 4.8, page 2, I have created a graph that shows the result of column H in graphical format. This graph shows that for all meters under 900 cubic feet per minute (cfm) the average service line, main and meter investment is similar, ranging from $1,099 to $1,737. The next group of similar meters ranges from 900 cfm to 7,000 cfm. I have also shown on the graph the proposed 3rd and 4th BSF groupings. The Company used these meter groupings to determine the breakpoints.

Q. How will the new refined ranges affect the current BSF charges?

A. The Company has calculated new Basic Service Fee charges for each of the proposed categories. The details of this calculation are provided as QGC Exhibit 4.8, Pages 3 and 4. The calculation is performed by first, determining the average gross investment for service lines, mains, and meters for each category. The average gross investment is then reduced to show only the relevant investment amounts to be included in the basic service fee. The reduction happens by multiplying the service line cost by 85%, gross main by 10% and gross meter by 100% (Column B, lines 1 - 3). The product of each is then netted down to the current book value (Lines 5 – 8). Return on that investment is added to taxes, billing and O&M costs, and depreciation costs (lines 9-15) to calculate the Basic Service Fee (line 17).

Q. Can you explain why 85% Service Line, 10% Main and 100% meter are used for the Basic Service Fee calculation?

A. The Basic Service Fee should be set at a level such that it collects the minimum required amount to serve an average customer in that Basic Service Fee category regardless of their usage. The Company uses 85% Service Line because not all customers have their own dedicated service line. For example, an apartment building may have four meters but only one service line serving all four meters. When the total number of system wide meters is divided by the total number of service lines system wide you get approximately 85%. Thus, 85% of the service line is assigned to the customer.

Traditionally the Company and the utility industry have given recognition to the fact that mains are sized to serve more than just individual customers. I have included a very small portion of the cost of IHP main (10%) to reflect this convention.

Additionally, each customer has an individual meter and receives 100% of the meter cost.

Q. What are the results?

A. QGC Exhibit 4.8, page 3, line 17 shows the proposed Basic Service Fee based on the proposed grouping. I have also included lines 20 – 22 to show the current meter grouping and the associated Basic Service Fee charges.

Q. What will be the general effect on customers?

A. The basic service fee in categories one, three, and four will increase, while the fee for category two will actually decrease. Additionally, since the category breakpoints have changed, many customers will be moving to a smaller block. Lines 19 and 22 of exhibit 4.8 page 3 show that many customers will be moving to a block with a lower basic service fee.

Q. Do different basic service fees affect the cost curves?

A. Yes. QGC exhibit 4.8 page 5 shows the cost curve for the GS class with both a $5 basic service fee and the $8 basic service fee that is being proposed. The top graph, which uses the $8 BSF, shows the cost curve and revenue curve much closer through all levels of usage than the bottom graph, which was the $5 BSF for a Category I Meter. The larger difference between the cost curve and revenue curve for usage from 2 Dth to about 11 Dths illustrates the inter-class subsidy that will continue to occur if the $5 BSF is not raised.

D. Design Rates and Fees to Collect the Required Revenue by Rate Schedule

Q. Have you calculated proposed rates that correspond to the revenue requirement calculated by Mr. Mendenhall and the COS study you presented earlier in this testimony?

A. Yes, a summary of the proposed rates is shown in QGC Exhibit 4.9. The rate design (green tabs) of “13-057-05 Model.xls” used to calculate these rates has been provided to all parties in this case as part of the filing.

IV. FT-1 QUALIFICATION CRITERIA

Q. Are you proposing changes to the FT-1 rate schedule?

A. Yes. I am proposing to change the qualifying criteria for the rate to ensure that the original intent of the FT-1 rate is met.

