STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Corning Natural Gas Corporation for Gas Service.	**))))))**	**Case 16-G-0369**

Direct Testimony and Exhibit of

Michael P. Gorman

On behalf of

Multiple Intervenors

October 28, 2016

BRUBAKER & ASSOCIATES, INC.

Project 10316

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<u>Direct Testimony of Michael P. Gorman</u>

I. Introduction and Summary

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and a Managing Principal of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to my testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am appearing on behalf on Multiple Intervenors, an unincorporated association of approximately 60 large industrial, commercial and institutional energy consumers with manufacturing and other facilities located throughout New York State, including the Corning Natural Gas Corporation ("CNG" or "Company") service territory.

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A I will respond to flaws in the Company's class cost of service study and proposed spread of its claimed revenue deficiency in this case between its rate classes. My testimony also proposes rates to cure the claimed revenue deficiency in a manner that moves each rate class's prices toward CNG's cost of service when using my recommendations to the class cost of service study.

Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND PROPOSALS IN THIS PROCEEDING.

A My recommended adjustments to the Company's class cost of service study and proposed spread of the revenue deficiency in this proceeding are shown in Table 1 below. As shown in Table 1, I make two adjustments to the Company's class cost of service study: (1) revise its design day demand allocator for large distribution mains and transmission main plant investment; and (2) allocate large main based on a design day demand and a customer component. Using my proposed class cost of service study I then adjust rates to move service schedule rates closer to the cost of service (the Company's proposal adjusts all classes at approximately the system average increase), with no class receiving more than 1.5 times the system average increase.

TABLE 1

Gorman Proposed
Cost of Service and Revenue Spread ($000)
(Non-Gas Revenue)

Service Schedule	Current Non-Gas Sales Revenue[1]	Increase / (Decrease) Needed to Reach Cost of Service: Amount[2]	Increase / (Decrease) Needed to Reach Cost of Service: Percent	Proposed Non-Gas Increase: Amount[3]	Proposed Non-Gas Increase: Percent	Index
SC 1 - Res	$ 7,655	$ 2,592	33.9%	$ 2,732	35.7%	1.18
SC 3 - Comm	1,016	159	15.6%	175	17.2%	0.57
SC 8 - HS Transp	92	51	56.1%	41	45.2%	1.50
SC 14 - Res Agr	940	254	27.0%	271	28.8%	0.96
SC 14 - Comm Agr	581	73	12.6%	82	14.1%	0.47
SC 6 - Comm Trans	499	(36)	-7.2%	6	1.3%	0.04
SC 7 - Indus Trans	408	(62)	-15.3%	5	1.2%	0.04
Bath EG&W Firm	257	361	140.2%	116	45.2%	1.50
Bath EG&W Trans SC3	48	43	89.9%	22	45.2%	1.50
Bath EG&W Trans SC4	84	53	63.0%	38	45.2%	1.50
Total	$ 11,580	$ 3,488	30.1%	$ 3,488	30.1%	1.00

Sources:
[1]Rate Year 2018 base non-gas revenues at current rates from Schedule PNM-5, page 7.
[2]Exhibit MPG-1, page 1 of 2.
[3]Increase for each class is limited to 1.5x the system average.

As outlined in Table 1 above, my proposed spread of the increase moves rates closer to cost of service and distinguishes between CNG's cost to serve its Firm customers and customers that are subject to curtailment when CNG does not have adequate system delivery capacity. The proposed spread of non-gas revenue increases is based on the Company's claimed revenue requirement deficiency.

My testimony does not endorse the Company's revenue requirement deficiency, but simply uses it for illustrative purposes to outline my proposed spread of any revenue deficiency found to be appropriate by the Commission in this proceeding. Therefore, my silence on revenue requirement issues should not be construed as an endorsement or support for the Company's position.

II. CNG's Proposed Class Cost of Service Study

Q HAVE YOU REVIEWED CNG'S CLASS COST OF SERVICE STUDY IN THIS PROCEEDING?

A Yes. CNG's class cost of service study is outlined and summarized on its Schedule PMN-6. In Table 2 below, I show CNG's current rate revenue, CNG's estimated cost of service by service schedule, and CNG's proposed revenue spread to service schedules.

