Formal Case No. 1093 when the Company first proposed implementation of the "Fee-Free" Credit/Debit Card Bill Payment Program, WG had updated information regarding the costs of that program that it did not disclose.

Q. WHAT IS THE BASIS FOR YOUR ASSERTION THAT THE INFORMATION WG HAS PROVIDED WITH RESPECT TO THE COSTS OF ITS "FEE-FREE" CREDIT/DEBIT CARD PROGRAM IS INCOMPLETE?

A. AOBA Data Request 13-9 referenced non-confidential information relating to the costs of the Company's "Fee-Free" Credit/Debit Card Bill Payment Program that was provided in Exhibit WG (2D)-3 and asked in part b. of its request that WG:

> *Provide the monthly payments WG has made to Official Payments Corp. and/or any predecessor organization since the inception of the Company's Fee free Credit/Debit Card Bill Payment Program.*

***** START CONFIDENTIAL INFORMATION *****

***

END CONFIDENTIAL INFORMATION ***

Q. WHY IS THE INFORMATION PROVIDED IN THE INVOICES SUBMITTED TO WG BY ITS CHOSEN CREDIT/DEBIT CARD PAYMENT PROCESSING FIRM RELEVANT TO THIS PROCEEDING?

A. First, the detail of invoices is relevant to the verification of the non-confidential dollar amounts shown by month in Exhibit WG (2D)-3. Second, that detail provides greater insight regarding the composition of the charges that produce the aggregate amount billed each month.

Q. WHAT HAVE YOU OBSERVED FROM THE INFORMATION CONTAINED IN THE INVOICES THAT HAVE BEEN PROVIDED?

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[44] WG operates it's a single credit/debit card program for all three of its retail service jurisdictions, and the invoices provided offer no separate identification of costs for the District of Columbia. Since WG's credit/debit card bill payment program commenced in other jurisdictions prior to WG's offering of the program to customers in the District of Columbia, the inception of WG's credit/debit card bill payment program appears to been in mid-2012. Yet, WG has not provided invoices for periods prior to the commencement of the program in DC. Given that no DC specific information is referenced in any of the invoices provided, the costs of WG's program can only be assessed on a system wide basis, and in that context, the full history of billings under the Company's contract with its provider of credit card processing services appears relevant to efforts to respond to the Commission's Designated Issue No. 14 in this proceeding. Similarly, for a program for which WG expects growing participation, invoices for periods subsequent to August 2015 are also relevant to an evaluation of this program, but again, that information has not been provided.

A. ***** START CONFIDENTIAL INFORMATION *****

***** END CONFIDENTIAL INFORMATION *****

[45] It is unclear how the Company can have fractional numbers of transactions billed (e.g., 0.17 in the 18,250.13 "Quantity" reflected in the bill dated 30-JUN-14). In fact, fractional billing units are shown for all but one of the months for which invoices have been provided.

Q. WHAT INFORMATION REGARDING THE COSTS OF THE "FEE-FREE" CREDIT/DEBIT CARD PROGRAM DID WG NOT DISCLOSE IN FORMAL CASE NO. 1093?

A. In the Direct Testimonies of both witness Tuoriniemi and witness Buckley in Formal Case No. 1093, filed February 29, 2012, Washington Gas represented that its costs for credit card processing under the "Fee-Free" Credit/Debit Card Bill Payment Program were expected to be approximately $1.00 per transaction for residential customers and approximately $2.00 per transaction for commercial customers.[46] No other charges for that program were referenced. Given WG's assumption that use of the program would be distributed proportionally between residential and commercial customers, WG estimated that 93.32% of credit/debit card transactions processed under the program would be for residential customers and 6.68% would be processed for commercial customers. This suggested a weighted average cost per transaction of $1.0668.

However, ***** START CONFIDENTIAL INFORMATION *****

[46] See Formal Case No. 1093, the Direct Testimony of witness Tuoriniemi, Exhibit WG (D), at pages 82-83; and the Direct Testimony of witness Buckley, Exhibit (L), at page 18.

***** END CONFIDENTIAL INFORMATION *****

Q. DO YOU OFFER ANY FURTHER OBSERVATIONS REGARDING THE INFORMATION CONTAINED IN THE INVOICES PROVIDED TO SUPPORT THE COSTS SHOWN IN EXHIBIT WG (2D)-3?

A. Yes. I have several.

***** START CONFIDENTIAL INFORMATION *****

[47] The contract between WG and Online Resources (now Official Payments) is provided as Attachment 1 to the Company's **CONFIDENTIAL** response to AOBA Data Request 13-9. Page 25 of 25 of that attachment contains Attachment 1 to the agreement between WG and Online Resources which lists "Fees."

***** END CONFIDENTIAL INFORMATION *****

Q. WHAT COSTS FOR WG'S "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM ARE INCLUDED IN THE COMPANY'S TEST YEAR REVENUE REQUIREMENTS IN THIS PROCEEDING?

A. Witness Tuoriniemi's Supplemental Direct Testimony at page 14, lines 9-13, references Exhibit WG (2D)-3 and relies on that exhibit to suggest that the Company's test year costs for its "Fee-Free" Credit/Debit Card Bill Payment Program totaled **$161,000**.[48]

Q. DOES WG RECOGNIZE ANY COSTS FOR ITS "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM OTHER THAN THE COSTS BILLED TO THE COMPANY BY THE ENTITY NAMED OFFICIAL PAYMENTS?

A. No. It does not. I would expect that, at a minimum, costs for individuals such as witness Sluder who serves as "*the interface between Washington Gas and the Company's banking institution Wells Fargo, N.A., third party payment vendors,*

[48] Exhibit WG (2D)-3 shows a test year cost of **$161,343.16**.

and Washington Gas' outsourcing partner Accenture"[49] would be included in the Company's reported program costs.

Q. HOW DOES WG DETERMINE THE DC PORTION OF THE COSTS IT INCURS FOR ITS "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM?

A. As shown in Exhibit WG (2D)-3, Washington Gas simply allocates the costs of the program on the basis of the average number of meters by jurisdiction. Using this measure DC is allocated 13.985% of the total costs incurred by WG.

Q. HAS WG DEMONSTRATED ANY SPECIFIC TIE BETWEEN THE NUMBER OF METERS IT SERVES IN EACH JURISDICTION AND THE NUMBERS OF CUSTOMERS IN EACH JURISDICTION THAT UTILIZE THE COMPANY'S "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM?

A. No. It has not. Since WG's credit/debit card processing company does not report payments processed by jurisdiction, WG simply assumes that proportional numbers of customers will utilize the program in each jurisdiction. However, each bill payment processed must necessarily be associated with an account number, and each account number is associated with a billing address. Thus, it would not be inappropriate for the Commission to expect WG to prepare such information, and it should not be difficult for WG to assess the numbers or percentages of customers by jurisdiction that use credit/debit card payments

[49] Exhibit WG (O) at page 1, lines 18-22.

each month. If the Company does not have that information already available, it could obtain reasonable estimates of customers' use of the program by jurisdiction through sampling analysis. Given that the "Fee-Free" Credit/Debit Card Bill Payment program started in other jurisdictions prior to when it commenced in DC, it should be expected that the numbers of customers using the Company's Credit/Debit card program would be greater in jurisdictions where customers have had more time to become familiar with its parameters.

Q. WITNESS SLUDER SUGGESTS THAT THE "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM "RESULTS IN A SAVINGS OF $3.03 PER TRANSACTION." IS HE CORRECT?

