DIRECT TESTIMONY OF COST OF SERVICE AND RATE DESIGN PANEL

Q. Please state the names of the members of the Cost of Service and Rate Design Panel ("Panel").

A. We are Eric H. Meinl and Evan M. Crahen.

Q. Mr. Meinl, please state your business address.

A. My business address is 6363 Main Street, Williamsville, New York 14221.

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

A. I am employed by National Fuel Gas Distribution Corporation ("Distribution" or the "Company") as General Manager in the Rates and Regulatory Affairs Department.

Q. Have you provided your educational and professional experience elsewhere in this proceeding?

A. Yes, I have provided this information in the Direct Testimony of Eric H. Meinl in this proceeding.

Q. Mr. Crahen, please state your name and business address.

A. My business address is 6363 Main Street, Williamsville, New York 14221.

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

A. I am employed by Distribution as a Regulatory Analyst II in the Rates and Regulatory Affairs

Department.

Q. Have you provided your educational and professional experience elsewhere in this proceeding?

A. Yes, I have provided this information in the Direct Testimony of Evan M. Crahen in this proceeding.

Q. What is the purpose of the Panel's direct testimony?

A. The purpose of this panel's direct testimony is to describe: (1) the cost of service study, which complies with the New York State Public Service Commission's ("Commission") Order issued on August 25, 2004, in the statewide unbundling proceeding (Case 00-M-0504); (2) marginal transmission, distribution and customer costs; and (3) the proposed rate design and tariff changes. It should be noted that the cost of service study has been completed to comply with the August 25, 2004 Commission Order and does not represent an endorsement of the Order's methods.

Cost of Service - Overview

Q. Please summarize the layout of the Exhibits and Workpapers related to the embedded cost of service study you are presenting in this proceeding.

A. The embedded cost of service study presented in this proceeding is voluminous and relies on a number of special studies and related Workpapers. For the convenience of the parties reviewing the study, an overall summary of the layout of Exhibits and supporting Workpapers is provided on pages 4 through 7.

	Total Company "Bundled"	Delivery	Natural Gas Supply (NGS)	Billing and Payment (B&P) Processing
Exhibits				
Total Company Proposed Rates Service Class Allocation	Exhibit ____ (COSRD-1) Schedule 1	Exhibit ____ (COSRD-1) Schedule 2	Exhibit ____ (COSRD-1) Schedule 3	Exhibit ____ (COSRD-1) Schedule 4
Total Company Proposed Rates Customer Cost Analysis	Exhibit ____ (COSRD-1) Schedule 5			
Total Company Current Rates Service Class Allocation	Exhibit ____ (COSRD-2) Schedule 1	Exhibit ____ (COSRD-2) Schedule 2	Exhibit ____ (COSRD-2) Schedule 3	Exhibit ____ (COSRD-2) Schedule 4
Total Company Current Rates Service Class Allocation Factors	Exhibit ____ (COSRD-2) Schedule 5			
Total Company Class Allocation Factor Report	Exhibit ____ (COSRD-2) Schedule 6			
Total Company Current Rates Classification Allocation	Exhibit ____ (COSRD-3) Schedule 1			
Total Company Current Rates Classification Allocation Factor Report	Exhibit ____ (COSRD-3) Schedule 2			

	Total Company "Bundled"	Delivery	Natural Gas Supply (NGS)	Billing and Payment (B&P) Processing
Workpapers - Studies				
Supply Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 Supply Bundled	Workpaper COSRD-1 Schedule 2 Supply Delivery	Workpaper COSRD-1 Schedule 3 Supply NGS	Workpaper COSRD-1 Schedule 4 Supply B & P
Storage Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 Storage Bundled	Workpaper COSRD-1 Schedule 2 Storage Delivery	Workpaper COSRD-1 Schedule 3 Storage NGS	Workpaper COSRD-1 Schedule 4 Storage B & P
Transmission Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 Transmission Bundled	Workpaper COSRD-1 Schedule 2 Transmission Delivery	Workpaper COSRD-1 Schedule 3 Transmission NGS	Workpaper COSRD-1 Schedule 4 Transmission B & P
Distribution Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 Distribution Bundled	Workpaper COSRD-1 Schedule 2 Distribution Delivery	Workpaper COSRD-1 Schedule 3 Distribution NGS	Workpaper COSRD-1 Schedule 4 Distribution B & P
B & P Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 B & P Bundled	Workpaper COSRD-1 Schedule 2 B & P Delivery	Workpaper COSRD-1 Schedule 3 B & P NGS	Workpaper COSRD-1 Schedule 4 B & P B & P
Comp. ES Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 Comp. ES Bundled	Workpaper COSRD-1 Schedule 2 Comp. ES Delivery	Workpaper COSRD-1 Schedule 3 Comp. ES NGS	Workpaper COSRD-1 Schedule 4 Comp. ES B&P
Clearing Function Proposed Rates Service Class Allocation	Workpaper COSRD-1 Schedule 1 Clearing Bundled	Workpaper COSRD-1 Schedule 2 Clearing Delivery	Workpaper COSRD-1 Schedule 3 Clearing NGS	Workpaper COSRD-1 Schedule 4 Clearing B&P

	Total Company "Bundled"
Service Class Allocation Factor Report Current Rates All Functions	Workpaper COSRD-2 Schedule 6
Supply Function Current Rates Classification Allocations	Workpaper Exhibit ___ (COSRD-3) Schedule 1 Supply
Storage Function Current Rates Classification Allocations	Workpaper Exhibit ___ (COSRD-3) Schedule 1 Storage
Transmission Function Current Rates Classification Allocations	Workpaper Exhibit ___ (COSRD-3) Schedule 1 Transmission
Distribution Function Current Rates Classification Allocation	Workpaper Exhibit ___ (COSRD-3) Schedule 1 Distribution
B & P Function Current Rates Classification Allocation	Workpaper Exhibit ___ (COSRD-3) Schedule 1 B & P
Comp. ES Function Current Rates Classification Allocations	Workpaper Exhibit ___ (COSRD-3) Schedule 1 Comp. ES
Clearing Function Current Rates Classification Allocation	Workpaper Exhibit ___ (COSRD-3) Schedule 1 Clearing

Workpapers Special Allocation Studies into Functions	
Plant Allocation - General Plant Reserve Allocation - General Plant Depreciation Expense Allocation - General Plant	Workpaper General Plant Allocation
Structures Allocation	Workpaper Structures Allocation
All Labor Allocation	Workpaper All Labor Allocation
Consumer Services Allocation	Workpaper Consumer Services
A&G Allocator	Workpaper A&G Allocation
Workpapers Special Allocation Studies into Classification	
Mains Study Customer/Demand Allocation	Workpaper Mains Customer/Demand
Workpapers Special Allocation Studies into Service Classes	
Cogeneration Allocation	Workpaper Cogeneration Allocation
Main Allocation Study <4″ / >=4″ Allocation	Workpaper Mains 4″ Allocation
Service Line Service Class Allocation	Workpaper Services Allocation
Meter Investment Service Class Allocation	Workpaper Meters Allocation
Industrial M&R Service Class Allocation	Workpaper Industrial M&R Allocation
Uncollectibles Service Class Allocation	Workpaper Uncollectibles Allocation
Customer Service Allocation	Workpaper Customer Service Allocation
Sales Promotion Allocation	Workpaper Sales Promotion

Q. Please state the purpose of a fully-allocated, cost of service study.

A. A fully-allocated, cost of service study assigns to each revenue or customer class its proportionate share of the Company's total cost of service. Fully-allocated, cost of service study results can be utilized to determine the relative cost of service for each class of customers and to help determine the individual class revenue requirements. Fully-allocated, cost of service studies can also be used to determine the appropriate rate structures of individual customer classes.

Q. Please describe the general procedure employed in performing the fully-allocated, cost of service study.

A. Prior to the unbundling proceeding (Case 00-M-0504), the general procedure employed in performing fully-allocated, cost-of-service studies consisted of four separate steps. The four separate steps were: (1) functionalization of plant and operating expenses; (2) classification of costs; (3) derivation of allocation methods; and (4) the actual allocations of plant and expense items to the customer classes.