TABLE 2

CNG Proposed
Cost of Service and Revenue Spread ($000)
(Non-Gas Revenue - 2018)

Service Schedule	Current Non-Gas Sales Revenue[1]	Rate Year 2018 Increase / (Decrease) Needed to Reach Cost of Service: Amount[2]	Rate Year 2018 Increase / (Decrease) Needed to Reach Cost of Service: Percent	Proposed Non-Gas Increase: Amount[3]	Proposed Non-Gas Increase: Percent
SC 1 - Res	$ 7,655	$ 1,977	25.8%	$ 2,302	30.1%
SC 3 - Comm	1,016	155	15.2%	303	29.8%
SC 8 - HS Transp	92	64	69.9%	28	30.2%
SC 14 - Res Agr	940	201	21.4%	285	30.4%
SC 14 - Comm Agr	581	105	18.0%	180	31.0%
SC 6 - Comm Trans	499	(1)	-0.2%	147	29.5%
SC 7 - Indus Trans	408	449	110.2%	124	30.3%
Bath EG&W Firm	257	419	163.0%	78	30.3%
Bath EG&W Trans SC3	48	52	109.4%	15	30.4%
Bath EG&W Trans SC4	84	67	79.9%	26	30.4%
Total	$ 11,580	$ 3,488	30.1%	$ 3,488	30.1%

Sources:
[1]Rate Year 2018 base non-gas revenues at current rates from Schedule PNM-5, page 7.
[2]Schedule PMN-6, pages 39 and 40.
[3]Calculated based on Schedule PMN-5, pages 1, 2, and 7.

Q DO YOU BELIEVE THAT CNG'S CLASS COST OF SERVICE STUDY IS REASONABLE?

A No. I have two concerns with CNG's class cost of service study. First, CNG's tariff clearly distinguishes between Firm service customers with minimal to low curtailment risk, and customers that are subject to curtailment in the event CNG's system capacity is not adequate to provide service on peak days or constrained demand days, or when delivery capacity is reduced due to physical plant constraints.

CNG's class cost of service study does not reflect this priority of service, and the difference in costs associated with either receiving a high priority service with low curtailment risk compared to service with low priority service and high curtailment risk.

Second, CNG recognizes a distinction for small mains serving small customers (mains two inches and smaller) based on a separate allocation of these main costs to only small customers. I support such distinction as an appropriate and acceptable methodology because it distinguishes between CNG cost of service for small and medium to large customers. However, in allocating large distribution mains, CNG's class cost of service study does not distinguish between the cost of distribution system incurred to meet design day demand requirements, and the costs incurred to simply connect gas customers to the distribution system. Therefore, similar to the methodology already being used by CNG in its study for allocating costs of small mains, I recommend a modification to the Company's class cost of service study to reflect both design day demand and a customer component for allocating plant costs for distribution mains larger than two inches.

Q ARE ANY OF CNG'S SERVICE CLASSIFICATIONS SUBJECT TO CURTAILMENT IN THE EVENT ITS SYSTEM DOES NOT HAVE ADEQUATE CAPACITY TO PROVIDE SERVICE?

A Yes. CNG's rate schedules describe curtailment in the event its system capacity is not adequate to provide service, or when enough interstate pipeline capacity is not available to provide service to CNG. CNG's Schedule of Gas Service defines curtailment events as:

> B. Gas Service Curtailments
>
> 1. If the Company in its judgment finds that it is unable to satisfy the full requirements of its customers and finds it necessary to curtail sales and/or transportation service, the Company may, at its option, immediately curtail service to a customer or give oral or written notice of curtailment. If notice of curtailment is given, a customer must curtail its use of service pursuant to the notice. [Emphasis added]

These service curtailment provisions clearly distinguish CNG's service obligations for transportation customers and sales customers.

CNG's Schedule for Gas Service described curtailments related to a shortage of CNG capacity as follows:[1]

> The following provisions shall govern curtailments and notices of curtailment of transportation services resulting from a shortage of Corning system capacity or a loss of deliverability by an interstate pipeline or Corning upstream supplier which provides transportation service to Corning.
>
> (a) In the event of a transportation-capacity deficiency, curtailments and notices will normally be made according to the following priorities to the extent permitted by operating feasibility, with Priority 2 being curtailed before Priority 1:

[1] PSC No: 7 Gas, CNG Initial Effective Date: 09/01/2012, Leaf: 65.

(i) Priority 1: All Firm transportation to Customers with dual-fuel or alternate energy facilities.

(ii) Priority 2: Interruptible transportation services and customers who have elected to not utilize the Company's upstream capacity.

(b) The Company will have sufficient capacity at all times to serve requirements in Priority 1, absent the occurrence of an emergency or a cause beyond its control. In the event that the Company does not have capacity sufficient to serve all of its Priority 1 requirements, the Company will allocate the available capacity among the affected customers in the manner which, in the Company's judgment, best protects the health, safety and property of its customers.

(c) At the time the Company receives an application for Priority 1 transportation service, the Company will determine whether it will have sufficient capacity to render all Priority 1 services, including the requested service, over the term of the requested service. If it lacks such capacity, the Company will reject the application unless the Company and the customer agree to construct the required capacity. The customer may be required to provide funding for any required construction.

(d) If there is not sufficient capacity to serve all requirements of customers within Priority 2 that are paying the same local transportation margin, the capacity available for such customers will be prorated among them in proportion to their nominated service level for the month at the receipt point in question. [Emphasis added]

Q DID CNG RECOGNIZE THIS CURTAILMENT PRIORITY IN ITS CLASS COST OF SERVICE STUDY?