A. His statement is only correct for those customers who would otherwise use credit/debit card payments processed by third-parties. However, as previously observed, substantial percentages of the customers who elect to use WG's "Fee-Free" Bill Payment Program appear to have shifted to that program from less expensive-to-process check payments mailed to WG's lockbox location. Those customers do not save $3.03 per transaction. Customers who previously used other bill payment options but shift to credit/debit card payments under the Company's program received no such savings. Yet, if and when WG's authorized revenue requirement is increased to reflect the costs of this program, those customers should expect to pay higher charges for their gas service to cover the Company's increased costs for payment processing.

Q. DO YOU SUPPORT CONTINUATION OF THE COMPANY'S "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM IN THE DISTRICT OF COLUMBIA?

A. No, I do not. The limited, incomplete, and inconsistent information WG has provided in response to Issue No. 14 in this proceeding does not portray a program that warrants continuation. Moreover, the analyses presented herein clearly depict a program that is uneconomic, deceptive, and clearly not "fee-free." If left in place, the Commission must expect that the program will add to WG's overall costs of service, without any clear demonstration of commensurate benefit. Rather, WG's average cost per transaction for processing all types of payment transactions has increased more than 33% over the last three years. In addition, the information WG has provided suggests that, since the inception of WG's "Fee-Free credit/Debit Card Bill Payment Program, the numbers of customers using WG's more expensive Walk-in Payment option has increased, not decreased, as the Company had anticipated. Over the long-run the contin-uation of WG's "Fee-Free" Bill Payment program could add as much as $1.36 per month or $16 per customer per year to the customer bills. In the context of WG's proposals in Formal Case No. 1093 to save money by encouraging customers to use e-bills, WG's promotion of increased payment processing costs through its credit/debit card payment processing program is difficult to rationalize.

Q. WOULD YOUR RECOMMENDATION ELIMINATE THE AVAILABILITY OF NO COST CREDIT CARD PAYMENTS FOR LOW INCOME CUSTOMERS?

A. Yes, it would. I considered the possibility of leaving open a more restricted program that would limit participation in the program to low-income customers; while requiring WG to maintain better and more complete information regarding the costs of the program and customer participation by jurisdiction and rate class. However, as discussed above, this program has not served to reduce the number of walk-in payments and thus does not appear to be particularly effective in addressing the needs of low-income customers. Thus, it is difficult to construct a compelling case for continuing the program in any form.

Q. IF THE COMMISSION DECIDES THAT WG'S "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM SHOULD BE TERMINATED, SHOULD THE COMMISSION MAKE A CORRESPONDING ADJUSTMENT TO WG'S REVENUE INCREASE REQUEST IN THIS PROCEEING?

A. Yes. The Commission should lower WG's test year expenses by not less than $161,343 and possibly more if other costs associated with the operation of that program are properly identified by the Company (e.g., witness Sluder's support activities).

E. WG's Proposed Revenue Normalization Adjustment (Issue 9)

Q. HAS THE COMMISSION ESTABLISHED A DESIGNATED ISSUE IN THIS PROCEEING THAT FOCUSES ON THE MERITS OF WG'S PROPOSED REVENUE NORMALIZATION ADJUSTMENT ("RNA")?

A. Yes. **Issue 9** asks:

> *Is WGL's proposed revenue normalization adjustment reasonable and appropriate, and what other ratemaking adjustments might be necessary and appropriate if the Company's proposed RNA is approved?*

Q. DO YOU SUPPORT THIS COMPANY'S IMPLEMENTATION OF ITS PROPOSED RNA MECHANISM?

A. No, I do not. Even if one fully accepts WG's rationale for developing its proposed RNA mechanism, which I do not, there are substantial flaws in the design of the Company's proposal that should mandate its rejection by this Commission.

Q. WHAT SUPPORT HAS WG PRESENTED FOR THE REVENUE NORMALIZATION ADJUSTMENT ("RNA") IT PROPOSES IN THIS PROCEEDING?

A. WG offers support for its proposed RNA is presented by three witnesses. The Direct Testimony and Exhibits of witness Raab, Exhibits WG (K) and (K)-1 through (K)-7, to explain the rationale for the Company's proposal. Witness Sims also addresses part of the rationale for the Company's RNA proposal in Exhibit WG (A).[50] In addition, a quantitative example of the operation of the proposed RNA mechanism through the Direct Testimony of witness Wagner, Exhibit WG (M), pages 15-18, and Exhibit WG (M)-4.

Q. HOW DO YOU STRUCTURE YOUR PRESENTATION WITH RESPECT TO WG'S PROPOSED RNA MECHANISM?

A. My discussion of the Company's RNA proposal is presented in two parts. The first part addresses the concepts and rationales that witnesses for WG offer in support of the Company's proposal. The second part examines the specifics of the Company's RNA proposal in the context of witness Wagner's Exhibit WG (M)-4 and highlights problems in design of that mechanism.

[50] Exhibit WT (A) at pages 7-8.

1. WG's RNA Concept and Supporting Rationales

Q. WHAT ARE THE RATIONALES THAT WG'S WITNESSES OFFER IN SUPPORT OF THE COMMISSION'S ADOPTION OF ITS PROPOSED RNA MECHANISM?

A. Witness Raab argues that there is a significant mismatch between the manner in which the Company incurs its costs of providing distribution service and the manner in which those costs are recovered through firm service rates, and that mismatch places substantial fixed cost recovery from the Company's firm service customers at risk. To better address that risk, witness Raab submits that a revenue normalization mechanism should be adopted to compensate for differences between WG's authorized revenue requirements and the revenue that the Company actually receives on a monthly basis. Witness Raab asserts that three factors work in concert against the Company's recovery of authorized revenue levels. Those factors are: (1) weather; (2) naturally occurring reductions in use; and (3) financially induced conservation. Moreover, witness Raab argues that the method of calculating normal weather heating degree days adopted by this Commission in Formal Case No. 1093 significantly overstates actual normal weather heating degree day expectations in a manner that "virtually guarantees that the Company will not achieve the level of revenue authorized by the Commission in this case.

Witness Sims suggests that the Company's proposed RNA (1) "realigns the collection revenues to the incurrence of costs" and (2) "removes the disincentives for utilities to promote conservation. She also submits that "*without an RNA, there is almost certainty that either the Company or its customers will be disadvantaged by the controllable effects of weather deviations from normal.*"[51]

Q. WHAT WEIGHT SHOULD THE COMMISSION GIVE TO WITNESS SIMS RATIONALES FOR ADOPTION OF THE COMPANY'S PROPOSED RNA?

A. Very little.

First, as I will explain more fully later in this section of my testimony, the Company's proposed RNA does not actually realign the collection of revenues to the incurrence of costs. Rather, it simply provides WG a further opportunity to collect fixed distribution costs through volumetric charges. In other words, WG's proposal is less concerned with matching cost recovery with cost incurrence than ensuring the Company's recovery of costs through any available means.

Second, the alleged removal of "*disincentives*" to promote conservation is of little relevance to WG's District of Columbia operations. In the District of Columbia the promotion of energy efficiency is the responsibility of the SEU, not WG. Thus, WG requires no incentives to promote conservation.

[51] Exhibit WG (A) at page 8, lines 4-6.

Q. SHOULD THE COMMISSION ACCEPT THAT IN THE ABSENCE OF A RNA MECHANISM EITHER THE COMPANY OR ITS CUSTOMERS WILL BE DISAVANTAGED BY THE EFFECTS OF DEVIATIONS FROM NORMAL WEATHER?