The unbundling proceeding added a fifth step that separates costs further into specific "Buckets" ("Buckets" or "Functions"), and a sixth step that assigns each functional cost to the unbundled services. For Distribution, these unbundled services are Delivery, Natural Gas Supply ("NGS") and Billing and Payment Processing ("Billing and Payment" or "B&P").

The first step, functionalization of plant and operating expenses, identifies and separates plant and cost elements into specific categories based on the various characteristics of utility operations. For Distribution, the functional cost categories for plant include natural gas production, transmission, distribution, general, and intangible plant. Operating expenses are functionalized as natural gas production, gas supply, transmission, distribution, customer accounts, customer service, and administrative and general. The Federal Energy Regulatory Commission ("FERC") Uniform System of

Accounts defines the standards for the functionalization of plant and operating expenses.

The second step of the general procedure used in performing fully-allocated, cost-of-service studies is the classification of costs. The classification of costs further separates the functionalized plant and operating expenses into four basic components. The four basic components of cost classification are: (1) demand or capacity-related, (2) commodity or energy-related, (3) customer-related, and (4) revenue-related. Demand or capacity costs are related to plant and expenses incurred due to a customer's peak load requirement. The number of customers or the amount of annual usage does not directly impact the level of demand costs. Commodity or energy costs are incurred in proportion to the customer's volumetric gas consumption. Neither demand-related plant and expenses nor customer-related plant and expenses impact the level of commodity costs. Costs associated with providing service to a customer are defined as customer-related costs. Costs associated with the customer's total annual use of gas, or the customer's total peak demand for gas, are not included in customer-related costs. Revenue-related costs are costs which vary by the amount of revenue received by the utility. Each of the previously functionalized costs is further identified as related to one or more of these cost classes.

The third step of the general procedure used in performing fully-allocated, cost-of-service studies is the derivation of allocation methods. The essential element in deriving reasonable cost-of-service allocation methods is the establishment of operating relationships between customer gas service requirements and the cost incurred by Distribution in meeting these requirements. These relationships are established by analyzing the gas system design and operations, Distribution's accounting records, and load data and sales revenues by revenue classifications. From the results of the analyses, methods of direct assignment and common plant allocation are chosen for all plant and expense elements. Direct assignments of plant and expenses to particular customers or classes of customers are made on the basis of special studies wherever the necessary data is available. These assignments are developed by detailed analyses of maps and records, work order descriptions, property records and/or customer accounting records. Within time and budgetary constraints, the greater the magnitude of cost responsibility based upon direct assignments, the less reliance need be placed on common plant allocation methodologies associated with joint-use plant. Common or joint-use plant allocation methodologies are chosen by analyzing the distinguishing operating characteristics of each customer class. These operating characteristics include annual gas consumption, peak period usage, load factor, and the numbers of customers in a particular class.

The fourth step of the general procedure used in performing fully-allocated, cost-of-service studies is the actual allocation of plant items and expense items to the customer classes. Actual allocation entails the application of previously chosen common allocation methodologies to the functionalized and classified plant and expenses that have not already been directly assigned.

Q. Please provide a general description of the fifth step where costs are separated into specific Buckets, as required by the Commission in Case 00-M-0504.

A. Using the books and records of the Company, the traditional cost of service study was separated into the "Buckets" outlined in Appendix A of the November 9, 2001 Order in Case 00-M-0504. The Buckets are:

(1) Supply Function;
(2) Storage Function;
(3) Transmission Function;
(4) Distribution Function;
(5) Billing and Payment Processing Function;
(6) Competitive Energy Services Function; and
(7) Clearing Accounts Function (including Customer Care).

Q. Please describe the Supply Function.

A. The Supply Function includes all direct production oriented plant and expenses. Also included are indirect costs for general plant and operations and maintenance ("O&M") expenses resulting from allocation studies. These studies will be described in more detail later in this testimony.

For Distribution, costs associated with Production Plant (both plant and O&M) are more closely aligned with the Transmission Function in that they are for the most part small gathering-type plant attached to local production wells, and not part of the system that provides for Natural Gas Supply Service. In compliance with the November 9, 2001 Order in Case 00-M-0504, Purchase Gas Expense (Account 401999) and Other Gas Supply Expense (Accounts 807.1 - 813) have been allocated between the Supply and Distribution Function. Uncollectible Accounts (Account 904) follows operating revenues, as prescribed in the Order.

Q. Please describe the Storage Function.

A. The Storage Function includes all direct storage-oriented plant, which for Distribution is Gas Storage Inventory. In Distribution's last base rate case (Case 07-G-0141), storage inventory was removed from rate base, and treated as an interest expense to be recovered through the merchant function charge. Therefore, storage inventory has been excluded from this study. Distribution does not have any storage O&M expenses and no indirect allocations to the Storage Function.

Q. Please describe the Transmission Function.

A. The Transmission Function includes all direct transmission-oriented plant and expenses. These include plant accounts 365 through 369 and O&M expenses in Control Accounts 401500 (Operating Expense - Transmission) and 402500 (Maintenance Expense - Transmission). Also included are indirect costs for general plant and O&M expenses resulting from the allocation studies, as well as all Production Plant costs, as described above.

Q. Please describe the Distribution Function.

A. The Distribution Function includes all direct distribution-oriented plant and expenses. These include plant accounts 374 through 387 and all O&M expenses in Control Accounts 401600 (Operating Expense - Distribution) and 402600 (Maintenance

Expense - Distribution). Also included are direct O&M costs for meter reading in Control Account 401700 (Operating Customer Account Expense) and Utility Energy Services costs in Control Accounts 401800 (Operating Customer Service and Information Expense) and 401850 (Operating Sales Expense). Indirect costs for general plant and O&M expenses resulting from the allocation studies were also included. As described above, the Distribution Function includes a portion of Purchase Gas Expense (Account 401999), Other Gas Supply Expense (Accounts 807.1 - 813) and the Uncollectible Account (Account 904).

Q. Please describe the Billing and Payment Processing Function.

A. The Billing and Payment Processing Function does not include any direct plant accounts or direct O&M expenses. The Billing and Payment Processing Function is embedded within Control Account 401700 (Operating Customer Account Expense) and was derived via the allocation studies. General Plant accounts and O&M expenses (e.g., Uncollectible Accounts and

Administrative and General) were also allocated to the Billing and Payment Processing Function.

Q. Please describe the Competitive Energy Services Function.

A. Distribution does not have a Competitive Energy Services function, and as a result, the Company has not allocated plant accounts or O&M expenses to this function.

Q. Please describe the Clearing Account Function.

A. Appendix A of the November 9, 2001 Order in Case 00-M-0504 ("November 9, 2001 Unbundling Order") describes the Clearing Account Function as Uncollectibles (supply and non-supply) and Customer Care. The Clearing Account Function, as defined in the November 9, 2001 Unbundling Order, is embedded within Control Account 401700 (Operating Customer Accounts Expense) and was derived via the allocation studies. General Plant accounts and O&M expenses (including Administrative and General) were also allocated to the Clearing Account Function. Uncollectibles were not included in the Clearing Account Function, but were included in the Functions that had operating revenues (specifically the Supply Function, Distribution Function and the Billing and Payment Processing Function). This was completed to allow for the allocation of costs based on revenues.

Q. Please describe the sixth step in the embedded cost of service study.

A. The sixth step assigns each Function by Service Class to the unbundled service of Delivery, Natural Gas Supply, or Billing and Payment Processing. The summation of the three unbundled services is the Total Cost for the Company, which is titled Total Company "Bundled Service." The assignment of each function to these unbundled services was completed in accordance with the following matrix:

Function	Delivery Service	Natural Gas Supply Service	Billing and Payment Processing Service
Supply Function		100.00%	
Storage Function		100.00%	
Transmission Function	100.00%		
Distribution Function	100.00%		
Billing and Payment Processing Function			100.00%
Competitive Energy Services Function	100.00%		
Clearing Accounts Function	52.72%		47.28%

Cost of Service - Classification

Q. Please describe the classification step in the cost of service study.

A. The classification step in the cost of service study classifies the costs into a Demand component, Customer component, Commodity component, or a Revenue component. Demand or capacity costs are related to plant and expenses incurred to serve a customer's peak load requirement. Annual usage does not directly affect the level of demand costs. Commodity costs are incurred in proportion to the customer's volumetric consumption.