A No. CNG has several transportation classes, Service Classification No. 6 (“SC-6”) Service Classification No. 7 (“SC-7”), and Hammondsport Transportation Service Classification No. 8 (“SC-8”). However, in its class cost of service study, CNG allocates design day delivery capacity to all service schedules as though they have the same priority of service. Importantly, as noted above, CNG does not have the same priority of service for all Service Classifications, but rather CNG's sales Service Classification No. 1 ("SC-1") and Service Classification No. 3 ("SC-3") have a higher priority of service than the Transportation Service Classification Nos. 6 and 7, and in part, SC-8.

Q BASED ON THE CURTAILMENT PRIORITY DESCRIPTION CONTAINED IN THE TARIFF, DO COMMERCIAL RATE SC-6, INDUSTRIAL RATE SC-7, AND HAMMONDSPORT SC-8 HAVE THE SAME CURTAILMENT PRIORITY?

A Based on a review of CNG's tariff, it does not appear so. SC-7 appears to have the greatest risk of curtailment based on the tariff provisions for these two rate schedules.

Specifically, the Commercial Transportation Rate SC-6 and Hammondsport SC-8 include a provision that allows for marketers providing service to SC-6/SC-8 customers, to procure and utilize CNG's upstream capacity.[2] Specifically, SC-6/SC-8 prescribe that marketers serving customers under this rate can comply with several options including "Must take a capacity assignment from the Company for the 12-month period November 1st thru October 31st at maximum rates." SC-6/SC-8 customers then appear to have the option to purchase upstream capacity from CNG, and, thus, avoid a Priority 2 curtailment.

[2] *Id*. at Leaf 159.

The Industrial Transportation Rate SC-7 does not include this upstream CNG capacity option.[3] As noted in CNG's curtailment priority, Interruptible Transportation customers who elect not to utilize the Company's upstream capacity will be curtailed before those that do utilize CNG upstream capacity.

Further, Transportation Rates SC-6/SC-8 are Firm transportation service applicable to retail customers that would otherwise be served under SC-1 and SC-3 – Residential or Commercial sales service. CNG's SC-1 is a Residential sales service with the highest priority of service. CNG's SC-3 Commercial sales service does not have a curtailment provision.

In comparison, Industrial Transportation Rate SC-7 is an Industrial Transportation rate that would take service under CNG Industrial sales rate SC-2, if such customer took sales service. The Industrial sales rate SC-2 does contain a curtailment provision.[4]

Specifically, SC-7 is a Firm Industrial Transportation rate but is subject to curtailment as specified in the tariff at leaf 162 and leaf 155. SC-7 states as follows:

> Applicable to the Use of Service for:
>
> Firm Transportation Service applicable to retail customers served by Service Classification No. 2 to P.S.C. No. 4 - Gas (hereinafter called the "Customer") when Corning Natural Gas Corporation (hereinafter called the "Company") has facilities available and adequate for the load. Service under this Service Classification must be requested by a retail customer who has contracted to purchase gas from an alternate source. Such customers shall be

[3] *Id*. at Leaf 162.

[4] *Id*. and at Leaf 155.

> limited to those requiring transportation for a minimum volume of 25,000 Mcf annually (Rate Codes IT, ITO, BC3, BC4). (Emphasis added.)

SC-7 is described as a Firm Transportation rate that serves retail customers that would otherwise be served by CNG Industrial Sales Rate – SC-2. SC-2 states as follows:

> Character of Service:
> Natural Gas - continuous but subject to the curtailment provision herein. Approximately 1,000 BTU per cubic foot. Normal delivery pressure 30 pounds per square inch or 15 pounds per square inch as agreed upon between applicant and company. (Emphasis added.)

SC-2 describes a curtailment provision as follows:

> 2. Curtailment
>
> The company shall have the right to limit service at any time with or without notice to the customer, to an amount of gas which the company estimates it will have available for service to the customer in excess of the amount of gas necessary to maintain service to its residential and commercial customers taking service under Service Classification No. 1. [Emphasis added]

SC-7 is an Industrial Transportation rate that does not specify an option for customers to "utilize the Company's upstream capacity" and is an Industrial Transportation rate that is applicable to SC-2 service, which is a curtailable Service Classification, that is subordinate to CNG's residential and commercial customers. Therefore, SC-7 is a curtailable service rate as described by CNG's tariff, and costs should be allocated to this Service Classification recognizing it is a lower priority, curtailable, rate when compared to CNG's other Service Classifications.

CNG's service classifications for SC-1 (Residential), SC-3 (Commercial), and SC-14 (Aggregate – Residential and Aggregate – Commercial) do not have specific provisions noting curtailment risk, and based on the curtailment priority described above, these service classifications have considerably less risk of curtailment than that for SC-7. Further, the Company's cost of service study includes rates for wholesale customer Bath (Firm Transportation SC-3 and Firm Transportation SC-4). However, the service classifications for this customer are not included in its retail schedule for gas service.