A. No. Contrary, to witness Sims' representation, WG's shareholders will be advantaged by the adoption of a RNA for the Company's District of Columbia jurisdictional service. As noted in the most recent WGL Holdings, Inc. SEC Form 10-K which was filed on November 19, 2015, the Company used heating degree day ("HDD") weather-related instruments (e.g., insurance or derivatives) for the District of Columbia to manage the effects of warmer than normal weather on its revenues and earnings.[52] Approval of the Company's proposed RNA will negate the potential need for WG to purchase weather-related instruments to protect shareholders interests. Thus, WG's shareholder will benefit directly from implementation of a RNA mechanism through the avoidance of the potential impacts for warmer than normal weather regardless of the actual degree day variations, if any, that might be experienced. Since similar weather-related instruments are not generally available to the Company's gas consumers, the benefits derived from adoption of a RNA mechanism are not the same for WG's customers and WG's shareholder.

[52] WGL Holdings, Inc. SEC 10-K for the period ending 09/30/15, filed November 19, 2015, at page 60 and page 122.

Q. ACCORDING TO WITNESS RAAB WHAT ARE "REVENUES AT RISK"?

A. Witness Raab's Direct Testimony defines "*revenues at risk*" as "*those revenues that are needed to recover fixed costs but are actually recovered through volumetric charges.*"[53]

Q. DO YOU ACCEPT WITNESS RAAB'S DEFINITION OF REVENUES AT RISK?

A. No, I do not. There is certainly weather-related variability in therm use that can impact the Company's recovery of costs. However, such variation actually affects only a **minority** of annual gas service volumes for each rate class. WG has no major class[54] for which there is any significant probability that annual volumes will fall to zero. Base gas use (i.e., gas use not affected by degree day fluctuations) is not weather sensitive, and although Raab observes that 60% of therm use is weather-sensitive, the range of expected variation in annual degree days does not include the potential for a zero heating degree day event. Thus, only the portion of weather sensitive gas use that is within the expected range of historic and/or projected degree day variations is actually "at risk." If normal weather is assessed using 30-year average HDDs and weather variations are assumed to be normally distributed, then the Company's actual weather-related

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[53] Exhibit WG (K) at page 10, lines 10-11.

[54] The term "major class" in this context is used to reference the Residential, Commercial & Industrial, and Group Metered Apartment classes (i.e., the classes for which WG proposes to compute RNA rate adjustments.

risk does not extend beyond the 30-year average HDDs less two standard deviations.[55]

As computed by WG witness Gibson, the 30-year average HDD level is 3,971.7 HDDs with a Standard Deviation of 319.5 HDDs. This suggests that there is a 95% probability that the actual degree day measure for any year will not fall below 3,332.6 HDDs or about 84% of normal HDDs. In other words, only 16% (i.e., 100% - 84% = 16%) of weather-sensitive gas use is actually subject to variation on an annual basis. Furthermore, if we accept witness Raab's assessment that that weather-sensitive gas use represents 60% of total therm use, then **less than 10%** of total annual therm use is actually **at risk** for **WG**.[56]

Q. DO YOU HAVE ANY FURTHER COMMENTS REGARDING WG'S DEVELOPMENT OF NORMAL WEATHER THERMS AND REVENUES?

A. Yes. Estimation of normal weather therms and revenues is an art, not a science. As reflected in the analyses WG has presented in this proceeding, the determination of normal weather therms is, at best, imprecise. For example, one aspect of the imprecision inherent in the estimation of normal weather therms is effectively spotlighted by the Direct Testimony of witness Raab. Although the

[55] The Commission should recognize that smaller variations from measures of normal HDDs have a much greater probabilities of occurrence.

[56] Even under the alternative measures of expected HDD variation presented in witness Raab's Exhibit WG (K)-5, two standard deviations below the computed normal HDD level is never lower than 3,190.5 HDDs. Thus, even under those alternative approaches for assessing normal weather and expected HDD variations, there is less than a 5% probability that the "at risk" portion of DC annual therm use equate to as much as 12% of normal weather therm use computed using a 30-year average normal heating degree day measure.

Commission made a clear determination of how it believed normal weather degree days should be computed in Formal Case No. 1093, witness Raab presents analyses which suggest that alternative approaches to the estimation of test year heating degree days ("HDDs") suggest that the Commission's approved methodology overstates his alternative assessment of normal weather HDDs by about 200 HDDs. The Company's weather normalization exhibits also identify several instances in which reported monthly therms for a rate class were viewed as anomalous and simply disregarded.[57] Among the data excluded from the statistical analyses used to estimate "Variation per DDD" and estimates of "Base Gas Factors" were:

1. Data for the test year month of April 2015 and June 2015 for C&I Non-Heating Sales Service;

2. Test year data for the month of June 2015 for GMA Heating/ Cooling Delivery Service customers using > 3,075 therms;

3. Data for the months of November and December 2013 for sales service provided to GMA Heating/Cooling customers using < 3,075 therms;

[57] As indicated in the footnotes at the bottom of each page of Exhibit WG (E)-1, Schedule 4, monthly information on lines marked with an "*" have been excluded from the statistical calculations used to produce the Company's linear regression results.

4. September 2013 data for both C&I Heating/Cooling Delivery Service customers using < 3,075 therms and C&I Heating/Cooling Delivery Service customers using > 3,075 therms.

I do not dispute that the data for those months appear to be anomalous. However, sound analytics would require investigation of the factors contributing to those often very large anomalies and efforts to determine how the usage reported for the affected months should have been distributed either among other months for the same class or to other classes to ensure that relationships between HDDs and usage are properly represented. Simply excluding anomalous data is not generally considered a best practice.

Q. ARE THERE OTHER FACTORS THAT ERRODE THE RELIABILITY OF THE ESTIMATES OF "VARIATION PER DDD" AND "BASE GAS FACTORS" THAT WG HAS DEVELOPED FOR THIS PROCEEDING?

A. Yes. Although normal HDDs are determined using 30-year average degree day data, the Company uses regression analyses premised on just three years of data where two of the three years represented in those analyses were among the coldest years in recent history. This biased selection of input data cannot be relied upon to produce estimates of "Variation per DDD" and "Base Gas Factors" that are compatible with the use of 30-year average degree day measures to represent "normal weather" conditions.

Q. HAVE YOU PREPARED AN ALTERNATIVE NORMAL WEATHER STUDY FOR CONSIDERATION BY THE COMMISSION IN THIS PROCEEDING?

A. No, I have not. Given the limited time provided for the preparation of this testimony, limited access to WG's data that would be necessary to investigate data anomalies and/or develop alternative sets of data inputs, and the number of other issues considered important to the interests of AOBA members, development of such an alternative Normal Weather Study was not feasible.

2. RNA Design and Implementation Problems

Q. HOW IS THE COMPANY'S PROPOSED RNA STRUCTURED?

A. The RNA mechanism that WG proposes in this proceeding provides for monthly adjustments to rates to reconcile actual revenues with growth adjusted authorized revenues for each of three broad classifications for firm service customers (i.e., Residential, Commercial and Industrial, and Group Metered Apartments). Rate adjustments would be computed to compensate for either positive or negative deviations of actual revenue from growth adjusted authorized revenue levels. Heating and Non-Heating customers of all sizes within each of specified customer classification would receive the same monthly rate adjustments which would be applied on a dollars per therm basis. In other words, Residential Heating customers, Residential Non-Heating IMA customers, and Residential Non-Heating Other customers would all be subject to the same monthly RNA rate adjustment charges. A similar arrangement is proposed for the C&I and GMA classes. Each month Heating customers, regardless of size, and Non-Heating customers would be assessed a uniform dollars-per-therm rate adjustment.

Q. DOES THE COMPANY'S PROPOSAL TO APPLY UNIFORM ADJUSTMENTS TO CUSTOMERS IN ALL SEGMENTS OF EACH RATE CLASS PRODUCE REASONABLE RESULTS?