The classification factors outlined in Exhibit___(COSRD-3), Schedule 1, Column S, were used throughout the seven Functions. For example, General Plant Office Equipment - Furniture (Account 391.1) was classified as 26.08% Demand and 73.92% Customer, regardless of whether the plant was in the Distribution Function or the Supply Function. Distribution Mains (Account 376) were assigned 58.56% Customer and 41.44% Demand based on the Mains study described below. General Plant Structures (Account 390) and the associated Land (Account 389) were based on the Structures study described below. Office Equipment - Furniture, General and Computers (Account 391.1, 391.2 and 391.3, respectively) and Communication Equipment (Account 397) were based on the All Labor study described below.

Referencing Exhibit___(COSRD-3), Schedule 1, Page 1, Gas Plant in Service totaled $1,491,012,000. $434,410,422 of this total is Demand related and $1,056,601,578 of this total is Customer related. There is no Commodity or Revenue related Gas Plant in Service. The classification factors used for Gas Plant in Service were also used for the Accumulated Reserve for Depreciation (Exhibit___(COSRD-3), Schedule 1, Page 2) and Depreciation Expense (Exhibit___(COSRD-3), Schedule 1, Page 3).

Referencing Exhibit___(COSRD-3), Schedule 1, Page 4, the deferred Commission Assessment was classified based on the classification of the O&M Regulatory Expense (Account 928), which is outlined on Page 8 of Exhibit___(COSRD-3). Schedule 1, Page 5 of Exhibit___(COSRD-3) provides the Direct Labor O&M expense. In total, for Direct Labor O&M expense, $8,238,396 was classified as Demand, $28,671,724 was classified as Customer, $544,561 was classified as Commodity, and $5,338,801 was classified as Revenue. Exhibit___(COSRD-3), Schedule 1, Pages 6 through 8, provides the direct O&M expense.

In accordance with page 24 of the Commission's August 25, 2004 Order in Case 00-M-0504, Uncollectible Accounts expense (Detail Account 904) has been classified to Revenues. In the same Order, at page 20, customer care (which is represented by portions of customer accounts expense included in Detail Accounts 903 and 901) pertaining to commodity should also be allocated based on Revenues.

Administrative and General Expenses are allocated on Pages 7 and 8 of Exhibit___(COSRD-3), Schedule 1, using a separate study (explained later in this testimony) which was provided in the Workpapers accompanying this panel testimony. The classifications used are provided in Column S of Exhibit___(COSRD-3).

Schedule 2 of Exhibit___(COSRD-3) is the Classification Allocation Factor Report and summarizes the factors used for Total Company (Page 1), the Supply Function (Page 2), the Storage Function (Page 3), the Transmission Function (Page 4), the Distribution Function (Page 5), the Billing and Payment Function (Page 6), the Competitive

Energy Services Function (Page 7), and the Clearing Accounts Function (Page 8). Total Company is a summation of the seven individual functions. As noted above, special studies will be explained below.

Cost of Service - Service Class Allocation

Q. Please explain Exhibit___(COSRD-2), Schedule 5.

A. Exhibit___(COSRD-2), Schedule 5, provides the Allocation Factors by cost line used to allocate the costs into service classes. The Total Company is a summation of the individual seven Functions and all seven Functions were classified with the same Allocation Factors. The individual Service Class Allocation Factor Reports by Function are included in the Workpapers accompanying this panel testimony.

Q. Please describe Exhibit___(COSRD-2), Schedules 1 through 4.

A. Exhibit___(COSRD-2), Schedule 1 is the Total Company Bundled Service, by service class, for current rates. Distribution's Total Company Bundled Service is the summation of: (1) the Total Company Delivery Service (Exhibit___(COSRD-2), Schedule 2), (2) the

Total Company Natural Gas Supply Service (Exhibit___(COSRD-2), Schedule 3),and (3) the Total Company Billing and Payment Service (Exhibit___(COSRD-2), Schedule 4). The individual Functions by Service Class were allocated to the Delivery, Natural Gas Supply, and Billing and Payment Service by the matrix noted above. The Total Company Delivery Service is a summation of the Delivery Service for the individual seven Functions. The Total Company Natural Gas Supply Service is a summation of the Natural Gas Supply Service for the individual seven Functions. Finally, the Total Company Billing and Payment Service is a summation of the Billing and Payment Service for the individual seven Functions.

Q. Please describe Exhibit___(COSRD-1), Schedules 1 through 4.

A. Exhibit___(COSRD-1) was prepared using the same format described above for Exhibit___(COSRD-2), Schedules 1 through 4, with the only exception being that Exhibit___(COSRD-1) is at proposed rates, where Exhibit___(COSRD-2) is at current rates. The classifications and allocations to service classes have remained the same. As can be seen from the summary page for Total Company Bundled Service, the proposed rates generate a projected rate of return ("ROR") of 7.81% for Total Company.

Cost of Service - Special Allocation Studies

Q. Please elaborate on the three types of studies that were performed; one to determine which Function the costs belong to, a second to determine the Classification of Distribution Mains, and a third to determine the service class allocation.

A. As directed in Case 00-M-0504, additional non-traditional cost of service allocation studies are necessary to determine which costs belonged to which Function. For example, costs embedded in Detail Account 903 (Customer Records and Collections) reflect services defined by Case 00-M-0504 (such as the Billing and Payment Function, the Distribution Function, and the Supply Function). Traditionally, these costs would not have been separately identified, but to comply with the requirements from Case 00-M-0504, Function studies associated with general plant (and associated reserve and depreciation expense), labor, consumer services (Detail Account 903), and Administrative and General (Control Accounts 401900 and 402900) were completed.

Cost of Service - Function Studies

Q. Please describe the General Plant Allocation.

A. General Plant traditionally has been allocated on a Production Plant + Transmission Plant + Distribution Plant basis, because theoretically General Plant supports the other plant functions. A copy of the General Plant Allocation is provided in the Workpapers accompanying this panel testimony.

Q. Please describe the Structures Allocation.

A. The Company owns facilities supporting employees who put pipe in the ground, employees who answer customer inquiries, and employees who provide administrative functions. The costs associated with this are contained within Structures and Improvements (Plant Account 390). After determining the costs associated with each location, the costs associated solely with the operations of the Company and administrative functions were assigned to the

Distribution Function. Costs that were associated solely with the customer inquiry portion of the Company were assigned to the Clearing Account Function. Costs that were shared between operations and customer inquiry were split 50/50 between the Distribution Function and Clearing Account Function.

Q. Please explain the All Labor Allocation.

A. Company labor direct charged to O&M and the Company clearing accounts has been functionalized according to work performed within the Company. For example, the Telecommunication Clearing (Clearing Account 184400) was assigned to the Distribution Function. Detail Accounts 901 (Customer Accounts Supervision) and 903 (Customer Accounts Records and Collections Expenses) were assigned to the Distribution, Billing and Payment, and Supply Functions based on the Consumer Service Allocation. It should be noted that the Consumer Service allocation was prepared in a manner consistent with the Recommended Decision in Case 07-G-0141, at page 81 (allocating customer records and collection costs based on revenues).

Labor in Control Accounts 401900

(Administrative and General - Operation) and 402900 (Administrative and General - Maintenance) was assigned based on the Administrative and General ("A&G") study for Detail Account 920000 (Administrative and General Salaries). This study determined that 7.50% was assigned to the Supply Function, 1.92% was assigned to the Transmission Function, 88.48% was assigned to the Distribution Function, 1.39% was assigned to the Billing and Payment Function, and 0.70% was assigned to the Clearing Account Function (with the last 0.01% representing rounding across the various Functions).

Q. Please explain the A&G Allocation.

A. A&G Expenses (Control Accounts 401900 and 402900) were assigned to Corporate Management ("CM"), Consumer Services ("CS"), or Operations, Engineering and Mechanical ("OEM") based on departments. CM was further divided into O&M and non-O&M based on the O&M percentage. Detail Account 928 (Regulatory Commission Expenses) was directly assigned to the Distribution Function based on the March 24, 2003 Recommended Decision in Case 00-M-0504, at page 46.