Q ARE THERE ANY OTHER NON-FIRM SERVICE CLASSIFICATIONS?

A Yes. CNG's SC-8 contains an "interruptible" service option as well as a Firm service option. However, CNG's proof of revenue indicates that all customers that take service under SC-8 are served under the Firm service option.

Q HOW DO YOU PROPOSE TO ADJUST CNG'S CLASS COST OF SERVICE STUDY TO REFLECT THE LOWER PRIORITY SERVICE DUE TO HIGHER CURTAILABLE RISK FOR RATE SC-7, COMPARED TO ALL OTHER SERVICE CLASSIFICATIONS?

A I propose two adjustments to CNG's class cost of service study. First, I propose to modify the Company's class cost of service study to allocate design day demand costs to only service classifications that have minimal curtailment risk. Adjusting the allocation of main costs based on design day demand is important to distinguish between customers with the lowest priority risk of curtailment and customers with the highest priority risk of curtailment when CNG's delivery capacity is not sufficient to deliver gas to all retail customers. Since curtailable load can be taken off the system during peak day demand, or other high demand constrained days, the rate classes that are curtailed first are used as a resource by CNG to ensure that it has the capacity needed to provide service to other higher priority service classes on peak demand days and demand constrained days. As such, the service classifications that have priority of service should pay for capacity on design day demand, including both system supply capacity and curtailable load, because they have a first priority to this system capacity.

Second, I propose to allocate large distribution demand costs based on two classifications.

Q PLEASE DESCRIBE YOUR SECOND ADJUSTMENT TO CNG'S COST OF SERVICE STUDY.

A I propose to classify a portion of CNG's large distribution main plant costs as customer related and allocate certain amounts of plant costs on customers. The Company designs its distribution main costs to have adequate capacity to meet the design day demands of its Firm customers, and to also have adequate length of mains installed in order to connect all customers to its distribution system. This component of the delivery main costs which is unrelated to the design day demand on the system is appropriate to spread over all customers on the system (both Firm and curtailment) and should, therefore, be allocated on the basis of customers.

Q HOW DID YOU MODIFY CNG'S CLASS COST OF SERVICE?

A As noted above, I reallocated the Company's rate base related costs of distribution mains greater than 2 inches, and transmission mains. For transmission mains, I propose to allocate on a revised design day demand allocator. For distribution mains larger than 2 inches, I propose a two-step allocation based on my revised design day demand allocator, and on the basis of number of customers. For distribution mains larger than 2 inches, I propose an allocation based on 75% of my revised design day demand allocator, and 25% customers.

I propose to revise the design day demand allocation factor to remove SC-7 customers from an allocation of these design day demand costs. Because SC-7 customers are subject to curtailment, they can be denied service when CNG does not have adequate capacity to serve all customers on the system. Therefore, since these customers can be curtailed on design day demand, or other constrained day demand periods, they should not pay a price for delivery service capacity that is comparable to those customers that have a higher priority of Firm service with minimal curtailment risk on a peak day.

Both of these allocation factors are developed on Schedule PMN-6, at page 57, which allocates both distribution main costs greater than 2 inches, and transmission main costs on the same allocation factor. CNG notes that these allocation factors are based on design day demand allocation factors. In other words, the Company's allocation factors separate the cost of distribution mains based on the capacity the Company must have in order to provide service on the system design day or peak demand day.

For my proposal, I changed the design day factor to remove the SC-7 class from the design day demand factor. I then used this new design day demand factor for only plant-related design day costs – that is, rate base costs for mains larger than 2 inches, transmission asset costs, and related depreciation expense. I do not propose a change to CNG's allocation factors for operation and maintenance expense, and other taxes – *i.e.*, all non-plant design day demand costs.

Q WHY IS IT APPROPRIATE TO INCLUDE A CUSTOMER COMPONENT IN THE ALLOCATION OF DELIVERY MAINS?

A When new customers are added to the system, the length of delivery mains must be adequate to connect and serve all customers. Thus, a portion of investment in delivery mains is driven by both the number and location of customers on the system, and the design day demands of customers on the system.

In this case, Mr. Normand has recognized this portion of distribution mains as mains sized 2 inches and below, which equates to 28.2% of all distribution mains. Well accepted methodologies recognize that the customer component of the distribution system should be based on a minimum distribution system, or a zero intercept method. These methodologies have not been performed in this case. However, I believe it is a reasonable approach to allocate at least 50% of these delivery service related costs on a customer component. Therefore, in addition to the allocation of small mains performed by Mr. Normand which I support as appropriate, I also recommend a 25% allocation of larger distribution mains based on this customer component.

This portion of distribution mains represents the minimum size distribution system required to connect new customers, even when they have no load on the system. In the long run, the cost of the minimum sized distribution system varies with the number and location of customers served by the system.

Q CAN YOU PROVIDE AN EXAMPLE THAT ILLUSTRATES WHY THE LENGTH OF MAIN VARIES BY CUSTOMERS AND NOT ONLY COMBINED DESIGN DAY DEMANDS?

