STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission As to the Rates, Charges, Rules and Regulations of Keyspan Gas East Corp. dba Brooklyn Union of L.I. for Gas Service	**:**	**Case No. 16-G-0058**
Proceeding on Motion of the Commission As to the Rates, Charges, Rules and Regulations of the Brooklyn Union Gas Company for Gas Service	**:**	**Case No. 16-G-0059**

REBUTTAL TESTIMONY

OF

RICHARD A. BAUDINO

ON BEHALF OF

THE CITY OF NEW YORK

J. KENNEDY AND ASSOCIATES, INC.

JUNE 10, 2016

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission As to the Rates, Charges, Rules and Regulations of Keyspan Gas East Corp. dba Brooklyn Union of L.I. for Gas Service	**:**	**Case No. 16-G-0058**
Proceeding on Motion of the Commission As to the Rates, Charges, Rules and Regulations of the Brooklyn Union Gas Company for Gas Service	**:**	**Case No. 16-G-0059**

REBUTTAL TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc., 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. Did you file Direct Testimony in this proceeding?

A. Yes. I filed Direct Testimony on behalf of the City of New York.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimony of the Utility Intervention Unit ("UIU") Rate Panel; the New York State Department of

Public Service Staff ("Staff") Gas Rates Panel ("Staff Gas Rates Panel" or "GRP"), and the Staff Gas Policy and Supply Panel ("Staff GPSP"). My Rebuttal Testimony will address issues relating to cost and revenue allocation and rate design.

UIU Rate Panel

Q. Beginning on page 26 of its Direct Testimony, the UIU Rate Panel took issue with the treatment of Distribution Mains costs in the Embedded Cost of Service ("ECOS") studies filed by Brooklyn Union Gas Company ("KEDNY") and KeySpan Gas East Corporation ("KEDLI"). On page 39 of its Direct Testimony, the UIU Rate Panel recommended classifying distribution mains costs as 100% demand related and allocating those costs based on Design Day Demand. Should the New York Public Service Commission ("Commission") accept this recommendation?

A. No. The UIU Rate Panel's recommendation to allocate distribution main costs on a demand-only basis is inappropriate, inconsistent with Commission precedent, and should be rejected in this proceeding.

Q. What rationale did the UIU Rate Panel advance for classifying and allocating the costs of distribution mains on a 100% demand basis?

A. On page 39, lines 20 through 24, the UIU Rate Panel testified that its recommended approach "is widely used by other utilities and regulatory commissions and it offers a

reasonable basis for analyzing costs, with the exception of temperature controlled and interruptible customers."

Q. Does the rationale advanced by the UIU Rate Panel present a reasonable basis for rejecting KENDY's and KEDLI's[1] allocation of distribution mains costs in the ECOS studies?

A. No, UIU's proposal is result-oriented and contrary to any rational analysis.

Q. Mr. Baudino, please explain why allocating distribution mains costs based on peak demand only is inappropriate.

A. The two main functions of distribution mains are to deliver gas during the system winter peak and to connect customers to the system. A properly designed zero-intercept study or minimum size system study recognizes these two functions by classifying main costs into demand-related and customer-related costs, which can then be assigned to customer classes based on their respective contributions to system peak and on the number of customers in each class.

Peak winter demand is one of the primary drivers of the Companies' investment in gas distribution mains. The Companies must have sufficient capacity available on

[1] KEDNY and KEDLI will also be referred to as "Companies".

their systems to satisfy the peak winter heating demand, which is caused mainly by heating customers. If the peak winter demand increases, the Companies may need to invest in additional mains to serve the load. During the non-winter months, substantial excess capacity exists on the system. Use of the Companies' distribution system during these months does not cause additional fixed costs to be incurred by the Company. In fact, high load factor customers provide valuable margins to the Companies during off-peak months when the demands of residential and commercial heating customers are very low. In a similar manner to peak winter demand, if the number of customers increases, the Companies may need to expand their distribution system investment. Thus, the number of customers connected to the distribution system is another important causative factor in distribution main investment.

I also note that the Companies' Rate Design Panel explained this very reasonable cost allocation process in their Direct Testimony (See KEDNY Rate Design Panel Direct Testimony, pages 16 and 17).