A. No, it does not. It inappropriately shifts cost recovery and risk between customers in the heating and non-heating subclasses. It also effectively introduces added weather sensitivity to the bills of non-heating customers who otherwise tend to have comparatively little weather-sensitive load. Thus, contrary to witness Raab's representation that the RNA would stabilize customers' bills, just the reverse would be true for non-heating customers within each rate class. Through the RNA rate adjustment mechanism, non-heating customer's bills would fluctuate with fluctuations in weather (on a slightly lagged basis) even though they may comprise little or no weather-sensitive gas use.

This result is unnecessary and inappropriate, and should not be accepted by the Commission. It also results in an inappropriate shifting of revenue requirements between heating and non-heating customers that would significantly undermine cost-based ratemaking principles.

If WG's approach to computing monthly adjustments to class revenue requirements is accepted, assessments of differences in the Company's costs of service for heating and non-heating customers will essentially be discarded. Rather, it appears that the Company is willing to sacrifice considerations relating to the equity of charges applied to customers within the broad Residential, Commercial & Industrial, and Group Metered Apartment rate classifications to achieve greater assurance of its own objectives, i.e., more predictable recovery of its authorized revenue requirements.

Q. WHAT WAS THE EFFECT OF WEATHER-RELATED RISK ON WG'S EARNINGS FOR THE TEST YEAR (I.E., WG'S FY 2015)?

A. Attachment 1 to the Company's response to AOBA Data Request 1-28 shows a "DC Weather Impact" on the Company's earnings for FY 2015 of **-$86,000**.

Q. HAS WG PRESENTED ANY EVIDENCE THAT THE ABSENCE OF A RNA MECHANISM HAS IMPOSED SIGNIFICANT FINANCIAL HARM ON THE COMPANY?

A. No. WG has operated for decades without a RNA and has remained financially stable throughout while also maintaining a long history of annual increases in shareholder dividends.

Q. DOES THE COMPANY'S PROPOSAL INCLUDE A CAP ON THE SIZE OF MONTHLY RATE ADJUSTMENTS?

A. No, it does not. WG's proposal includes no limits on monthly rate adjustments. Thus, unlike the Bill Stabilization Adjustment ("BSA") that this Commission approved for Pepco, WG's RNA mechanism includes no mechanism for deferred cost recovery and offers no protection to customers against large month-to-month fluctuations in the levels of applicable monthly rate adjustments.

Q. IS THE ABSENCE OF A CAP ON MONTHLY RATE ADJUSTMENTS A CONCERN THAT MUST BE ADDRESSED BY THIS COMMISSION?

A. Yes, it is. Weather-related fluctuation in revenue collections have the potential to impose large month-to-month deviations between actual revenue collections and growth adjusted authorized revenue targets. If the entire shortfall or excess in revenue actually collected in one month is imposed on bills in a single subsequent month, large month-to-month variability in charges for all customer classes must be anticipated when extreme weather is experienced. This is a particular concern, as we transition each year from winter months to spring months. As the weather warms in the spring months the size of customers' bills will tend to decline. However, if smaller monthly bills in spring months are hit with large rate adjustments from a prior winter month, the potential for unacceptably large percentage adjustments to customers' **monthly** bill increases. Thus, I advise the Commission not to accept any RNA mechanism that lacks reasonable limits on the size of monthly rate adjustments that can be imposed.

Q. HAVE YOU IDENTIFIED ANY OTHER PROBLEMS IN THE RNA MECHANISM THAT WG PROPOSES?

A. Yes, I have. The data and calculations that WG proposed to use to adjust Peak Usage Charge revenue for customer growth do not reflect, and are inconsistent with, the Peak Usage Charge provisions in the Company's present and proposed rate schedules for non-Residential firm service customers (i.e., current Rate Schedules 2 and 2A and proposed Rate Schedules 2, 2A, 2B, and 2C).

Q. PLEASE EXPLAIN.

A. Witness Wagner's Exhibit WG (M)-4, page 3 pf 4, lines 15-20, depict the calculations WG intends to use to adjust its monthly Peak Usage Charge revenue requirements to reflect customer growth. On lines 16-18, the Company's proposed rate adjustment methodology under the RNA computes an adjustment to Peak Usage Charge billing units (therms) by multiplying "Test Year

Average use per Customer" by the "Change in No. of Customers." This is the same calculation that WG uses to adjust its distribution charge billing units on lines 9-14 of the same page. **It is totally unrelated to Peak Usage**, and it improperly and unjustifiably misrepresents the relationship between customer growth, peak usage, and authorized revenues. The problems associated with this adjustment are further amplified by the Company's failure to demonstrate any tie between the proposed calculations for its Peak Usage Charge revenue adjustment and the tariff language that requires:

(1) That measures of Peak Usage used in billing shall be ratcheted to the customers usage in the prior billing months of November through April;

(2) That Peak Usage be determined on the basis of the **month of maximum usa**ge determined on the basis of use per cycle billing day (not on average use for the test year); and

(3) That Peak Usage be determined on the basis of the **<u>customer's</u> month of maximum usage**, not a measure of the system month of maximum use, not the class month of maximum use, nor a measure of average use for the test year.

In the absence of any demonstration by the Company of a direct correlation between average test year usage and the measures of peak usage used for billing Peak Usage Charges, the customer growth adjustment that WG proposes to apply to Peak Usage as part of its RNA must be rejected.

The Peak Usage Charge provisions of the Company's tariff have been in place for over 20 years. WG should have plenty of data available to assess the relationships, if any, between measures of class usage and Peak Usage Billing determinants. However, it chose to forego necessary and appropriate analytics and substitute unsupported assumptions that improperly inflate the revenue requirements for which non-residential firm service customers would be held responsible under the Company's proposed RNA mechanism.

Q. DO YOU HAVE ANY COMMENTS REGARDING WITNESS RAAB'S DISCUSSION OF NON-VOLUMETRIC RATE DESIGNS?

A. Yes, I do. First, many of the ratemaking mechanisms that witness Raab represents as "non-volumetric rate designs" actually involve the recovery of significant costs through volumetric charges. This would be true for the District of Columbia if the RNA mechanism that WG proposes in this proceeding is adopted. Second, witness Raab's discussion of these matters provides primarily the Company's cost recovery concerns and fails to adequately develop other relevant ratemaking considerations. The Commission could, for example, assure full recovery of the Company's annual revenue requirement by simply allowing the Company to recover all of its distribution system costs through monthly customer (i.e., system) charges. However, that approach would ignore the influences of a number of factors that can cause the cost responsibilities of customers within each rate class to vary. Historically, commissions have attempted to achieve greater equity in the charges applied to individual customers within each rate class through rate designs that recover portions of each class' revenue requirement on other measures of service (i.e., primarily volumetric measures of gas use). Yet, the number of other measures of service that can be readily obtained and easily used in billing gas distribution services tends to be limited.[58] Thus, there are sound reasons founded in intra-class rate equity considerations for the Commission not to eliminate, or perhaps even substantially reduce, the portion of total revenue recovered through volumetric charges. Gas utilities throughout most of the U.S. have maintained financially sound operations for decades while recovering the majority of their distribution revenues through volumetric charges.

[58] This Commission has been somewhat innovative in this regard by developing and implementing demand-related peak usage charges for non-residential customers. However, this is a practice that is still not often applied for large numbers of retail gas service customers in other jurisdictions.