The remainder of CM O&M was functionalized based on non-A&G labor and non-A&G O&M expenses. CM non-O&M and OEM were functionalized based on Production, Transmission, and Distribution gross plant. CS was functionalized 100% to the Clearing Account.

Cost of Service - Distribution Mains Classification Study

Q. Please describe the Mains Study as provided in the Mains Customer/Demand Workpaper.

A. The first step in determining the allocation of Distribution Mains (Plant Account 376) is the split between Customer and Demand. The Company performed a regression analysis, which determined that 58.56% was customer related and 41.44% was demand related. The regression analysis produced the zero intercept point, based on the relationship between the radius of the pipe size squared and the average cost per foot. Specifically, the cost per foot for a theoretical zero inch radius main was calculated to be $8.273172, and then this cost was multiplied by the total footage of 50,379,672, in order to determine the customer component of mains. This resulted in $416,799,688.91, which is 58.56% of the total cost of $711,725,996.67.

Cost of Service - Service Class Allocation Studies

Q. After costs were classified, how was the proper allocation to the service classes determined?

A. The operational characteristics of each account were reviewed to determine the appropriate allocation methodology. For a number of these accounts, special allocation studies were performed. These accounts were Mains (Plant Account 376), Services (Plant Account 380), Meter and Regulator ("M&R") Stations (Plant Account 378), Meters (Plant Account 381), Cogeneration Facilities, Uncollectibles Expense (Detail Account 904), Customer Service Expense (Control Account 401800), and Sales Promotion Programs (Control Account 401850).

Q. Please describe the Cogeneration study.

A. Mains (Plant Account 376) associated with current cogeneration accounts represented $1,300,116.57 of original costs, based on the Company's asset management system records. The depreciation expense was calculated to be $51,484.56 and the accumulated reserve for depreciation was calculated to be

($1,009,171.86).

Q. Please describe the remaining mains (Plant Account 376) study.

A. After the mains demand and customer split was determined (described above), Plant Account 376 was further analyzed for service class allocations into: (1) mains associated with cogeneration, (2) mains greater than or equal to four inch diameter pipe, which were assigned to service classes based on Factor #56 "Peak Day without Cogen," and (3) mains below four inch diameter pipe, which were assigned to service classes based on Factor #78 "Peak Day Remaining Mains."

Q. How were the demand mains greater than or equal to 4" diameter determined in the Mains 4" Allocation Workpaper?

A. The Company summarized footage and costs for Distribution mains, by size, using information from the Company's asset management system. Distribution mains greater than or equal to 4" account for 19,956,952 feet of the total footage, or 49.02%. These mains were then assigned to the service classes based on Factor #56 "Peak Day without Cogen." The remaining mains were assigned to service classes based on Factor #78 "Peak Day Remaining Mains."

Q. Why do the non-cogeneration mains need to be allocated differently by size?

A. The larger sized distribution mains provide feeder service to smaller customers as well as direct service to larger customers, thereby offering service to all customers. Allocation Factor #56 "Peak Day without Cogen" uses peak day requirements for all service classes, except cogeneration, to allocate larger mains. Smaller-sized mains cannot provide direct service to larger customers, and larger customers do not use smaller mains as feeder systems, therefore these mains are more appropriately allocated to the smaller customers only.

Q. Please describe the Services Allocation.

A. Total costs by size for Plant Account 380 were derived using the Company's asset management system. Total costs were allocated to the appropriate service classes using information (number of services, by size and service class) from the Company's service line system.

Q. Please describe the Meters Allocation.

A. The company owns meters in order to provide service to customers. Using information available from Company systems, the number of meters by service class was determined. Meter costs were summarized by meter size, using Plant Account 381 from the asset management system. These costs were allocated to the appropriate service class using the number of owned meters by service class. Similarly, the number of Pressure Compensated meters by service class was obtained from Company records and the average costs by meter type were applied to determine the pressure compensated meter investment by service class.

Q. Please explain the Industrial M&R study.

A. The asset management system was queried to determine M&R station costs (Plant Account 385) by location. The locations were then assigned to service classes based upon current customer service class data. For

M&R station locations that could not be directly assigned to a service class, an allocation to all classes (except cogeneration and residential service) was completed.

Q. Please explain the Uncollectibles Allocation.

A. An analysis of write offs, for the twelve months ended December 31, 2015, was performed to determine the appropriate percentage by service class. The Natural Gas Supply Service uncollectible factors were based on SC 1 and SC 3 customer classifications. The Delivery Service and Billing and Payment Service uncollectible factors were based on all customer classifications.

Q. Please describe the Customer Service Allocation.

A. Control Account 401800 provides customer-oriented services, either with labor dollars or with other O&M expenses. Management from the Company areas responsible for these expenditures assigned costs to service classes that benefit from these services.

Q. Please describe the Sales Promotion Allocation.

A. Similar to the Customer Service Allocation, Sales Promotion activities (Control Account 401850) were allocated to the customer classes benefitting from these services.

Q. Have the results of these studies been included in this rate proceeding?

A. Yes. The study results are included in the Workpapers accompanying this panel testimony. It should also be noted that a summary exhibit of studies is included above in this panel testimony.

Marginal Transmission and Distribution Cost

Q. Please describe Exhibit___(COSRD-4), Schedule 1.

A. Exhibit___(COSRD-4), Schedule 1, provides the non-gas transmission and distribution marginal cost study.

Q. What is the definition of transmission and distribution marginal non-gas cost?

A. Marginal non-gas cost is the cost of transmitting and distributing an additional unit of gas. Marginal transmission and distribution costs are the costs associated with additions and modifications to the transmission and distribution system infrastructure that result from increased throughput due to increased sales. This is the cost from the city gate to the customer, but does not include costs for any equipment inside the customer's premises. The transmission and distribution marginal cost would apply to increased throughput due to new attachments, as well as additional load from existing customers due to an expansion of gas use by existing customers.

Q. Please describe the calculation for the marginal transmission and distribution cost in Exhibit___(COSRD-4), Schedule 1.

A. Exhibit___(COSRD-4), Schedule 1, is a standard analysis for calculating the unit rate per Mcf for gas transmission and distribution marginal cost. This is a traditional approach where there are increases in system throughput along with associated transmission and distribution plant additions. The five year forecast period from October 2016 to September 2021 is being used as a basis for the calculation. The Rate Year (12 months ending March 31, 2018) would be included in this five year forecast period.

Line 1 is the average annual investment in capital for the transmission and distribution system for the five year period, fiscal 2017 through fiscal 2021, including services, mains and measuring stations. Such capital costs were extracted from the Company's five year Capital Expenditure Program. The average capital investment was annualized by applying a carrying charge of 14.10%, plus an additional 2.70% in annual O&M, to line 1. The total annualized cost on line 5 was then divided by the projected increase in incremental annual throughput (which was developed using information from Exhibit___(VFP-1), Schedule 1), in order to calculate the average marginal transmission and distribution unit rate per Mcf.

Q. What is the conclusion from the transmission and distribution marginal cost study, using the standard method?

A. The standard method produced a unit rate of $166.67 per Mcf, which is not a reasonable result by an order of magnitude. The standard method effectively assumes that all additions to plant result from incremental volumetric demands on the system. This is an unreasonable assumption considering that the majority of investment in facilities for the Company is associated with replacing existing facilities to meet existing demand. As an alternative to this analysis, the Company has provided an additional study.

Q. Please explain how the marginal cost of plant required to serve customers was determined in this alternative study.

A. As explained previously, utilizing typical marginal cost calculations produces unreasonable results. Therefore, a different approach is necessary in order to estimate the marginal investment cost of serving a customer.

This different approach involved analyzing a sample of specific large system replacement jobs performed by the Company from January 2015 to December 2015. Larger system replacement jobs are useful to analyze because specific mainline replacement costs for a known quantity of customers can be readily identified. The cost estimates resulting from these large system replacement jobs tend to be conservative, since these projects allow for a more efficient utilization of equipment and crews due to project economies of scale. Also, the Company has, for the most part, already acquired right-of-ways for these projects.