Q. Do the Companies' have any programs that illustrate how the number of customers factor into distribution main investment?

A. Yes. The Neighborhood Expansion ("NEB") Pilot Program illustrates that the number of customers is one of the drivers in distribution main investment. Under the

NEB Program, a neighborhood can be considered for distribution system expansion at no cost to the customers if it passes an eight customer per five hundred feet of main density test. The use of a per-customer test in the NEB Program is another practical illustration of how the number of customers is a key factor in distribution main investments.

Q. Is the allocation of distribution main costs on a customer and demand basis consistent with the National Association of Regulatory Utility Commissioners ("NARUC") Gas Rate Design Manual dated August 6, 1981 ("1981 NARUC Manual") and Gas Distribution Rate Design Manual dated June, 1989 ("1989 NARUC Manual")?

A. Yes. The NARUC Manuals discuss a number of methodologies and approaches to cost allocation. With respect to the allocation of distribution main costs, the 1989 NARUC 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*.) Similarly, the 1981 NARUC Manual indicates that the cost associated with distribution plant mains is typically functionalized on a demand and customer basis. (1981 NARUC Manual at 28, Table III.)

Q. Has the Commission recognized the appropriateness of a customer component in the cost of gas distribution mains?

A. Yes. The Commission has accepted the use of a minimum size system concept to classify and allocate distribution costs in past cases.

Q. Is the minimum size distribution system method and zero intercept method the same thing?

A. In concept, yes they are the same. The minimum size system approach identifies the minimum sized distribution main needed to serve customers and then classifies that portion of distribution mains as customer-related. The zero intercept method uses regression analysis to identify the cost of a hypothetical "zero sized" main, the cost of which is necessary to serve customers connected to the system whether or not they place any demand on the system. While there may be subtle differences between the two methods, both recognize that certain distribution main costs should be classified as customer-related and allocated based on the number of customers not on peak demand.

Q. What is the result of failing to recognize a customer-related component in the cost of distribution mains?

A. The result is a gross misallocation of costs that fails to allocate proper cost

responsibility to the Company's customer classes. In sum, the Residential classes are allocated far too little costs of distribution mains, while non-residential classes are allocated far too much cost responsibility.

This point can be illustrated with a simple example. Assume that there is a single industrial customer on KEDNY's system with a peak demand of 300 dekatherms ("Dth"). Further assume that elsewhere on the system, there is a neighborhood of 750 residential customers with a peak demand of 300 Dth. It is obvious that in order to connect all of those residential customers to its system, the Company will have to invest in far more footage of distribution mains for those customers than it would have to invest in for the one industrial customer. That extra investment in distribution mains is due solely to the number of customers on the system, not the peak demands of those customers.

Q. Can you provide a few examples of how the Commission has allocated distribution main costs in the past?

A. Yes. 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.[2] The Commission noted that:

> The Judge also rejected CPB's and PULP's 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.[3]

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."[4]

Similarly, in Case 93-G-0162, a 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.[5] The Commission held that the "company's cost estimates are the best presented in the record in these

---

[2] 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.

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

[4] *Id*. at 53.

[5] 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.

cases."[6]

Q. Has the Commission previously rejected a proposal to classify all distribution costs as demand related?

A. Yes. In a Central Hudson Gas & Electric Corporation ("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 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

[6] *Id*. at 52.

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.[7]

Q. Did Central Hudson also use the zero intercept method in its most recent rate case?

A. Yes. In its 2014 rate case, Central Hudson used the zero intercept method to support classifying 35% of its distribution mains as a customer-related cost.[8]

Q. Do other New York utilities also recognize a customer component of distribution mains?

A. Yes. Niagara Mohawk Power Corporation d/b/a National Grid 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.[9]

---

[7] *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).

[8] *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Gas Service, et. al*., Case No. 14-G-0319, Direct Testimony of the Cost of Service Panel at 12 (filed July 25, 2014).

[9] *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and*

Q. Did the UIU Rate Panel address or distinguish the Commission's practice of allocating distribution main costs on a demand and customer basis in its Direct Testimony?