F. Requests for Authorization of Regulatory Assets

1. Business Process Outsourcing

Q. WHAT QUESTIONS DOES THE COMMISSION SEEK TO ADDRESS THROUGH ISSUE 11 THAT WAS SET FORTH IN ORDER NO. 18172?

A. Issue 11 asks:

> *Are the Company's new plans for Business Process Outsourcing (BPO 2.0), including its plan for replacing its existing contractual arrangement with Accenture, reasonable and appropriate?*
>
> *(a) Are the proposed ratemaking adjustments associated with BPO 2.0 reasonable and appropriate?*
>
> *(b) Is WGL's proposal to defer the costs to achieve associated with the Company's BPO 2.0 in a regulatory asset for consideration in a future rate case reasonable and appropriate?*
>
> *(c) Were the costs and savings associated with the Accenture Agreement appropriately reflected in the current base rates?*

Q. HAVE YOU REVIEWED THE COMPANY'S PRESENTATION WITH RESPECT TO BPO 2.0 (I.E., THE NEXT PHASE OF ITS BUSINESS PROCESS OUTSOURCING)?

A. Yes, I have. My review included examination of WG's filed testimony and exhibits, WG's responses to data requests that address matters relating to its current Accenture MSA and its proposed BPO 2.0, and the issues addressed in my **CONFIDENTIAL** Supplemental Testimony regarding the Accenture MSA in Formal Case No. 1054.

Q. WHERE IN THE COMPANY'S PRE-FILED TESTIMONY AND EXHIBITS DOES IT PROVIDE SUPPORT FOR ITS BPO 2.0 COSTS TO ACHIEVE?

A. The Direct Testimony of WG witness Tuoriniemi, Exhibit WG (D), at pages 54-63 (significant portions of which are labeled **CONFIDENTIAL** by WG), provides an outline of the Company's BPO 2.0 ratemaking proposals, as well as information regarding anticipated costs to achieve ("CTA") associated with transitioning to, and implementation of, WG's new business process outsourcing plan. In addition, the Supplemental Direct Testimony of witness Kenahan offers greater detail regarding the status of WG's BPO 2.0 implementation plans. It also provides further information with respect to costs incurred to date to affect the transition to new vendors and updates of its estimated costs to complete that transition.

Q. WHAT RATEMAKING ADJUSTMENTS RELATING TO WG'S TRANSITION TO BPO 2.0 DOES WITNESS TUORINIEMI PRESENT?

A. The Company's ratemaking adjustment that relate to BPO 2.0 is found in Adjustment 30. Witness Tuoriniemi explains that Adjustment 30 has two components. One is intended to remove the remaining amortization of costs to achieve associated with the current MSA from the Company's test year costs of service. A second component addresses costs associated with future out-sourcing activities.[59] Witness Tuoriniemi also explains that the Company uses the term "costs to achieve" (or "CTA") to refer to both: (1) costs of implementing WG's existing Master Services Agreement with Accenture ("Accenture MSA"); and (2) costs that the Company has incurred or expects to incur in connection with the end of the term of the existing Accenture MSA which will expire within the Company's defined rate effective period for this case (i.e., the twelve month period ending January 31, 2018).

Q. ARE WG'S CALCULATIONS IN SUPPORT OF ITS REMOVAL OF THE UNAMORTIZED BALANCE OF COSTS TO ACHIEVE THE ACCENTURE MSA FROM ITS TEST YEAR EXPENSES APPROPRIATE?

A. Witness Tuoriniemi computes that the unamortized balance of costs to achieve the Accenture MSA at the beginning of the rate effective period will be only $124,000. In that context, the Company recognizes that continuation of the current Commission-approved $371,000 annual amortization expense for Accenture MSA costs to achieve would be expected to yield a noticeable over-collection of the remaining balance. Therefore, WG proposes to exclude the

[59] Exhibit WG (D) at page 54, lines 20-23.

entire amount of the Commission's authorized $371,000 annual amortization expense from its test year expenses, and I support that proposal.[60]

Q. DOES THE COMPANY'S PROPOSAL REQUIRE IT TO ABSORB $124,000 OF UNAMORTIZED COSTS TO ACHIEVE THE IMPLEMENTATION OF THE CURRENT ACCENTURE MSA?

A. It could be viewed that way. However, I offer a different perspective. In Formal Case No. 1054, I recommended in my Supplemental Direct Testimony that:

> *The Commission should require that all elements of the Company's costs to achieve be allocated or assigned to specific outsourced functions, and if any or all portions of the MSA are terminated early, Washington Gas and its shareholder (WGL Holdings, Inc.) should bear the burden of the remaining unamortized portions of Transition, Transformation, Severance, or Advisory costs incurred to achieve that portion of the Company's outsourcing initiative.*[61]

Given WG's representations that some activities under the Accenture contract have been terminated early and moved to outside contractors before the expiration of the overall agreement, it can also be argued that WG should absorb a portion of any unamortized "cost to achieve" for the Accenture MSA from the date that the Company transferred any activity to a new contract, particularly given that WG recognizes less than adequate performance by Accenture in at

[60] Given the schedule for this proceeding that is set forth in Order No. 18172, it is likely that the effective date for new rates resulting from this case will be later than February 1, 2017. Thus, any implementation of new rates subsequent to February 1, 2017 will cause the unamortized balance of WG's CTA for the Accenture MSA to be even smaller than the $124,000 that witness Tuoriniemi computes.

[61] **CONFIDENTIAL** Supplemental Direct Testimony of Bruce R. Oliver, Formal Case No. 1054.

least two areas. In this context, WG's absorption of $124,000 may not be sufficient to provide a reasonable and appropriate reflection of lost value associated with costs to achieve initial implementation of the Accenture MSA.

Q. WHAT IS THE NATURE OF WG'S "COSTS TO ACHIEVE" THE NEXT PHASE OF ITS BUSINESS PROCESS OUTSOURCING (BPO 2.0)?

A. WG witness Kenahan explains that the Company has identified three categories of its "Cost to Achieve" BPO 2.0. Those are categories and the Company's associated current cost estimates are:

1. Advisory Costs		**$ 3.0 million**
Consulting Costs	$1.6 million	
Outside Legal Services	$1.4 million	
2. Transition and Transformation Costs		**$ 8.2 million**
Vendor charges to evaluate processes	$5.0 million	
Accenture Transition Assistance Charges	$2.5 million	
Consultants to Serve as Project Managers	$0.7 million	
3. Wind-down Costs		**$ 1.6 million**
Total Estimated "Costs to Achieve"		**$12.8 million**[62]

Q. WHAT ROLE HAVE CONTRACTORS PLAYED IN THE COMPANY'S PLANNING, EVALUATION OF IMPLEMENTATION OF WG'S BPO 2.0?

A. Contractors have performed major elements of those activities. WG engaged consulting firms to:

[62] Exhibit WG (N) at pages 10-12.

1. Assess the existing outsourcing contract;
2. Develop requests for proposals ("RFPs");
3. Evaluate responses to RFPs; and
4. Negotiate contract terms;
5. Project Management for transition planning and implementation.[63]

Q. THE TESTIMONY OF WITNESS KENAHAN MAKES MULTIPLE ASSERTIONS REGARDING THE QUALITY OF SERVICE THAT WG EXPECTS TO RECEIVE UNDER ITS BPO 2.0 PLAN. DO YOU HAVE ANY COMMENTS REGARDING THOSE ASSERTIONS?

A. Such assertions should be given little weight. The true test will be in the actual performance of the contractors upon whom WG has chosen to rely. However, problems associated with elements of the existing Accenture MSA and WG's substantial reliance on outside contractors in the transition process raise concerns regarding the ability of WG to exercise needed oversight, evaluate performance under the new contractual arrangements, and enforce contract terms without incurring costs for additional outside contractors assistance.