Q. Please describe Exhibit___(COSRD-4), Schedule 2, Pages 1 and 2.

A. Exhibit___(COSRD-4), Schedule 2, Page 2 is a calculation for gas transmission and distribution marginal cost based upon the ten largest projects from January 2015 to December 2015 in the Company's New York system. In the calculation, two jobs had no services or customers associated with the project, so only eight of the ten jobs were used. The total cost, which includes the main installation, main removal, and service costs, was $2,863,057 (line 4). This amount divided by the amount of customers associated with these eight projects results in a cost per customer of $3,619.54, as shown on line 6. The total number of customers on our system is 515,148. The total marginal cost applied to all customers is

$1,864,598,792 ($3,619.54 x 515,148), as shown on line 8.

The total marginal cost of $1,864,598,792 was carried forward to Exhibit___(COSRD-4), Schedule 2, Page 1, which was prepared using the same format as Exhibit___(COSRD-4), Schedule 1. After applying the carrying charge of 14.10% and the O&M percentage of 2.70%, the total annual cost is $313,252,597, as shown on line 5. Dividing line 5 by 102,040,018 Mcf of throughput yields a marginal cost rate of $3.0699 per Mcf. For comparison purposes, the Company has included the Marginal Cost analysis from Case 07-G-0141, to show the variance in the studies based on the data used in the calculation ($3.0699 per Mcf in the current rate filing compares to $5.6093 per Mcf from Case 07-G-0141). Even though the results vary from case to case, Distribution views this calculation as a more reasonable approach for this study, with results being more applicable for conditions in the Company's service territory.

Q. What study is being used for marginal customer costs?

A. For the purposes of this filing, the Company is using the embedded customer cost as a surrogate for marginal customer costs, as shown in Exhibit___(COSRD-1), Schedule 5.

Proposed Rate Design and Associated Tariff Changes

Q. Please provide a general description of Distribution's tariff service rates.

A. Distribution provides services to end use customers and to energy service companies ("ESCO" or "ESCOs").

Services provided to end use customers fall into two broad categories: (1) delivery services and (2) gas supply services. These two broad categories of services are billed to customers through the unbundled charges reflected in Distribution's tariff.

Services to ESCOs include a number of support services that provide ESCOs with access to end use customers on Distribution's system. These services include balancing, billing and a variety of administrative services. These services accommodate the reliable delivery of ESCO supplies to Distribution's system, which in turn are ultimately delivered to end use customers.

Q. Is Distribution proposing a new tariff?

A. Yes. The new tariff is described in greater detail in the testimony of the Tariff Reorganization Panel. However, for the purpose of this testimony, references to existing service classification numbers will be utilized herein. The testimony of the Tariff Reorganization Panel will provide a translation of existing service classifications to proposed service classifications for reference purposes. Their testimony will also describe in detail the Company's initiative to modernize and update its tariff, which if approved, would become tariff volume number 9.

Q. Please provide a general description of the customer rate classifications in the Company's tariff.

A. The Company provides unbundled services to the following categories of customers: (1) residential, (2) small, non-residential, (3) large, non-residential, (4) end use based rate classifications, and (5) ESCO and transportation customer services. Exhibit___(COSRD-5) provides a summary of the

Company's current tariff service classifications within these five broad categories.

Q. What guidelines or criteria should be considered in the design of gas utility rates?

A. The design of gas utility rates must, of course, be just and reasonable and avoid undue discrimination. Where rates need to be adjusted toward the achievement of proper cost recovery, customer impact considerations should be factored into the rate design process.

Market conditions within the utility service territory, related to the competitive environment faced by the Company's customers, should also be reviewed. Other factors that should be considered in designing rates include: (1) pipeline bypass competition from unregulated suppliers of natural gas, (2) the prices of such alternative pipeline bypass sources of gas relative to Distribution's current and proposed rates, (3) the number of price sensitive customers, and (4) the potential for load loss due to customers switching to other suppliers of natural gas. The loss of customers and gas volumes in the short-term (e.g., customers switching to alternative fuels, customers switching to alternative suppliers, or other market-based factors such as the migration of production to more competitive regions) can affect a gas utility's ability to recover fully its fixed costs and can reduce a gas utility's chances of earning the allowed rate of return, as determined by a state regulatory body. In the long-term, this can result in increased rates for other customers.

Further, rates should provide financial and earnings stability to Distribution. Toward this goal, generally it is not a sound ratemaking practice to provide for recovery of a substantial portion of fixed costs, such as customer-related and demand-related facility costs that bear no relationship to customer gas consumption patterns, in the rate block portion of the rate schedule. The recovery of fixed costs through commodity rates detracts from earnings stability because the revenues generated from customers' volumetric use of gas can be affected by an overall decline in usage per account (and thus subject to recovery from sales volumes and revenues that have been declining over the long run). However, with the currently effective revenue decoupling mechanism ("RDM"), this risk, absent the complete loss of the customer, is largely mitigated. The recovery of fixed costs through commodity rates can also be unfair to large heating customers. These customers could be burdened with providing revenue recovery of costs incurred in order to provide service to small volume customers, such as seasonal or recreational residences. The fixed costs of providing delivery services to any individual customer are significant. If the majority of fixed costs are recovered through volumetric rates, then the lower volume customers of any rate class will tend to be subsidized by the higher volume customers in the rate class. This is a particular concern for low income payment troubled customers residing in poor housing stock where their usage significantly exceeds the average customer's usage.

Q. How can cost of service study results provide guidelines for rate design?

A. Results of a class allocated cost of service study provide cost guidelines that are useful in evaluating class revenue levels and rate structures. With regard to rate class revenue levels, the rate of return results indicate where certain rate classes are being charged rates that recover more or less than their indicated cost of service. Using the cost study, rate class revenue levels can be brought closer in line with the indicated costs of service. This results in the movement of rate class rates of return toward the system average rate of return, as well as rates that are more in line with the cost of providing service. With respect to the cost justification of rates within each rate class, the classified costs (as allocated to each class of service in the cost study), provide cost information that can be of assistance in determining the need for changes in the relative levels of demand, customer and commodity rate block charges.

Q. How are guidelines or criteria, such as the ones just mentioned, generally incorporated into the rate design process?

A. The rate design process, which includes both the appointment of revenues to be recovered among customer classes and the determination of rate structures within customer classes, consists of finding a reasonable balance between the various criteria or guidelines that relate to the design of utility rates. Economic, regulatory, historical and social factors all enter into the process. Exhibit___(COSRD-6) further clarifies this by providing criteria of a sound rate structure, which are comprised of revenue-related, cost-related and practical-related attributes to consider as part of the rate design process.

In summary, both quantitative and qualitative information are evaluated before reaching a final rate design determination. Of necessity then, the rate design process has to be, in part, influenced by judgmental evaluations.

Q. What changes are being proposed to the Company's tariff service rates?

A. Generally, the Company is proposing changes to rates that include changes to delivery charges and changes to the services provided to ESCOs.

Q. Is Distribution proposing changes to the base cost of gas Reserve Capacity Rate in this proceeding?

A. No. The Company is, however, proposing an adjustment to the reserve capacity cost rate calculation based on an analysis that is provided in Exhibit___(COSRD-7). This proposed adjustment would be effectuated in Distribution's monthly Reserve Capacity Cost Adjustment Statement. The basis for the change to capacity included in this monthly statement is described further in the testimony of the Gas Supply Administration Panel and in Exhibit___(GSA-5).

Q. How were the final proposed rates calculated?

A. The final proposed rates were calculated using the methodology that is presented in Exhibit___(COSRD-8). The rate design process, which ultimately derived the final proposed rates, proceeded along the nine steps summarized in this exhibit.

Q. Please describe the first step of the rate design process.

A. The first step documented in Exhibit___(COSRD-8) allocates the revenue requirement increase to the service classifications based on each service classification's proportion of non-gas cost revenue.

Q. Please describe the second step of the rate design process.

A. The second step documented in Exhibit___(COSRD-8) reflects the impact on Company revenue from resetting the revenue decoupling mechanism target, the symmetrical sharing target, and the merchant function charge reconciliation target. Resetting these tracking mechanisms results in a $3,999,352 decrease, a $2,200,303 decrease, and a $2,345,031 increase, respectively, to the proposed overall revenue recovered in base rates.