A. No, it did not. Instead, UIU cited to several cases where it claims that DPS Staff and/or other utilities have endorsed its approach; however, a review of those cases does not indicate that the Commission has ever affirmatively endorsed UIU's proposal. For example, it cited to the most recent Orange and Rockland gas rate case, Case 14-G-0494, wherein the Commission adopted a Joint Proposal that classified gas distribution main costs on a demand basis. However, the Commission's decision to approve a settlement in one particular case does not create precedent on the proper allocation of distribution main, particularly considering that a review of the Commission's order adopting the Joint Proposal does not indicate that the manner of classifying distribution main was in dispute in that proceeding.

In contrast, in the New York State Electric and Gas and Rochester Gas and Electric proceedings cited by UIU (Cases 09-G-0716 and 09-G-0718), the classification of electric distribution plant was "particularly contentious," and resulted in a settlement

---

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.

agreement (approved by the Commission) that directed the utilities to classify electric distribution plant using a 50-50 demand/customer split in its next rate proceedings. Notably, Staff specifically advocated for the 50-50 demand/customer split in its testimony in these proceedings.

Q. Did the UIU propose using alternative ECOS studies to the ECOS study filed by the Companies?

A. Yes. Beginning on page 40, line 23 the UIU Rate Panel described two alternative ECOS studies. One alternative ECOS study, ECOS Study I, allocated distribution mains using the Companies' Design Day Demand Allocator. The other alternative ECOS study, ECOS Study II, classified 100% of distribution mains as demand related, but allocated the minimum system portion using Winter Daily Demand. This second alternative study allocated more distribution main costs to Temperature Controlled ("TC") and Interruptible ("IT") service classes.

Q. Is it appropriate to use Winter Daily Demands to allocate the so-called minimum system portion of distribution mains to service classes?

A. No, it is not. First of all, the customer-related portion of distribution mains should not be arbitrarily changed to a demand-related cost and allocated based on demand for the reasons I explained previously. Second, TC and IT customers do not have the

same level of reliability and access to the system that firm service customers do. At temperatures below 15 degrees, TC customers will be interrupted. TC customers also must invest in dual fuel capability in order to have continuous service during interruptions, which is a cost that firm service customers do not incur. Given the fact that TC and IT customers do not have the same level of reliability that firm service customers do, they should not receive a fully allocated share of distribution main costs based on the Winter Daily Demands allocation factor. Allocating demand-related main costs based on Winter Daily Demands results in TC and IT customers being assigned too much cost responsibility.

Q. What are the results of the UIU's recommended ECOS studies compared to the Companies' filed ECOS study?

A. Rebuttal Table 1 provides a comparison of service class rates of return for KEDNY using the Companies' filed ECOS study and the two ECOS alternatives sponsored by the UIU Rate Panel. I obtained this data from Exhibit ___(URP-2), Schedule 2.

Rebuttal Table 1
KEDNY Class Rates of Return
Company and UIU ECOS Studies

	KEDNY ECOS	UIU ECOS STUDY I	UIU ECOS STUDY II
SC1A - Res NonHeat	-5.38%	11.91%	11.36%
SC-1B Res Heat	2.44%	1.76%	2.37%
SC-1DG Res DG	-6.32%	-7.84%	-7.54%
SC-2-1 Non-Res NonHeat	13.78%	9.07%	7.06%
SC-2-2 Non-Res Heat	-0.24%	-3.58%	-3.05%
SC-3 Multiple Family	-1.20%	-5.60%	-5.31%
SC-4A High Load Factor	20.95%	10.87%	5.34%
SC-4A CNG	35.37%	20.70%	13.50%
SC-4B Year Round AC	15.48%	6.94%	7.09%
SC-18-5A OnSys Lg. Vol Sales	95.20%	95.26%	5.04%
SC-6C Temp. Controlled Comm/Ind	48.07%	48.42%	25.63%
SC-6G Temp. Controlled Gov't	35.92%	36.31%	16.80%
SC-6M Temp Controlled Multi-Fmly.	27.30%	27.87%	13.45%
SCX-7 Seasonal	19.18%	22.10%	14.82%
Total System	2.39%	2.39%	2.39%

I note that even under UIU's ECOS Study II, the TC classes are still paying rates substantially in excess of their cost to serve. For example SC-6G generates a class rate of return of 16.80% compared to the system average rate of return of 2.39%. Even UIU's two alternative ECOS studies underscore the fact, explained in detail in my Direct Testimony, that the TC classes are paying rates greatly in excess of their cost to serve.