A Yes. Consider an example where CNG has two customers with the same peak day demand connected to a distribution loop, and the customers are two miles apart from each other. For this distribution loop, CNG would need to install two miles of distribution main, that have adequate capacity to meet the peak day demands of the two customers. The length of main is determined by the geographic distance between the two customers.

Now assume CNG has another portion of its distribution system where again there are two customers with the same peak day demand but are 10 miles apart. For this distribution loop, CNG would need to install 10 miles of distribution main to connect these customers to the distribution system, again using main sized to meet the combined peak day demands of the two customers.

While in each of the two distribution loops, the mains are sized to meet the combined peak day demand, the second loop would require considerably more distribution investment because it will require five times greater length of distribution mains to connect the customers to the system. This length of main is not driven by peak demand but is driven by customer location.

As such, the number of customers and the location of customers on this distribution loop are important engineering design features, as well as cost-causation bases for determining the utility's cost of providing distribution service to all customers.

In this example, CNG designs its distribution system both to meet the design day demands of the customers on its distribution loops, and to have adequate length of main to connect all customers to its distribution system. Hence, these cost-causation factors should also be reflected in CNG's cost of service study.

Q IS THERE ANY INSTANCE WHERE THE PEAK DEMANDS OF THE TWO HYPOTHETICAL CUSTOMERS ON THE TWO DISTRIBUTION LOOPS WOULD BE THE ONLY FACTOR IN DESIGNING THE DISTRIBUTION SYSTEM?

A No. The design of the distribution system must consider both the peak day demands of the customers connected to the distribution loop and the length of main needed to allow CNG to connect all customers to the system. There is no instance where a distribution system would be designed based only on the peak day demands of the customers connected to the system.

Q HAS THE NEW YORK PUBLIC SERVICE COMMISSION ("COMMISSION") PREVIOUSLY APPROVED A PROPOSAL TO ALLOCATE DISTRIBUTION COSTS USING BOTH A CUSTOMER AND A DEMAND COMPONENT?

A Yes. The Commission has approved the allocation of distribution costs on a customer and demand basis in many cases. In Case 94-G-0885, a National Fuel Gas Distribution Corporation ("NFG") proceeding, the Commission approved both the Administrative Law Judge's approval of NFG's use of the zero intercept method and corresponding rejection of proposals to allocate distribution costs on the basis of demand.[5] The Commission noted that:

> The Judge also rejected parties attempt to impeach NFG's cost study. While they criticized the minimum distribution system concept it employed, the Judge found that it makes some sense because clearly no customer can be served without distribution facilities, and the company's approach effectively emphasized the 'minimum' in the minimum distribution system.[6]

The Commission held that "the true interests of residential customers would not be served by over allocating costs to nonresidential customers with competitive alternatives, whose load might thus be lost."[7]

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5 Case 94-G-0885, Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of National Fuel Gas Distribution Corporation for Gas Service, Op. No. 95-16 (issued September 21, 1995) at 49-50, 53.

6 Case 94-G-0885, supra, Op. No. 95-16 (issued September 21, 1995) at 49-50.

7 *Id*. at 53.

Similarly, in Case 93-G-0162, a Niagara Mohawk Power Corporation d/b/a National Grid ("Niagara Mohawk") proceeding, the Commission declined to sustain objections to the Company's cost studies which allocated minimum system costs and service line costs on a customer basis.[8] The Commission held that the "company's cost estimates are the best presented in the record in these cases."[9]

Q HAS THE COMMISSION PREVIOUSLY REJECTED A PROPOSAL TO CLASSIFY ALL DISTRIBUTION COSTS AS DEMAND RELATED?

A Yes. In Central Hudson Gas & Electric Corporation's ("Central Hudson") 2008 rate case, the Commission approved the Administrative Law Judge's recommendation for the continued use of the zero-intercept method and rejection of Staff's proposal to allocate distribution costs on the basis of demand. The Commission noted the following:

> Staff proposed to reclassify gas distribution main costs for purposes of the pro forma embedded cost of service study by assigning them entirely to the demand component of rates. Currently, based on the zero-intercept methodology that Central Hudson has used since at least 1990, those costs are classified 55% to the customer component of rates and only 45% to the demand component. Because gas mains constitute 20% of the total cost of gas service, the reclassification results in a very large shift in cost responsibility from residential customers to large gas users. The RD noted that both the existing and proposed methodologies are deemed acceptable by NARUC with no

[8] Case 93-G-0162, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation for Gas Service, Op. No. 94-13 (issued May 12, 1994) at 51-53.

[9] *Id*. at 52.