A. Background of FT-1 Rate

Q. Will you describe the FT-1 Rate and why it was established?

A. Due to large volume usage and proximity to interstate pipelines, certain Questar Gas customers were considered to be a by-pass risk. These customers could feasibly opt to connect directly to an interstate pipeline rather than obtaining service from Questar Gas. Retaining these customers provides benefits to other customers already on the system; therefore, the Company designed a rate that would provide an incentive for by-pass risk customers to remain on the local distribution system.

The rate was initially established as the FT rate in Docket No. 94-057-02. It was established "in response to the challenges of competition and bypass." Initially the rate was available to industrial customers who acquired their own gas supply and maintained a monthly load factor of at least 50%.

The rate was renamed and refined in 1999, Docket No. 99-057-20. In that case, the Company proposed splitting the FT rate into two separate classes[3]. The first, FT-1, was designed for customers who posed a risk of by-passing the Company's system and leaving all other customers to support their "stranded costs."

Q. What are the current qualifying criteria for the FT-1 rate?

A. Customers qualify for this rate if they have annual usage of at least 100,000 Dth and are located within five miles of an interstate natural gas pipeline or if annual usage is over 4,000,000 Dth.

Q. How many customers qualify for this rate?

A. There are currently nine FT-1 Customers.

Q. Under which of the two criteria do the current FT-1 customers qualify?

A. All nine customers qualify due to their proximity to an interstate pipeline and the fact that they use more than 100,000 Dth per year.

[3] The FT-2 was the second class to be created when the FT rate split. FT-2 is now the TS rate schedule.

B. By-pass Risk Calculation

Q. How is a customer's potential by-pass risk calculated?

A. By-pass risk is a function of usage and proximity to an interstate pipeline. A customer is considered a by-pass risk when the customer's cost of building its own pipeline to connect to the nearest interstate pipeline is less than the cost of the customer's DNG billing on the local distribution system. The point at which the costs to build a private pipeline and remain on the LDC system are exactly the same is referred to as the break-even point.

To determine the break-even point, I developed a matrix, attached as QGC Exhibit 4.10, in which distance from an interstate pipeline is correlated to a usage level. The point at which the distance and usage equal zero is the break-even point. The numbers less than zero represent the amount of yearly benefit customers would receive if they were to by-pass the LDC. Numbers greater than zero are the extra expense the customers would recognize yearly if they were to by-pass the system.

Q. What assumptions go into the calculation?

A. We included assumptions about the per foot cost of building a pipeline in the calculation. We estimated the costs by taking actual project costs for varying pipe sizes over the last five years and applying an inflation factor to make all projects comparable with current cost levels. We also estimated an interstate pipeline tap fee. Our analysis is fairly conservative because it is based on costs associated with 6-inch main.

Q. Please describe the results of the analysis?

A. The results of the analysis show that the FT-1 qualification criteria are too liberal given the original purpose of this rate class. The current criteria allow customers who are not a by-pass risk to qualify for this discounted rate.

Q. Is the Company proposing more restrictive criteria?

A. Yes. The Company proposes that in order to qualify for the FT-1 rate a customer must use at least 600,000 Dth annually and an additional 225,000 Dth for every mile away from the nearest interstate pipeline. For example, a customer located two miles from an interstate pipeline would be required to use at least 1,050,000 Dth annually (600,000 + (225,000 x 2)) = 1,050,000).

Q. What affect will this change have on current FT-1 customers?

A. If the proposed criteria are applied, three customers will remain on the FT-1 rate schedule. The other six customers will be moved to the TS rate schedule. I have attached, as QGC Exhibit 4.10 page 2, a graph that illustrates the analysis. Usage is shown on the X axis, while distance from the interstate pipeline is detailed on the Y axis. The lower line (B) on the graph represents the break-even point, and the upper line (A) represents the proposed FT-1 criteria. Each individual point on the graph represents a customer meter or combination of meters. Note that customers who fall to the left of the criteria line will not qualify for the new rate, while those to the right remain on the FT-1 schedule.

Q. What affect will this change have on the total gas bill of a current FT-1 customer that would be moved to the TS class?