Q. Did the UIU Rate Panel have a specific revenue allocation proposal?

A. In my opinion, the UIU Rate Panel did not have a specific revenue allocation proposal that the Commission could use to guide its decision.

The UIU Rate Panel began its discussion of its revenue allocation recommendation on page 44 and continued through page 46, line 3 of its Direct Testimony. UIU's first recommendation was against classifying and allocating minimum system costs on the basis of customers. UIU's second recommendation was a disagreement with using ECOS results to determine the share of the revenue increase that should be borne by TC, IT, DG, and EG customers. UIU did not provide any specific guidance on how much of the revenue increase should be borne by these classes, but pointed to its ECOS Study II if the Commission "wants to pursue this proposal." With regard to UIU's second recommendation, I note that even under its ECOS Study II, TC customers should not receive any revenue increase given the excessive service class returns produced by that study.

UIU's third recommendation consisted of some general thoughts on "reducing some of the substantial deviations that exist in individual class rates of return relative to the system average." UIU Rates Panel Direct Testimony, page 44, lines 15 through 17. However, UIU provided no substantive or quantitative proposals on how these so-

called deviations should be addressed. UIU's fourth recommendation simply noted "the largely across-the-board approach used by the Companies may not move far enough toward achieving more uniform rates of return." UIU Rates Panel Direct Testimony, page 45, lines 12 through 13. However, once again the UIU did not provide any analysis or specific quantification as to how the Commission could move class rates of return to cost.

Q. On page 67, the UIU Rates Panel recommended continuing value of service pricing for TC, IT, DG, and EG rates. Please address this recommendation.

A. I recommend that the Commission adopt the Company's approach to basing TC service class rates on cost of service, rather than on value of service. Assuming that the cost responsibility for these customers can be accurately measured, which I believe it can be, rates for TC customers should be based on the cost to serve them. The Companies' ECOS as well as the two ECOS provided by the UIU Rates Panel show that TC customers' current revenues are well in excess of the cost to serve them. It is appropriate for the Commission to recognize this situation and begin to base TC service class rates on the allocated cost to serve. My proposal to keep total TC revenues the same, rather than increase them, is certainly a reasonable and measured step toward cost-based rates for TC customers and is supported under the Companies' proposal and UIU's proposals.

Staff Gas Rates Panel

Q. Please summarize the Staff Gas Rates Panel's proposal with respect to TC and IT customer rates and pricing.

A. On page 34 of its Direct Testimony, the Staff Gas Rates Panel noted that "the Companies practice of pricing non-firm service up to firm rates have resulted in non-firm customers converting to firm service." On page 35, the GRP recommended a 20% discount off of the applicable firm rate for TC customers and a 30% discount for IT customers. The GRP also recommended continuing the 90%/10% split sharing mechanism.

Q. What is your conclusion with respect to the Gas Rates Panel's treatment of TC/IT customers' rates and revenues?

A. I recommend that the Staff Gas Rates Panel's recommendations with respect to TC/IT rates and revenues be rejected. I continue to recommend, as the Companies did, that rates for TC/IT service be based on cost of service and that those rates continue to move in that direction over time.

Q. Please explain why the Commission should reject the GRP's recommendation.

A. In my opinion, the GRP's recommendation reduces the problems with the currently effective TC/IT tariffs (i.e., TC/IT customers paying rates well in excess of cost of

service), but does not go far enough. The Staff pointed out that the operation of the current tariff, with rates approaching the cost of firm service, has resulted in non-firm customers switching to firm service. However, even a 20% discount does not fully address this problem and makes no real movement toward reflecting the true cost to service TC/IT customers.