> indication that one or the other is superior. It concluded that such a large shift in cost responsibility should not be adopted without compelling evidence that it is necessary to rectify some serious inequity... We have stated repeatedly that we strive to match cost responsibility with cost causation... .At the same time, as we discuss in connection with customer charges and the common cost allocation ratio, we have consistently taken a gradual approach when a sudden, full correction would create unacceptable bill impacts. That situation clearly exists here. Finally, although we find the arguments persuasive as to the assignment of a greater proportion of gas mains costs to the demand component, we are not convinced on this record that no mains costs should be classified as customer related. Accordingly, we direct that for the purpose of setting rates in this case, the allocation of gas mains costs should be 65% demand and 35% customer. This is consistent with the ratio that we adopted for National Grid in approving a Joint Proposal in its recent gas rate case.[10]

Q DO OTHER NEW YORK UTILITIES ALSO RECOGNIZE A CUSTOMER COMPONENT OF DISTRIBUTION MAINS?

A Yes. Niagara Mohawk used the zero intercept method in two prior gas rate cases. In those cases, 45.5% of distribution mains were classified as customer-related costs.[11]

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[10] *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric Service, et al.,* Case Nos. 08-E-0887, 08-G-0888, 09-M-0004, Order Adopting Recommended Decision with Modifications, at 46-48. (issued June 2009). See also, Recommended Decision at 104-107 (issued April 10, 2009).

[11] *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation for Gas Service*, Case No. 08-G-0609, Testimony of Gas Rates Panel (filed September 2, 2008) at 3; *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation for Electric and Gas Service,* Case No 12-G-0202, Testimony of Gas Rate Design Panel (filed April 27, 2012) at 18.

Q IS ALLOCATING DISTRIBUTION MAIN COSTS ON CUSTOMER AND DEMAND CONSISTENT WITH INDUSTRY PRACTICE?

A Yes. With respect to the allocation of distribution main costs, the 1989 National Association of Regulatory Commissioners ("NARUC") Gas Distribution Rate Design Manual states that "[a] portion of the costs associated with the distribution system may be included as customer cost." (1989 NARUC Manual at 22.) The 1989 NARUC Manual states further that, "[o]ne argument for inclusion of distribution related items in the customer cost classification is the zero or minimum size theory." (*Id.*) The Manual continues:

> Demand or capacity costs vary with the size of plant and equipment. They are related to maximum system requirements which the system is designed to serve during short intervals and do not directly vary with the number of customers **or their annual usage**. Included in these costs are: the capital costs associated with production, transmission and storage plant and their related expenses; the demand cost of gas; and most of the capital costs and expenses associated with that part of the distribution plant not allocated to customer costs, such as the costs associated with distribution mains in excess of the minimum size.[12]

Also, in a recent annual update on gas rate structures, the American Gas Association ("AGA") stated the following on classifying a portion of distribution mains as a cost of customer component.

> The largest part of a natural gas customer's bill is the cost of the gas itself, over which the utility has little control. This cost accounts for about 41 cents of every dollar of revenue received by a distribution utility.[footnote omitted] The bill amount for the gas portion varies with price as well as amount consumed. Natural gas utilities also incur costs that are not dependent on a customer's consumption. These "fixed" costs may include:

12 NARUC Gas Distribution Rate Design Manual (1989), pp. 23-24; emphasis added.

> - Meter reading
> - Billing
> - Fixed costs on plant and equipment
>   - Depreciation and taxes
>   - Distribution mains, meters, and service lines
> - Most administrative and general expenses
>   - Wages
>   - Buildings, energy, etc.
> - Natural gas storage
> - Customer and service O&M
>
> Most utilities recover at least a portion of these costs through a fixed charge on a customer's bill.[13]

Q DOES CLASSIFYING A PORTION OF DISTRIBUTION MAINS AS CUSTOMER RELATED HAVE THE EFFECT OF OVER-ALLOCATING COSTS TO SMALL CUSTOMERS?

A No. Allocating distribution mains costs on both a customer and demand basis does not over-allocate costs to small customers. Rather, this method properly classifies and allocates costs across all rate classes.

Q AFTER THIS ADJUSTMENT TO THE COMPANY'S COST OF SERVICE STUDY, WILL SC-7 CUSTOMERS STILL MAKE A CONTRIBUTION TO CNG'S COST OF SERVICE, AND WILL FIRM SERVICE CUSTOMERS BENEFIT FROM THE EXISTENCE OF CURTAILABLE CUSTOMERS LIKE SC-7?

A Yes. By applying my recommended modifications to the class cost of service study, curtailable customers will still pay their allocated share of CNG's operation and maintenance expense, other non-design day cost of service components,

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13 American Gas Association *Energy Analysis*, "Natural Gas Utility Rate Structure: The Customer Charge Component – 2015 Update," May 28, 2015.

and a customer component allocation of large distribution main costs. Hence, while SC-7 curtailable customers are not paying design day demand plant costs, they are benefitting Firm customers by absorbing a portion of all non-design day plant costs, and a customer component of large distribution cost. As such, Firm customers on the system benefit from the existence of the transportation customers that are subject to curtailment when CNG does not have adequate capacity to serve all of its customers. These Firm customer benefits come in the form of providing greater assurance that Firm customers will receive service during CNG's peak demand day and other demand constrained days. Also, Firm customers pay a lower rate because SC-7 curtailable customers pay for an allocated portion of CNG's non-design day costs, which reduces the costs which must be paid by non-SC-7 Firm customers.