[63] WG Exhibit (N), page 5, lines 18-19; page 10, lines 20-24; as well as page 11, line 24, through page 12, line 1.

Q. WITNESS TUORINIEMI TESTIFIES THAT AT THE END OF THE TERM OF THE ACCENTURE MSA, WG "WILL DISCONTINUE FILING ALL ANNUAL REPORTS" PURSUANT TO THE COMMISSIONS ORDER IN FORMAL CASE NO. 1054. IS THE TERMINATION OF SUCH REPORTING REASONABLE AND APPROPRIATE?

A. No, It is not. Despite the Company's representations regarding the quality of services expected under its BPO 2.0 plan, the transfer of activities to new vendors does not guarantee their performance or the ultimate costs of the services that such vendors contract to provide. Furthermore, with the Company assuming responsibility for overseeing multiple contractors, it can be argued that the information the Commission may need to monitor and provide regulatory over sight with respect to the Company's multiple vendors of outsourced services will increase. In this context, I am frankly surprised that WG has not offered an updated plan for expanded reporting.

I also find that it is unclear when the Accenture contract will actually expire. Nothing in WG's testimony clarifies whether activities that will continue to be performed by Accenture after June 2017, will be performed under a renewal of portions of the existing agreement or provided under a total new contractual arrangement. Given the structure of the initial agreement between WG and Accenture, the Commission should expect that it will be the former. If services after June 2017 are provided by Accenture under a modification, extension, or partial renewal of the current Accenture agreement, at least some of the existing reporting requirements should continue. I would also expect that input from all parties including WG (and perhaps the consultants who have negotiated or will negotiate the new contractual arrangements with Accenture and other vendors) would be helpful, if not necessary for the Commission to update and revise its reporting requirements.

Q. WHAT INFORMATION DOES WG PROVIDE RELATING TO ITS BPO 2.0 PLAN THAT DEMONSTRATES THE MARKET-BASED OR COMPETITIVE NATURE OF THE PRICES IT WILL PAY FOR SERVICES UNDER ITS NEW VENDOR CONTRACTS?

A. None. Rather, considering the upfront costs the Company has incurred for vendors to evaluate the existing processes, it that appears, at a minimum, WG had to either make substantial commitments to vendors before pricing was negotiated or limit the number of bidders they would pay to perform such evaluations prior to bidding. In either case the likelihood that WG will experience robust price competition appears low.

Q. DOES ANYTHING IN THE COMPANY'S PRESENTATION RELATING TO ITS BPO 2.0 PLAN DISCUSS THE NATURE AND MAGNITUDE OF COSTS THAT

THE COMPANY WOULD NEED TO INCUR AT THE END OF ANY OF ITS BPO 2.0 VENDOR CONTRACTS?

A. No. Given WG's recent experience with respect to the need to terminate activities under substantial portions of the existing Accenture MSA, it is reasonable to consider the costs that WG will face approximately four years from now when its new vendor contracts approach their initial expiration dates. The Commission must also anticipate that WG will once again require substantial assistance from outside contractors to evaluate the existing contracts and vendor performance under those contracts, to devise new RFPs, evaluate responses to RFPs, and negotiate a set of **BPO 3.0** agreements.

Q. WHAT IS WG'S PROPOSAL FOR TREATMENT OF THE COSTS IT EXPECTS TO INCUR TO ACHIEVE ITS BPO 2.0 PLAN?

A. Witness Tuoriniemi's Direct Testimony Recommends that the Commission normalize its estimated BPO 2.0 costs to achieve ("CTA") by setting a "*representative going in level*" for amortization over five years.

Q. WHAT RATIONALES ARE OFFERED BY THE COMPANY IN SUPPORT OF ITS PROPOSED TREATMENT OF BPO 2.0 CTA?

A. The Company's proposal is premised on: (1) WG's assessment that the benefits of the program will exceed its CTA; and (2) a five-year amortization period will reasonably match the anticipated term(s) of new contracts and will match the period of cost recovery with the period over which anticipated savings will be realized by ratepayers.

Q. DO YOU HAVE ANY COMMENTS REGARDING WG'S PROJECTED BPO 2.0 SAVINGS?

A. Yes. ***** START CONFIDENTIAL INFORMATION *****

[64] Exhibit WG (N) at pages 10-12.

***** END CONFIDENTIAL INFORMATION *****

Q. ARE WG'S COST TO ACHIEVE "KNOWN AND MEASURABLE" AT THIS TIME?

A. No. They are not. ***** START CONFIDENTIAL INFORMATION *****

***** END CONFIDENTIAL INFOR-MATION ***** By comparison, witness Kenahan's Supplemental Testimony, filed a little more than two months later, presents CTA estimates that total to $12.8 million. That reflects a ***** START CONFIDENTIAL INFORMATION *****

***** END CONFIDENTIAL INFORMATION ***** Yet, my assessment of the Company's testimony suggests that as more contracts are negotiated and additional transitions are completed, there is significant potential that WG's CTA will increase further.

Q. ARE ALL OF THE COMPANY'S IDENTIFIED ADVISORY, TRANSITION/ TRANSFORMATION, AND WIND-DOWN COSTS APPROPRIATELY CHARACTERIZED AS COSTS TO ACHIEVE?

A. No. WG represents that its payments to Accenture for termination of activities and assistance in wind-down are contractually required as part of contractual terms agreed upon at the time the Accenture MSA was executed roughly nine years ago. They clearly represent costs of doing business under the existing Accenture MSA and should be treated as offsets against any claimed actual cost savings under the Accenture MSA. As previously mentioned, I explicitly address the potential that WG would incur such costs in my Supplemental Testimony in Formal Case No. 1054. However, despite that fact that provisions in the Accenture MSA that I reviewed at that time specifically addressed those potential costs, WG included no quantitative assessment of those costs in the analyses of anticipated savings it presented to the Commission in Formal Case No. 1054.

For a utility with an on-going service responsibility, incurrence of end-of-contract costs to provide for sustained activity at the end of such an outsourcing arrangement must be considered when comparing the costs of any arrangement with other options. The fact that WG chose not to explicitly address requirements for transition and wind-down payments set forth in the Accenture MSA as part of its assessment of costs and savings associated with that agreement in Formal Case No. 1054 does not now justify attributing those costs to the next round of contracts. Simply ignoring back-end costs for long-term contracts at the time of the initial presentation of the contract is not prudent or responsible. Moreover, if initial estimates had been provided in Formal Case No. 1054, those estimates could have been updated in subsequent rate cases, such as Formal Case No. 1093, to provide the Commission and the parties better guidance with respect to the Company's end-of-contract expectations.

Q. DO YOU AGREE WITH WITNESS TUORINIEMI THAT WG'S ESTIMATED COSTS TO ACHIEVE MEET THE STANDARDS FOR RECOVERY IN FUTURE CASES?

A. No, I do not. Neither the costs nor savings associated with WG's BPO 2.0 plan have been sufficiently documented in this case to support any representation that those costs are "known and measurable." Some of the agreements are yet to be fully negotiated, and the details of the arrangements that have been negotiated have not been presented in a manner that enables the Commission or other parties to compare charges under those agreements with either costs currently incurred under the Accenture MSA for like services. In addition, the Company's presentation makes reference to market-based costs and "*market benchmarks that have been established by prior engagements.*" However, witness Kenahan's testimony indicates that such comparisons are yet to be performed.[65] No information regarding such benchmarks or the results of benchmarking analyses

[65] Exhibit WG (N) at page 5, lines 20-23.

has been presented, and thus, any request for regulatory asset treatment of costs incurred to achieve these new arrangements is, at best, premature.