The problem with basing the cap on TC/IT rates off of firm service rates is that the cost of gas for firm service customers includes a substantial amount of demand charges that are not applicable to non-firm customers. This gives the Companies far too much leeway in increasing TC/IT rates above the true cost to serve. I will demonstrate this fact with an example. The Companies supplied Excel versions of the KEDNY Rate Design Panel's schedules, including Exhibit___RDP-4, Schedule 4. This spreadsheet showed the Companies' proposed cost of gas by service class on the tab entitled "KEDNY GAC Prop". Using January 2017 as an example, the cost of gas rate for TC customers is $0.2954 per therm. For SC 2 firm service customers, the cost of gas rate per therm for that month is $0.4354. A 20% discount on the SC 2 cost of gas would result in a therm rate of $0.3483, which is still 17.9% higher than the proposed cost of gas for TC/IT customers. What this means is that the Companies have additional headroom to increase total TC/IT revenues, even considering a discount to the distribution rates.

However, under the GRP's proposal the difference in the cost of gas could be higher. This is because the GRP proposes to apply the *incremental* cost of gas to the calculation of rates under the cap, as opposed to the *average commodity* cost of gas. Since incremental gas costs will likely be higher than the average commodity cost of gas contained in the Companies proposed gas cost rates, the TC/IT cap would be even higher, making the 20% discounted cost of gas higher. In turn, this would enable the Companies to further increase TC/IT revenues.

Q. Mr. Baudino, did Staff attempt to quantify the effect of its TC/IT rate proposal on TC customers?

A. No. The City of New York issued discovery to the Staff that attempted to ascertain the effect of its proposal on a hypothetical TC-6G customer using 400,000 therms per month. The Staff stated that its proposal impacts the current price cap, limiting KEDNY's actual cumulative revenues to what would have been paid under SC 2-2 including the 20% discount. The discovery also requested a comparison of the average and incremental cost of gas. The Staff responded that it had not developed a cost of gas comparison. Please refer to Exhibit___(RAB-7) for the referenced discovery and response from the Staff.

Q. Should TC/IT customers be charged the incremental cost of gas?

A. No. There is no good reason for continuing to charge TC/IT customers the incremental cost of gas when their rates should be based on the cost to serve. TC/IT customers should only be charged the average commodity cost of gas like firm service customers.

Q. Would moving to cost of service based rates as you recommend add clarity and certainty to the bills that TC/IT customers pay?

A. Yes. Continuing the current method of pricing as the GRP recommends, even with a 20% discount, does not promote clarity or transparency of the rates TC/IT customers must pay. Moving to a cost based rate as I recommend reduces the uncertainty surrounding the currently effective pricing approach for TC/IT customers.

Staff Gas Policy and Supply Panel

Q. What is Staff's position with respect to TC service classifications?

A. On page 32, line 24 through page 34, line 20, the Staff Gas Policy and Supply Panel outlines several recommendations with respect to the TC service classifications. The GPSP first outlines its rationale for why it would be appropriate to merge the TC and IT service classifications. The GPSP argues that the TC and IT customer base are essentially indistinguishable, yet currently TC customers are paying more than IT customers for an inferior service. As a result, the GPSP proposes a permanent

moratorium on all new TC customers, while providing flexibility for existing TC customers to remain on TC service or switch to firm or IT service under certain circumstances.

Q. Do you agree with the GPSP's proposal for a permanent moratorium on new TC customers?

A. No, I do not. While I do not take issue with the GPSP's claim that TC customers may be interrupted before IT customers, the GPSP proposal to close off TC customers fails to account for two key factors with respect to TC service. First, the TC rate provides certainty to customers regarding when they will be interrupted and this certainty is valuable from a planning standpoint. In contrast, IT customers are interrupted when there is a system reliability issue, which can depend on several factors and involve the discretion of the utility.

Second, the GPSP presented no analysis on what is expected to happen to the frequency of interruptions if the TC customer load migrated to IT service. It is certainly possible that existing IT customers could experience an increase in interruptions due to this migration, as this customer class would no longer be insulated from interruptions because the TC customers exited the system and thereby avoided a system reliability issue.

Q. What is your recommendation with respect to TC service classifications?

A. At a minimum, both of the issues I identified above should be investigated before the Commission imposes a permanent moratorium on new TC customers. As mentioned in my Direct Testimony, while I do not oppose collaborative discussions that are designed to improve TC and IT service offerings, I disagree with proposals to close the TC tariffs to new customers.

Q. Does this conclude your Rebuttal Testimony?

A. Yes.