Q WHAT ARE THE RESULTS OF THESE ADJUSTMENTS TO THE COMPANY'S CLASS COST OF SERVICE STUDY?

A The results of these modifications to CNG's class cost of service study are shown on my Exhibit MPG-1. In Exhibit MPG-1, I reallocated the design day plant costs for peak day demand requirements and allocated a portion of large distribution mains on a customer basis, as described above. On page 2 of Exhibit MPG-1, I show the Company's class cost of service study for illustrative purposes. The results of my modifications to the Company's class cost of service study and the Company's cost of service study are shown in Table 3 below.

TABLE 3

Cost of Service Comparison ($000)

Service Schedule	CNG Proposed Non-Gas Cost of Service[1]	Gorman Proposed Non-Gas Cost of Service[2]	Increase / (Decrease) from CNG: Amount	Increase / (Decrease) from CNG: Percent
SC 1 - Res	$ 9,632	$ 10,248	$ 615	6.4%
SC 3 - Comm	1,171	1,175	4	0.3%
SC 8 - HS Transp	156	143	(13)	-8.1%
SC 14 - Res Agr	1,141	1,194	53	4.7%
SC 14 - Comm Agr	686	654	(32)	-4.6%
SC 6 - Comm Trans	498	463	(35)	-7.0%
SC 7 - Indus Trans	857	345	(512)	-59.7%
Bath EG&W Firm	677	618	(59)	-8.7%
Bath EG&W Trans SC3	100	91	(9)	-9.3%
Bath EG&W Trans SC4	151	137	(14)	-9.4%
Total	$ 15,068	$ 15,068	$ (0)	0.0%

Sources:

[1]Table 2. Current revenue plus increase to reach cost of service.

[2]Table 1. Current revenue plus increase to reach cost of service.

III. CNG'S PROPOSED REVENUE SPREAD

Q HOW DOES THE COMPANY PROPOSE TO SPREAD THE REVENUE DEFICIENCY ACROSS RATE CLASSES IN THIS PROCEEDING?

A The Company's proposed spread of the revenue deficiency is outlined on its Schedule PMN-5, which largely increases rates on a relatively uniform percent basis. Importantly, the resulting change in rates does not move customers' rates closer to cost of service.

Q DO YOU BELIEVE THE COMPANY'S PROPOSED SPREAD OF THE RATE INCREASE IS REASONABLE WHEN APPLIED TO YOUR PROPOSED CHANGES TO THE CLASS COST OF SERVICE STUDY?

A No. The Company's proposed rate increase does not move its class rates closer to cost of service. If my proposed class cost of service study is adopted, there should be greater movement towards cost of service in spreading the revenue deficiency in this proceeding.

Q PLEASE DESCRIBE YOUR PROPOSED REVENUE SPREAD IN THIS PROCEEDING.

A Using my revised class cost of service study, I propose to move each class toward cost of service with the limitation that no class receive more than 1.5 times the system average increase. This would require some classes that are already paying rates at cost of service to receive a modest increase. Using this as a limitation, my proposed revenue spread of the claimed revenue deficiency in this proceeding is summarized below in Table 4.

TABLE 4

Gorman Proposed
Non-Gas Revenue Spread ($000)

Service Schedule	Current Non-Gas Sales Revenue[1]	Proposed Non-Gas Increase Amount[2]	Proposed Non-Gas Increase Percent	Index
SC 1 - Res	$ 7,655	$ 2,732	35.7%	1.18
SC 3 - Comm	1,016	175	17.2%	0.57
SC 8 - HS Transp	92	41	45.2%	1.50
SC 14 - Res Agr	940	271	28.8%	0.96
SC 14 - Comm Agr	581	82	14.1%	0.47
SC 6 - Comm Trans	499	6	1.3%	0.04
SC 7 - Indus Trans	408	5	1.2%	0.04
Bath EG&W Firm	257	116	45.2%	1.50
Bath EG&W Trans SC3	48	22	45.2%	1.50
Bath EG&W Trans SC4	84	38	45.2%	1.50
Total	$ 11,580	$ 3,488	30.1%	1.00

Sources:
[1]Rate Year 2018 base non-gas revenues at current rates from Schedule PNM-5, page 7.
[2]Table 1

As shown in Table 4, I recommend a gradual movement toward cost of service based on my modifications to the Company's class cost of service study. As shown in this proposed spread, at the Company's estimated revenue deficiency, I recommend that no class get more than 1.5 times the system average increase (or a 45.2% increase), and to accomplish this no class will get less than a 1% increase in their non-gas delivery rates – based on CNG's claimed revenue deficiency.