Furthermore, witness Tuoriniemi suggests that the Company's recommendation is consistent with the approach the Commission has taken with respect to the deferral of gains or losses on the reacquisition of long-term debt.[66] However, as I have explained above, many of the costs for which WG requests deferral in this instance are not "*known and measurable*" at this time, and the period of benefit, if any, is as yet not fully discernible. Thus, this effort to find precedent for the Company's proposal has little or no applicability to the facts surrounding the Commission consideration of WG's BPO 2.0 costs in this proceeding.

Q. DO YOU HAVE ANY COMMENTS REGARDING WITNESS TUORINIEMI'S SUMMARY OF ADJUSTMENT 30 ON PAGE 63 OF HIS TESTIMONY?

A. I do. ***** START CONFIDENTIAL INFORMATION *****

[66] Exhibit WG (D) page 62, line 15, through page 63, line 2.

***** END CONFIDENTIAL INFORMATION *****

2. *Pipeline Integrity Cost Deferral Program* (Issue 5)

Q. HAS THE COMMISSION DESIGNATED AN ISSUE WHICH ADDRESSES THE COMPANY'S PROPOSED INTEGRITY MANAGEMENT COST DEFERRAL PROGRAM?

A. Yes. Issue 5 asks:

> *Is the proposed Integrity Management Cost Deferral Program necessary, reasonable and appropriate and is it reasonable to approve the deferral of costs in a regulatory asset for future consideration in a rate case?*

Q. HAVE YOU REVIEWED THE COMPANY'S PROPOSED INTERGRITY MANAGEMENT COST DEFERRAL PROGRAM?

A. Yes. I have reviewed the Direct and Supplemental Testimonies of witness Huey, as well as the Company's responses to data requests relating to that program.

Q. DO YOU FIND THE COMPANY'S PROPOSAL NECESSARY, REASONABLE, AND APPROPRIATE?

A. No, I do not. WG's proposal is seriously deficient and unreasonably vague with respect to the expenses and programs for which costs would be deferred. The Company is requesting the Commission to make a broad determination of the reasonableness and appropriateness of "*future pipeline safety initiatives that represent risk mitigation measures that* ***may arise but are currently unknown or not identified***."[67] This is just one of many statements that underscores the inappropriateness and vagueness of the Company's request. At best, the Company's proposal is pre-mature, poorly developed, and does not provide the Commission and the parties to this proceeding adequate foundation for sound regulatory policy determinations.

Pipeline safety has always been a core responsibility of the Company. Yet, the proposed program attempts to distinguish between "on-going activities" and new, incremental or accelerated activities in a manner that suggests new or incremental activities are not part of the Company's core responsibilities. Although new laws or regulations may add some new facets to pipeline safety

[67] Exhibit WG (J) at page 2.

activities and re-direct, re-label, or re-package traditional pipeline safety activities, the basic elements of the Company's responsibilities do not change.

Q. CAN YOU CITE OTHER EVIDENCE OF WHAT YOU CHARACTERIZE AS VAGUENESS IN THE COMPANY'S PROPOSAL?

A. Yes. AOBA Data Request 7-1a references page 2, lines 13-20, of witness Huey's Direct Testimony and asks the Company to provide:

> *"A detailed description of each of the "certain select activities that accelerate or enhance pipeline safety' for which costs would be included in the proposed regulatory asset."*

WG's response to that request indicates "*three activities **are being considered***." Moreover, after identifying three types of activities, the Company states, "***None** of these activities **have been estimated or budgeted***." (Emphasis added).

A few programs are presented with budgeted costs. However, WG notes that those costs are budgeted on a system wide basis and "**allocated**" to the District of Columbia. Such allocated system wide costs are, at best, difficult for this Commission to oversee and ensure that District ratepayers actually benefit from dollars expended.

Q. ACCORDING TO WITNESS HUEY WHAT BENEFITS WILL BE DERIVED FROM THE PROPOSED PIPELINE INTEGRITY COST DEFERRAL PROGRAM?

A. Witness Huey's Direct Testimony asserts that the benefits of deferring eligible costs would include:

1. Improvement of system and customer safety;
2. Enhance reliability for customers; and
3. Reduced greenhouse gas emissions associated with leaks caused by excavation damage.

Q. WHAT IS YOUR ASSESSMENT OF THESE BENEFITS WG CLAIMS WILL BE DERIVED FROM THE PROPOSED PIPELINE INTEGRITY COST DEFERRAL PROGRAM?

A. None of these benefits are new. Each can also be claimed for other WG programs such as its APRP and replacement or encapsulation of Mechanically Coupled pipe. No information is offered that would facilitate the contributions of each of the Company's current and proposed programs to the achievement of such benefits. There can be little question that replacing older leak prone pipe provides all three of the benefits to which witness Huey refers. How much if any incremental benefit would be attributable to the activities WG would include in its Pipeline Integrity Cost Deferral Program is not a matter for which the Company has offered any clear guidance.

In addition, I observe that the high reliability of service on WG's system is a factor WG openly touts. How much additional improvement is achievable, and whether the small available opportunities for incremental reliability improvement warrant the added expenditures that WG proposes is a matter that this Commission, OPC and other parties may wish to closely monitor. Yet, WG's proposals in this proceeding lack the information necessary to support such determinations. Rather, the Company's proposals would have these determin-ations made outside of rate cases and without the aid of well-structured decision criteria and appropriately metrics.

Similarly, the Company's claims of benefits from reduced damage associated with excavation leaks are not new. Similar claims were made in the context of WG's Corporate Scorecard presentation in Formal Case No. 1093. WG has been purportedly working to reduce leaks due to excavation damage for a number of years, and WG does not demonstrate any significant incremental benefits that will flow from the new activities it intends to pursue. I also note that in Formal Case No. 1093, WG indicated in a data request response that "*The Company does not track the costs of damages caused by its employees or* *contractors.*"[68] Tracking employee and contractor caused damage could be a useful tool in reducing leaks, but nothing in WG's proposal appear to address such incidents. Rather, WG focuses on damage resulting from third-party excavators without providing any statistics regarding the relative amount of damage that may be associated with employees and contractors.

This Company request provides more questions than answers. The criteria that WG would use to distinguish existing activities from new or incremental activities are not clearly developed. Likewise, it is unclear how costs for "*accelerated activities*" or new programs would be differentiated from cost overruns on existing activities. Yet, such criteria are critical to the oversight of expenditures, and a failure to clearly delineate such criteria will add to the complexity and cost of future reviews of Integrity Management Program expenditures. At present, there are no "bright lines" to distinguish new programs from existing programs or eligible expenditures from ineligible expenditures. These problems are compounded by the Company's lack of specificity regarding the items and activities included in its proposed "going level expense" for existing programs.[69]

Q. IS THE COMPANY'S COST DEFERRAL PLAN NECESSARY TO ENSURE IMPLEMENTATION OF PROGRAMS SUCH AS ITS DAMAGE PREVENTION PROGRAM IMPROVEMENT PLAN?

[68] Formal Case No. 1093, Exhibit AOBA (A) at pages 34-35, and WG's response to AOBA Data Request 1-18 in that case.
[69] Exhibit WG (J) at page 4.

A. No. The Company does not indicate that cost deferral is necessary to address the Damage Prevention Program Improvement Plan or other safety related programs at this time. Witness Huey characterizes the proposed Integrity Management Cost Deferral Program as simply "*another tool in this effort.*"[70] Further, the Company's cost recovery concerns are at best speculative and focus on legislation not passed at the time of its filing and regulations not promulgated by an agency yet to be created.[71] The fact that WG cannot predict the scope offuture costs that might result from legislation "being developed" is not relevant to the Commission's considerations in this proceeding. Safety of the system is important, but WG fails to show that a decision not to accept its cost deferral program at this time will in any way impede the Company efforts to maintain a safe and reliable system. WG indicates that it is already compliant with existing safety related laws and regulations, and further action at this time premised on speculative assessments of potential future legislation or regulations is unwarranted.