Q. Please describe the third step of the rate design process.

A. The third step documented in Exhibit___(COSRD-8) considers the impact of proposed enhancements to the Company's low income program, which is described in greater detail in the Customer Service Panel testimony. The proposed enhancements result in a $4,694,114 increase to proposed rates.

Q. Please describe the fourth step of the rate design process.

A. The fourth step documented in Exhibit___(COSRD-8) accounts for proposed changes to the Company's billing charge. Distribution is proposing to reduce the billing charge by 3 cents for all customer classes. This results in an increase to the proposed overall revenue recovered through other base rates, with a $177,876 impact on proposed rates.

The billing charge to be included in the minimum charges for all customers that the Company renders a bill to is proposed to decrease by $0.03 per bill, from the current rate of $1.07 per bill to $1.04 per bill.

Lines (1) through (9) of Exhibit___(COSRD-9) provide a calculation of the unbundled billing charge. The basis for the calculation of the billing charge is the unbundled cost of service study results for billing services. The unbundled billing charge is designed to provide the system average 7.81% rate of return on the rate base determined to support the billing service function. The unbundled billing charge was determined by dividing the total unbundled billing costs by the total amount of customer bills projected to be rendered by the Company for the 12 months ended March 2018. As shown on line (9) of Exhibit___(COSRD-9), the decrease to the billing charge is $0.03 per bill.

Q. Please describe the fifth step of the rate design process.

A. The fifth step documented in Exhibit___(COSRD-8) makes modifications to the Supply Charge and Records and Collection Charge from Distribution's Merchant Function Charge Statement. These modifications result in a proposed decrease of $3,259,972, to be recovered through other base rate charges.

Exhibit___(COSRD-10) provides the calculation of the unbundled merchant function charge for the Supply and Records and Collection components. The basis for the calculation is the unbundled cost of service study results for natural gas supply. Distribution is proposing to combine the Supply and Records and Collection components into one rate, which would be applied to all residential and small non-residential service classification sales volumes. Based on the calculation provided in Exhibit___(COSRD-10), the rate would be $0.31777 per Mcf.

Exhibit___(COSRD-15) summarizes the current and proposed supply and records and collection cost charges. As mentioned previously, present rates break out supply procurement and records and collection charges separately, by cost component and by residential and non-residential customer classes. The costs allocated to these classes are reconciled separately by class.

Due to a greater proportion of non-residential customers migrating to transportation service, when compared to residential customers, the non-residential reconciliation rates nearly equal the base rates for this class of customers. This method of reconciliation has the potential to lead to absurd results. For example, should more and more non-residential customers migrate from sales service, the reconciliation rate would grow higher and higher, with the last remaining non-residential customer on sales service facing a $2,110,725 reconciliation rate cost. The cost of service study already is signaling an unusually high rate of return for non-residential gas supply service of 176.24% at current rates.

Under the Company's proposal to roll all supply procurement and records and collection costs into a single rate, the potential "death spiral" reconciliation rate (described above) is avoided. In addition, the rate of return for non-residential gas supply service would drop from 176.24% at current rates, to 43.56% at proposed rates.

Q. Please describe the sixth step of the rate design process.

A. The sixth step documented in Exhibit___(COSRD-8) accounts for a change in the Uncollectible Charge from Distribution's Merchant Function Charge Statement. Specifically, the residential and non-residential uncollectible percentages were updated by dividing the supply portion of uncollectibles into the supply portion of total operating revenues. Updating the Uncollectible Charge increases rates to be recovered through other base rate charges by $1,848,160.

The uncollectible percentages are provided in Exhibit___(COSRD-16). For residential service, the uncollectible percentage in the merchant function charge will change from 2.83185% to 1.83690%. For non-residential service, the uncollectible percentage in the merchant function charge will change from 0.40231% to 0.44130%.

Q. Does Exhibit___(COSRD-16) also provide the Company's proposed purchase of receivable ("POR") discount rate?

A. Yes. The Company is proposing to maintain the current POR rates for residential and non-residential service. Based on line 7 of Exhibit___(COSRD-16), the cost of service study results would indicate that a much higher POR discount rate would be justified. However, such a dramatic increase in POR discount rates would not be consistent with the gradualism concept of rate design. Therefore, the Company is proposing to hold the POR discount rate at current levels and gradually move the implied records and collection contribution towards a more cost-based result.

Q. Are you proposing any changes to the storage inventory carrying charges included in the merchant function charge?

A. No. The storage inventory carrying charges are excluded from the determination of revenue requirement and are effectively tracked separately. The Company proposes to continue to reconcile any differences in the actual storage inventory carrying charges, with those included in base rates, on an annual basis.

Q. Please describe the seventh step of the rate design process.

A. The seventh step documented in Exhibit___(COSRD-8) calculates a sub-total of steps one through six of the rate design process, which are described above. The $39,955,744 shown in Exhibit___(COSRD-8) was derived as follows: $40,350,189 - $3,999,352 - $2,200,303 + $2,345,031 + $4,694,114 + $177,876 - $3,259,972 + $1,848,160. Creating a sub-total in step 7 will help facilitate step 8 of the rate design process.

Q. Please describe the eighth step of the rate design process.

A. The eighth step documented in Exhibit___(COSRD-8) applies the revenue adjustment factor, to the sub-total that was derived in step 7 of the rate design process, for the residential and small non-residential service classifications. The revenue adjustment factor is explained in the direct testimony of Jeremy R. Barber. For the residential service classifications, a revenue adjustment factor of -0.084962% was applied to the sub-total of $31,664,137, which results in a $26,903 decrease in proposed rates. For the small non-residential service classifications, a revenue adjustment factor of -0.310128% was applied to the sub-total of $4,814,807, which results in a $14,932 decrease in proposed rates. In total, the revenue adjustment factor decreases rates to be recovered through other base rate charges by $41,835.

Q. Please describe the ninth step of the rate design process.

A. The ninth step documented in Exhibit___(COSRD-8) combines the results of steps 7 and 8, both of which are described above. This step adds the impact of the revenue adjustment factor to the sub-total that was derived earlier in the rate design process. The result of step 9 represents Distribution's final proposed rates, to be recovered through changes in the minimum charges and volumetric delivery rate blocks.

Q. Please describe how the minimum charge and volumetric block rates were determined.

A. For Residential Service Classification Nos. 1 and 2, Distribution recommends recovering 75% of the proposed increase in revenues through increases to the minimum charge and 25% of the proposed increase in revenues through the volumetric block rates. For Service Classification No. 3, Distribution recommends recovering 50% of the proposed increase in revenues through increases to the minimum charge and 50% of the proposed increase in revenues through the volumetric block rates. For Service Classification No. 13 (TC-1.0, TC-2.0, TC-3.0, TC-4.0, and TC-4.1), Distribution recommends recovering 100% of the proposed increase in revenues through the volumetric block rates.

A summary of current and proposed rates by service classification, including revenue impacts and unit rates, has been provided in Exhibit___(COSRD-13).

Q. Can you provide a summary of proposed changes by tariff service classification?

A. Yes. The summary provided will group each service classification into the five broad categories of services described above: (1) residential, (2) small, non-residential, (3) large, non-residential, (4) end use based rate classifications, and (5) ESCO and transportation customer services. A summary of current and proposed rates has been provided in Exhibit___(COSRD-13).

Q. Please provide a summary of the residential service classifications.

A. The service classifications for residential customers are summarized in Exhibit___(COSRD-5). Service Classification No. 1 is the residential service classification. The charges under Service Classification No. 1 are unbundled into two categories: (1) monthly delivery service rates, and (2) Company-provided monthly gas cost supply rates. All residential customers (with the exception of residential customers receiving service through low income rate schedules) receive delivery service through Service Classification No. 1. Residential customers have the choice of receiving monthly gas supply services from Distribution or a qualified ESCO. If the customer chooses to receive monthly gas supply service from an ESCO, the monthly gas supply charge included in Service Classification No. 1 is not billed to the customer. The delivery service rate charges for Service Classification No. 1 have been provided in the Workpapers accompanying Exhibit___(COSRD-8).