This gradual movement to cost of service does have precedent in New York. The Commission has limited class revenue increases to 1.25 to 1.5 times the system average increase depending upon the overall revenue increase awarded to the utility company. For example, in Case 91-S-1193, the Commission limited the increase of base rates (net of fuel) to 1.25 times the system average increase.[14] Similarly, in Case 94-E-0334, a Consolidated Edison Company of New York proceeding, the Commission approved a settlement that held that "no class will receive more than one and one-half or less than one-half the overall pure base percentage increase or decrease."[15] Likewise, in Case 92-E-1055, involving Central Hudson Gas and Electric, the Commission adopted Staff's recommended limit of 1.5 times the system average increase.[16] It should be noted that in the prior Central Hudson case, the Commission declined to approve a 2.0 times the average increase, which was only 4.6% in that proceeding. Moreover, the Commission approved a similar ceiling in Case 05-E-1222, a New York State Electric and Gas proceeding, with respect to rate

[14] See Case 91-S-1193, Consolidated Edison Company of New York, Inc, Steam and Gas Service, Op. No. 92-29 (issued October 20, 1992) at 13.

[15] See Case 94-E-0334, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service, Op. No. 95-3 (issued April 6, 1995) at Appendix D, p. 4.

[16] Case 92-E-1055, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric Service, Op. No. 94-3 (issued February 11, 1994) at 59-60.

decreases. Specifically, the Commission approved a Staff recommendation that "[t]he maximum decrease for any class would be no more than 1.5 times the overall decrease and the minimum [decrease] would be no less than 0.5 times the overall decrease."[17]

Q DO YOU BELIEVE THAT YOUR PROPOSED ADJUSTMENTS TO RATES WILL RESULT IN JUST AND REASONABLE RATES TO RETAIL CUSTOMERS?

A Yes. I believe that my modifications to the class cost of service study coupled with my recommended revenue spread, more reasonably allocates CNG's claimed revenue deficiency in this proceeding, and sets CNG's rates closest to its cost of service.

CNG's costs of providing service are properly spread between high priority customers with little curtailment risk and lower priority customers with greater curtailment risk. High priority customers have a greater assurance of uninterrupted service on constrained days caused by customer demands or system equipment failures because lower priority customers can be curtailed in order to provide greater assurance of delivery during such periods of system constraint. Further, higher priority customers also benefit because a significant amount of CNG's cost of providing service is paid for by the customers that have

[17] Case 05-E-1222, Proceeding in Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation for Electric Service, "Order Adopting Recommended Decision with Modifications" (issued August 23, 2006) at 96.

a high risk of curtailment. Therefore, cost of service reflects service priority, and quality of service, and reasonably spreads CNG's cost of service over its various service schedules based on these parameters.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

Qualifications of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Managing Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from Southern Illinois University, and in 1986, I received a Masters Degree in Business Administration with a concentration in Finance from the University of Illinois at Springfield. I have also completed several graduate level economics courses.

In August of 1983, I accepted an analyst position with the Illinois Commerce Commission ("ICC"). In that position, I performed a variety of analyses for both formal and informal investigations before the ICC, including: marginal cost of energy, central dispatch, avoided cost of energy, annual system production costs, and working capital. In October of 1986, I was promoted to the position of Senior Analyst. In this position, I assumed the additional responsibilities of technical leader on projects, and my areas of responsibility were expanded to include utility financial modeling and financial analyses.

In 1987, I was promoted to Director of the Financial Analysis Department. In this position, I was responsible for all financial analyses conducted by Staff. Among other things, I conducted analyses and sponsored testimony before the ICC on rate of return, financial integrity, financial modeling and related issues. I also supervised the development of all Staff analyses and testimony on these same issues. In addition, I supervised the Staff's review and recommendations to the Commission concerning utility plans to issue debt and equity securities.

In August of 1989, I accepted a position with Merrill-Lynch as a financial consultant. After receiving all required securities licenses, I worked with individual investors and small businesses in evaluating and selecting investments suitable to their requirements.

In September of 1990, I accepted a position with Drazen-Brubaker & Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and Staff. Since 1990, I have performed various analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and acquisitions, utility reorganizations, level of operating expenses and rate base, cost of service studies, and analyses relating to industrial jobs and economic development. I also participated in a study used to revise the financial policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have participated in rate cases on rate design and class cost of service for electric, natural gas, water and wastewater utilities. I have also analyzed commodity pricing indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of service and other issues before the Federal Energy Regulatory Commission and numerous state regulatory commissions including: Arkansas, Arizona, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, Missouri, Montana, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate setting position reports to the regulatory board of the municipal utility in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate disputes for industrial customers of the Municipal Electric Authority of Georgia in the LaGrange, Georgia district.

Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS TO WHICH YOU BELONG.

A I earned the designation of Chartered Financial Analyst ("CFA") from the CFA Institute. The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting, economics, fixed income and equity valuation and professional and ethical conduct. I am a member of the CFA Institute's Financial Analyst Society.