A. Exhibit 4.10, page 3 of 3 shows the effect on the total gas bill of the six customers moving from FT-1 to TS. The exhibit was calculated using the distribution rates proposed in this case and an estimated $3.50 rate for commodity and $0.20 transportation charges. Column E, row 20 shows that the average change for these customers is an increase of $2.52%

Q. Are you proposing to introduce a demand charge into the FT-1 rate design?

A. Yes. To help the Company better manage the system and more accurately plan for the true needs of our firm customers, the company is proposing that a demand charge be included in the FT-1 rate. Since the FT-1 rate is designed to be less than full cost, the company proposes to set the demand charge at one half of the demand charge in the TS class.

V. NEW MAINS AND SERVICES

Q. Please summarize the current costs for new mains and services that are typically charged to new customers?

A. There are two types of costs that are being charged to new customers: external costs and internal costs.

Q. What are external costs?

A. External costs are third-party costs, like costs for contractors. When a new main or service is installed, it is typically installed by an outside contractor. External costs are costs associated with that contractor's work, including trenching and laying pipe, the pipe materials, backfill and compaction. External costs can also include permitting and pavement restoration.

Q. What are internal costs?

A. Internal costs are those costs incurred by the work of Questar Gas' employees, as opposed to third-party contractors. These internal costs are summarized in the table below.

Pre-Construction	The Company's Pre-Construction Department is the first group to be in contact with a customer initiating new service. The Pre-Construction Department acquires all of the initial information needed to start a new main or service project, including customer loads for pipe sizing and construction plans for gas main and service location. The Pre-Construction Department also aids in coordinating the activities of multiple Company departments, and serves as a liaison between Questar Gas and the new customer.
Right-of-Way	The Right-of-Way Department ensures that the company has the necessary rights-of-way in each new project.
Surveying	The Surveying Department surveys real property for right-of-way acquisition.
Engineering/Design	The Engineering Department designs a new system according to Company standards and specifications and ensures that the Company's distribution system can handle the additional load.
Operations	Occasionally, a Company crew does work associated with new lines. For example, Company crews tie new lines into existing infrastructure.

Inspection	New mains or services installed by a contractor are inspected by Company personnel for compliance with Company standards and specifications. Company personnel also document the installation and take field notes.
Mapping	Each new main or service must be mapped for locating, operations and integrity management.

Q. How does the Company determine external costs for main and service lines?

A. The contractor costs are bid out by zones. The external costs are the actual costs charged by a successful zone bidder for a job, along with any other actual costs associated with the job (i.e. permitting).

Q. How are the internal costs for main and service lines calculated?

A. Each year, a team analyzes the work orders for new mains and services. Once the costs have been analyzed and deemed to be legitimate costs, they are divided by the footage that was installed that year to determine how much cost per foot should be charged.

Q. What is the current ratio between external and internal costs?

A. About 50% of the costs are external and 50% of the costs are internal.

Q. How does the Company currently bill a new customer for external and internal costs?

A. The Company combines the external and internal costs together to create a total cost of the project and then deducts an allowance from the total.

Q. Is there a cost sharing between the new customer and existing customer?

A. Yes. As was determined in Docket No. 02-057-02, and adjusted for in the Tariff Change Docket No. 11-057-T02, the allowance has been designed to have the new customers and existing customers share, on average, incremental costs of main and service lines 50-50.

Q. How has this policy worked in the past?

A. Reasonably well, however, the refund and contribution policies have been administratively burdensome to the Company and confusing to developers and builders.

Q. Is the Company proposing to simplify and streamline the existing policy?

A. Yes, keeping the long-standing policy of sharing incremental costs 50-50. The Company proposes to do away with varying allowance amounts and refunds over a five-year period and instead simply require a cash contribution in aid of construction (CIAC) from a new customer equal to the external costs. The Company would be responsible for the internal costs. The Company would continue to capitalize the internal costs and include them in the cost of the project.