Service Classification No. 2 is the Company's

HEAP Residential Assistance Service ("HRAS"). Customers receiving this residential service have received a payment under the federal Home Energy Assistance Program in the current or immediately prior HEAP Plan Year and do not take service under Service Classification Nos. 2A or 2B, which will be described herein. As described in the Customer Service Panel testimony for this proceeding, the Company is proposing to continue the HRAS service, but extend the monthly discount for an additional three months, from five to eight months. The impact of this proposal has been incorporated into the third step of the rate design process.

Service Classification No. 2A is the Company's Elderly, Blind or Disabled ("EBD") Payment-Troubled Residential Assistance Service ("PTRA"). As described in the Customer Service Panel testimony, the EBD PTRA program is a legacy program with a limited number of program participants and the Company is proposing to eliminate the program. Distribution proposes to transfer these customer accounts to Service Classification No. 2, where they will continue to receive a discount on their gas utility bills. In addition, Distribution is proposing an additional credit for these customers in an effort to facilitate an effective transition to a new rate class for these customers. The impact of this proposal has been incorporated into the third step of the rate design process.

Service Classification No. 2B is the Company's Low Income Customer Affordability Assistance Program ("LICAAP"). As described in the Customer Service Panel testimony, Distribution's LICAAP program is a targeted program which provides a higher level of benefit to a subset of low income, payment-troubled customers that have a greater need. It provides an affordable gas utility bill to households, based on household income and the number of residents living in the home. The Company is proposing that LICAAP customers that have completed the necessary arrearage forgiveness eligibility period of the program be moved to the broad-based HRAS discount service described above. This proposal is outlined in greater detail in the Customer Service Panel testimony. The impact of this proposal has been incorporated into the third step of the rate design process.

Q. Please describe the Company's low income program reconciliation proposal.

A. Distribution is proposing an annual reconciliation mechanism, which is described in greater detail below. The reconciliation period for this mechanism will be the twelve months ended March and the surcharge period will be from July 1 through June 30.

Q. How is the Company proposing to fund its low income programs?

A. The Company has included $10,694,114 in the revenue requirement to fund its proposed low income program. The Company is also proposing an annual reconciliation mechanism to track and refund, or recover actual low income program costs, which differ from the amount imputed in the revenue requirement established in this case. The difference between actual low income spending and the amount imputed in the revenue requirement will be calculated and recovered/refunded based on an adjustment to the volumetric rate of residential customers.

Q. Please provide a summary of the small non-residential service classifications.

A. Service Classification No. 3 is the general service classification for non-residential customers. Similar to Service Classification No. 1, the charges under Service Classification No. 3 are unbundled into two categories: (1) monthly delivery service rates, and (2) Company-provided monthly gas cost supply rates. The delivery service rate charges for Service Classification No. 3 have been provided in Exhibit___(COSRD-13).

Q. Please describe the large non-residential service classifications.

A. Delivery service to large non-residential customers is currently provided through Service Classification Nos. 13D and 13M. Large non-residential customers have an annual consumption greater than 5,000 Mcf per year. Large non-residential customers are further subdivided into the following categories:

(1) SC 13, TC 1.1 - total annual throughput between 5,000 and 25,000 Mcf per year;

(2) SC 13, TC 2.0 - total annual throughput between 25,000 and 55,000 Mcf per year;

(3) SC 13, TC 3.0 - total annual throughput between 55,000 and 150,000 Mcf per year;

(4) SC 13, TC 4.0 - industrial customers with a total annual throughput greater than 150,000 Mcf per year; and

(5) SC 13, TC 4.1 - non-industrial customers with a total annual throughput greater than 150,000 Mcf per year.

The delivery service rate charges for these service classifications have been provided in Exhibit___(COSRD-13).

Q. Please provide a summary of changes proposed for the end use based service classifications.

A. Exhibit___(COSRD-14), Schedule 1, provides a summary of changes for end use based service classifications. The rates for these service classifications have been modified based on the proposed changes being made to Service

Classification Nos. 3 and 13.

Q. Has the Company proposed any rate changes for Service Classification No. 4?

A. Yes. Service Classification No. 4 rates, which are based on rate components of the Service Classification No. 3 and Service Classification No. 13 (TC-1 and TC-2), have been updated to reflect the proposed rate changes in these service classifications. The development of Service Classification No. 4 rates is provided in Exhibit___(COSRD-14), Schedule 2.

Q. Has the Company proposed any rate changes for Service Classification No. 5?

A. Yes. Service Classification No. 5 rates, which are based on rate components of Service Classification No. 13 (TC-3, TC-4 and TC-4.1), have been updated to reflect the proposed rate changes in these service classifications. The development of Service Classification No. 5 rates is provided in Exhibit___(COSRD-14), Schedule 3.

Q. Please describe the proposed rate changes for Service Classification No. 7.

A. Exhibit___(COSRD-14), Schedule 4 depicts the methodology utilized to develop the floor and ceiling natural gas vehicle rates ("NGV") for Service Classification No. 7.

Q. Please describe Service Classification No. 8.

A. Service Classification No. 8 was approved by the Commission in Case 90-G-0734. Service Classification No. 8 is applicable to non-residential customers that use gas directly for natural gas-fueled air conditioning equipment. Service Classification No. 8 is a seasonal rate, with one set of base rates in effect for the summer months (May through September - the months with historically significant cooling degree days), and another set of base rates in effect for the remaining non-summer months of the year. For the summer months, the minimum charge for the first 1,000 cubic feet, or less, is equivalent to the minimum charge for Service Classification No. 3. All consumption over 1,000 cubic feet is equivalent to the base commodity cost of gas plus the commodity margin of the Service Classification No. 5 rate.

For the non-summer months, the proposed Service Classification No. 8 rate is equal to the Service Classification No. 3 rate.

Q. Please describe the development of the summer month rate for all consumption over 1,000 cubic feet for Service Classification No. 8.

A. As outlined in Exhibit___(COSRD-14), Schedule 5, the base commodity cost of gas for Service Classification No. 3 (i.e., $0.18730) is added to the commodity margin for Service Classification No. 5 (i.e., $0.14250). The resulting rate that is derived is $0.32980 ($0.18730 + $0.14250).

Q. Please describe the development of proposed rates for Service Classification No. 9.

A. Service Classification No. 9, the small cogeneration sales service rate, is applicable to customers' consumption of natural gas, when the gas is used directly in natural gas-fueled cogeneration equipment. The rate derivation for this service classification is provided in Exhibit___(COSRD-14), Schedule 6.

Q. Has the Company proposed any rate changes for

Service Classification Nos. 23 and 24?

A. Yes. Service Classification No. 23, which represents the non-residential distributed generation ("DG") service rate, is applicable to a non-residential customers' consumption of natural gas, where the gas is used directly for DG less than 50 megawatts. The customer is anticipated to maintain a load factor of 50% or greater for the DG facilities receiving service under this rate. Service Classification No. 24, which represents the residential DG service rate, is applicable to a residential customer's consumption of natural gas, where the gas is used directly for DG applications. The rate derivation for both of these service classifications is provided in Exhibit___(COSRD-14), Schedule 7, and Exhibit___(COSRD-14), Schedule 8, respectively.

Q. Please explain how the Company's current business development and economic development zone rates were adjusted to reflect the Company's proposed change in revenues.

A. The business development rates and economic development zone/Excelsior rates, applicable to Service Classification Nos. 3 and 13, were adjusted by applying the same percentage that was used to establish the rate discounts in each service class to the appropriate proposed unit rates (exclusive of the base cost of gas). This methodology was previously approved by the Commission.

Exhibit___(COSRD-13) includes a summary of the business development and economic development zone rate discounts for Service Classification Nos. 3 and 13.

Q. Has a comparison been performed which compares the effect of the proposed rates on customer retail and transportation bills?

A. Yes. Exhibit___(COSRD-11) presents a comparison of gas bills at various consumption levels under current and proposed rates for Service Classification Nos. 1, 2, 2A, 2B, 3 and 13, respectively.

Pages 6 through 10 of Exhibit___(COSRD-11) provides the current and proposed rates for TC 1.1, TC 2.0, TC 3.0, TC 4.0 and TC 4.1, respectively.

The proposed rates for the various TC categories include an estimated gas supply rate of $0.462673 per Ccf in the last column in order to make the overall impact analysis similar to that provided for sales customers.

Exhibit___(COSRD-17) contains the impact of proposed gas rates, and summarizes (by service classification) the number of bills, rate year sales volumes, revenues at current rates, and revenues at proposed rates.

Q. Please describe the Company's PSC audit and assessment proposal.

A. Distribution is proposing to implement a mechanism to track the differences between what is imputed in rates for the PSC audits and assessments, and the actual costs incurred, on an annual basis.

As described in greater detail in the direct testimony of Ruth M. Friedrich-Alf, there is an initial PSC assessment in January of each year, a true up in August and a final assessment in October. The base amount included in the rate year for this filing is $2,370,000. Also as described in greater detail in the direct testimonies of Evan M. Crahen and Ruth M. Friedrich-Alf, Section 66(19) of the Public Service Law gives the Commission the authority to conduct comprehensive management audits. The base amount included in the rate year for this filing is $837,979, which was derived from the Company's most recent management audit.

Q. How is the Company proposing to reconcile the assessment and audit costs?

A. The Company has included $3,208,000 in the revenue requirement for regulatory assessment and audit costs. The difference between the actual spending for regulatory assessments and audit, and the imputed amount in rates of $3,208,000, will be determined for the twelve month period ending March 31. This difference will be refunded or surcharged to all non-negotiated customers on a unit rate per Mcf basis (utilizing forecasted volumes).

Q. Please describe the Company's system upgrade and modernization proposal.

A. Distribution is proposing a system upgrade and modernization tracking mechanism. This mechanism will allow for the recovery of carrying costs associated with the replacement of Leak Prone Pipe ("LPP") above the targeted amounts planned to be replaced, as reflected in the capital spending budget presented in the direct testimony of Kevin D. House.

Exhibit___(COSRD-12) provides a sample calculation for the LPP itemization, which provides an illustrative example of how the dollar amount for cost recovery would be calculated. Referring to line 6, on page 1 of Exhibit___(COSRD-12), the dollar amount of LPP plant carrying costs that would be authorized for cost recovery is outlined for the twelve months ended March 2018, March 2019 and March 2020, respectively. As more fully demonstrated in Exhibit___(COSRD-12), the sample calculation also includes a 200 basis point repeating, cumulative incentive for the Company to accelerate its LPP replacement initiatives. The authorization of cost recovery for the acceleration of Distribution's LPP Replacement Program is consistent with Commission policy objectives and enunciated goals, as set forth in Case 15-G-0151.

In addition to LPP replacement, the tracking mechanism would permit the recovery of Commission authorized expenditures designed to meet state energy goals. In the long-term, Distribution envisions that the system upgrade and modernization tracking mechanism could also provide cost recovery for Reforming the Energy Vision ("REV") Proceeding (Case 14-M-0101) policy or business initiatives that are approved by the Commission. While the vast majority of the REV Proceeding is focused on reforming the retail electric industry, Distribution's energy efficiency portfolio and certain non-energy efficiency projects and programs could reasonably be seen as advancing REV Proceeding policy objectives, where it practically makes sense for natural gas customers.

As a natural gas only utility, Distribution would not be serving in the capacity of a distributed service platform provider ("DSPP"), as gas utilities should not be involved in dispatching various distributed energy resource ("DER") technologies on the electric grid. There are, however, opportunities for natural gas utilities to coordinate on electric or multi-fuel projects (in coordination with businesses, market actors, DER providers, peer utilities, the New York State Energy Research and Development Authority, etc.), develop natural gas solutions in order to facilitate electric peak demand reductions (e.g., microgrids), to serve as a primary fuel for electric generation (e.g., distributed generation and micro-combined heat and power), or to serve as a backstop fuel for renewable technologies that could potentially become intermittent from a reliability perspective (again, e.g., distributed generation and micro-combined heat and power, including community aggregation initiatives), among others. This is described in greater detail in the direct testimony and accompanying exhibits of the Energy Services Panel.

In the long-term, the system upgrade and modernization tracking mechanism could be used to support the expansion of advanced metering capabilities, or technological enhancements to electronic data interchange ("EDI") or related systems in order to further customer engagement initiatives or ensure for the meaningful provision of data, in a secure manner, to ESCOs or DER providers. It should be stressed that the projects identified in this paragraph are presented solely as illustrative examples of items that could reasonably be included in the system upgrade and modernization tracking mechanism for cost recovery purposes. These illustrative examples do not represent projects underway or solutions Distribution is readily endorsing at this time.

To the extent REV Proceeding system upgrade or modernization initiatives are mandated by the Commission, and those mandated initiatives are applied to the natural gas industry, Distribution shall be permitted to include such mandated initiatives in the tracking mechanism without the need for further Commission approval. The Company would prepare a schedule that identifies specific items (and associated dollar amounts) for cost recovery and inclusion in the tracking mechanism.

This schedule would be filed publically with the Commission. This would help expedite the implementation, and furtherance, of such REV initiatives. However, to the extent Distribution believes other non-mandatory REV Proceeding system upgrade or modernization initiatives would be beneficial to its ratepayers, and Distribution chooses to voluntarily implement such initiatives, Distribution would file a letter requesting that the Commission approve the inclusion of such voluntary REV-related initiatives in the Company's tracking mechanism. Accompanying the letter filing would be a schedule that identifies specific items (and associated dollar amounts) for cost recovery and inclusion in the tracking mechanism.

It should also be noted that Distribution proposes to utilize the tracking mechanism to fully recover costs associated with any state or federally mandated safety requirements. To the extent that mandated, additional safety requirements are newly developed, or it is mandated that existing safety requirements be further modified (by the Commission or any federal regulatory agency), Distribution shall be permitted to include such mandated initiatives in the tracking mechanism without the need for further Commission approval. The Company would prepare a schedule that identifies specific items (and associated dollar amounts) for cost recovery and inclusion in the tracking mechanism. This schedule would be filed publically with the Commission. This would help expedite the implementation, and furtherance, of such safety initiatives. However, to the extent Distribution believes other non-mandatory safety initiatives would be beneficial to its ratepayers, and Distribution chooses to voluntarily implement such initiatives, Distribution would file a letter requesting that the Commission approve the inclusion of such voluntary safety initiatives in the Company's tracking mechanism. Accompanying the letter filing would be a schedule that identifies specific items (and associated dollar amounts) for cost recovery and inclusion in the tracking mechanism.

Q. Please describe the Company's off-system sales and capacity release proposal.

A. In accordance with the most recent Joint Proposal in Case 13-G-0136, $750,000 of off-system sales and capacity release proceeds fund the Gas Network Enhancement Program (referred to as the Gas Expansion Plan in the Joint Proposal) and $250,000 of off-system sales and capacity release proceeds currently fund the Area Development Program. These programs are described in detail in the testimony and accompanying exhibits of the Energy Services Panel.

As described in the direct testimony of Ruth M. Friedrich-Alf, Distribution has included the $250,000 associated with the Area Development Program in the Company's revenue requirement. As a result, at this time, the Company is proposing to discontinue funding the Area Development Program from off-system sales and capacity release proceeds.

Distribution is proposing to continue funding the Gas Network Enhancement Program at the current level of $750,000 per year, using off-system sales and capacity release proceeds as the funding source. When remaining off-system sales and capacity release proceeds (i.e., the total proceeds less the $750,000 described above) become available for sharing, Distribution would continue the existing practice of retaining 15% of remaining proceeds for shareholder benefit.

As part of the system upgrade and modernization tracking mechanism described above, Distribution is proposing to defer the dollar amount of LPP plant carrying costs that would be authorized for cost recovery.

The ratepayer share of the off-system sales and capacity release proceeds would first be utilized to eliminate any deferral balances accumulated from the system upgrade and modernization tracking mechanism. Any remaining balance for the ratepayer share of off-system sales and capacity release would be refunded to customers.

Q. Does this conclude your panel testimony?

A. Yes, at this time.