Q. How does this support the long-standing policy of sharing costs 50-50?

A. Currently, the average external cost per foot for main and service lines are approximately equal to the internal costs on a per foot basis. The table below shows the average cost per foot of mains and services. For each project, it is anticipated that half the total cost will be paid by the new customer while the other half will be covered by Questar Gas.

	External (Contractor) Costs	Internal (QGC) Costs
Mains	$6.83	$7.00
Services	$9.46	$9.00

Q. Why does the Company prefer the proposed policy?

A. The new policy, like the existing policy, splits the costs equally between existing and new customers, but there are benefits to both Questar Gas and the new customers.

Q. What are the benefits for new customers?

A. New customers benefit because up-front costs are lower. Under the existing policy, a customer may have to wait up to five years before it receives all of the allowances. Under the proposed policy, the new customers pay a single, defined CIAC and no future refunds occur. The proposed policy is also easier to explain because contractor costs are simple, and directly attributable to the customer's specific job.

Q. How does Questar Gas benefit under the proposed policy?

A. The proposed policy is simple to administer and will reduce costs associated with tracking and refunding allowances.

Q. Is the Company proposing any other changes to the way it charges new customers for main and service line and meter facilities?

A. Yes. Currently the Company charges the new customers for meters, as part of the service line cost. The Company is proposing to break out the meter and charge the customer directly for the meter costs.

Q. Will the Company offer any offset or reduction for the meter costs?

A. Not at this time. However, the Company plans to propose in its next Energy Efficiency docket to allow new customers who participate in specific ThermWise® programs to apply their rebates to the cost of the meter.

Q. Have you prepared a tariff sheet reflecting these changes?

A. Yes. The proposed tariff sheets are shown in QGC Exhibit 3.37, sections 9.03 and 9.04.

Q. Are you proposing that this policy be used for residential customers only?

A. No. The new policy would apply to any new customer that would be connecting to an intermediate high pressure (IHP) main. If a customer requires high pressure, the existing tariff policy under “other main extensions” will continue toapply.

VI. CET ALLOWED REVENUE PER CUSTOMER

Q. The Conservation Enabling Tariff (CET) requires that the annual revenue per GS customer be calculated. Have you prepared a calculation of the allowed annual revenue and the monthly spread of the annual revenue per customer to be used in conjunction with the CET?

A. Yes. QGC Exhibit 4.11 shows the calculation of the allowed annual GS revenue per customer. Line 13, Column B contains the total revenue requirement assigned to the GS class. This comes from the Rate Design Summary (QGC Exhibit 4.9 page 1, column I, line 18). This amount is divided by the average number of GS customers in the test period to arrive at the annual revenue per customer of $309.06. QGC Exhibit 4.11 shows the calculation of the monthly allowed CET amounts for the GS class. The calculation of the spread of the annual revenue per customer over the 12 months is based on the forecasted monthly revenues for 2014.

Q. Have you calculated the annual bill for a typical GS customer based on the Company's proposed revenue requirement, COS study and rate design?

A. Yes. QGC Exhibit 4.12 shows the monthly bill amounts for the typical customer using current rates and the proposed rates. Column F, row 14 shows that the typical GS customer using 80 Dth per year would realize an increase of 2.45%.

Q. Does this conclude your testimony?

A. Yes.

State of Utah)
) ss.
County of Salt Lake)

I, Austin C. Summers, being first duly sworn on oath, state that the answers in the foregoing written testimony are true and correct to the best of my knowledge, information and belief. Except as stated in the testimony, the exhibits attached to the testimony were prepared by me or under my direction and supervision, and they are true and correct to the best of my knowledge, information and belief. Any exhibits not prepared by me or under my direction and supervision are true and correct copies of the documents they purport to be.

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Austin C. Summers

SUBSCRIBED AND SWORN TO this 1st day of July, 2013.

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Notary Public