Q. IN LIGHT OF THESE OBSERVATIONS WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S PROPOSED INTEGRITY MANAGEMENT COST DEFERAL PROGRAM?

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[70] Exhibit WG (J) at page 6, lines 4-5.
[71] Exhibit WG (J) at page 6, lines 17-19.

A. The Commission should find that the Company's proposal to create a regulatory asset in this proceeding for costs associated with integrity management and pipeline safety is not sufficiently detailed or specified to be approved. Therefore, AOBA recommends that the Integrity Management Cost Deferral Program be denied in this proceeding.

Q. ASSUMING THE ACTIVITIES THAT THE COMPANY WOULD UNDERTAKE AS PART OF ITS PROPOSED PIPELINE INTEGRITY COST DEFERRAL PROGRAM ARE JUDGED TO BE PRUDENT AND NECESSARY, HOW SHOULD WG OBTAIN COST RECOVERY FOR THOSE PROGRAMS?

A. The Company should seek recovery through a base rate filing as part of its "going level costs." Such a filing should be supported by actual expenditures, budgets, and detailed plans which illuminate the full dimensions of each activity and each activities specific objectives and benefits for District ratepayers.

Q. DO YOU HAVE ANY CONCERNS REGARDING WITNESS HUEY'S TESTIMONY THAT IN ADDITION TO COSTS INCLUDED IN THE COMPANY'S PROPOSED INTEGRITY MANAGEMENT COST DEFERRAL PROGRAM, THE COMPANY WILL PROPOSE A "GOING LEVEL EXPENSE" THAT IT WOULD SEEK TO HAVE INCLUDED IN TEST YEAR OPERATING EXPENSES?

A. Yes, I do. If the proposed structure is to be workable, the Company needs to clearly delineate what constitutes an "on-going program," and detail the activities and benefits it expects from each "on-going programs" and each new or incremental activity. The Commission would also need to understand the conditions and criteria under which a new or incremental activity might transition to an "on-going activity." As presented, the distinctions between "on-going" and new or incremental programs are too gray to provide useful guidance. The Commission and the parties should be able to independently assess when an increase in expenditures constitutes a new or incremental program and when it should be considered growth in an "on-going" activity.

Q. IN SUPPORT OF ITS ACCELERATED PIPE REPLACEMENT PROGRAM, WG ASSIGNS PRIORITIES FOR PIPE TO BE REPLACED. ARE THERE ANY PRIORITIES ASSIGNED TO THE ACTIVITIES WG WOULD INCLUDE IN THE PROPOSED INTEGRITY MANAGEMENT COST DEFERRAL PROGRAM?

A. None have been identified in witness Huey's testimony. The absence of any discussion of priorities implicitly suggests that either all activities have similar priority or no priorities exist.

Q. DOES THE COST DEFERRAL PROGRAM THAT WITNESS HUEY OUTLINES PROVIDE FOR A MATCHING OF THE TIMING OF COST AND BENEFITS ASSOCIATED WITH EACH POTENTIAL ACTIVITY?

A. That is unclear. Costs are at times deferred to provide a closer matching to the period of benefit with the period in which costs are recovered through rates. But nothing in witness Huey's testimony offers any assessment of the period of benefit for activities for which costs would be deferred.

3. Costs for Pipe Replacement Activities (Issue 4)

Q. WHAT IS ISSUE 4?

A. **Issue 4** asks:

> *Has WGL properly accounted for the treatment of revenue and plant in service relating to the Plant Recovery Adjustment and the ProjectPipes surcharges in a reasonable and appropriate manner?*

Q. HAS WG PRESENTED TESTIMONY TO SUPPORT THE REASONABLENESS OF ITS ACCOUNTING FOR COSTS AND REVENUE RECOVERED THROUGH ITS PLANT RECOVERY ADJUSTMENT AND PROJECTPIPES SURCHARGE?

A. The Company's support for those costs is found in the Direct Testimony of witness Tuoriniemi.[72] Witness Tuoriniemi testifies, "*the Company has already spent the full $28 million approved for this program.*" He also states, *"In order to*

[72] Exhibit WG (D) at pages 47-50.

close out the PRA Rider, I have included the full $28 million here because the entire $28 million was closed to plant in service."

Q. WHEN WILL THE PRA RIDER ACTUALLY BE CLOSED OUT?

A. WG's response to AOBA Data Request 10-27a indicates the Company's intent to discontinue the PRA rider when the $28 million amount included in the PRA is reflected in the base rates approved at the conclusion of this proceeding.

Q. DOES WASHINGTON GAS EXPECT TO INCUR CAPITAL EXPENDITURES FOR THE REPLACEMENT OR ENCAPSULATION OF MECHANICALLY COUPLED PIPE IN EXCESS OF THE $28 MILLION AMOUNT THE COMMISSION HAS AUTHORIZED?

A. Yes. Part b. of WG's response to AOBA Data Request 10-27 states "*The Company anticipates incurring cost in excess of the negotiated $28 million cap.*"

Q. HOW DOES WG PLAN TO TREAT COSTS FOR MECHANICALLY COUPLED PIPE THAT EXCEED THE COMMISSION'S $28 MILLION CAP?

A. Witness Tuoriniemi's response to AOBA Data Request 10-27c, explains that the Company expects that costs incurred in excess of the $28 million cap will be treated as normal pipe replacement capital expenditures and reflected in the Company's rate base subject to review in the Company's next rate case.

Q. WHAT IS THE MAGNITUDE OF THE COSTS THAT WG EXPECTS TO INCUR IN EXCESS OF THE $28 MILLION CAP?

A. The most recent WGL Holdings SEC Form 10-K filed observes that in the District of Columbia, "*the replacement and encapsulation program targeting vintage mechanically coupled pipe is expected to be completed in calendar year 2016 for an estimated amount of **49.1 million**.*"[73] (Emphasis Added).

Q. WILL ANY COSTS ASSOCIATED WITH EXPENDITURES IN EXCESS OF THAT ESTABLISHED $28 MILLION CAP BE BILLED TO CUSTOMERS THROUGH THE PRA PRIOR TO THE TERMINATION OF THAT MECHANISM?

A. That is unclear. However, to the extent that such amounts have been billed, or will be billed to WG's District of Columbia customers through PRA surcharges prior to the termination of that rate mechanism, the Commission should require that such amounts be specifically identified by the Company. Moreover, I recommend that any amounts so identified should be placed into a regulatory liability and credited back to customers either through the Company's next base rate case or through the APRP surcharge.

[73] WGL Holdings, Inc. SEC Form 10-K dated November 19, 2015 at page 50.

G. Interruptible Service Issues *(Issue No. 19)*

Q. WHAT ARE THE INTERRUPTIBLE SERVICE ISSUES THE COMMISSION HAS DESIGNATED FOR CONSIDERATION IN THIS PROCEEDING?

A. The Interruptible Service issues the Commission designated in Order No. 18172 are as follows:

> **Issue 19.** *How should the following fundamental issues, related to interruptible customers, be resolved:*
>
> *(a) Should WGL's Interruptible Sales Service be terminated (as the Maryland PSC has done)?*
>
> *(b) Should WGL's margin sharing of Interruptible Service distribution revenue be adjusted or ended?*
>
> *(c) Have revenues from the Interruptible Service and Watergate Classes been reasonably included in WGL's class cost of service studies?*
>
> *(d) How does WGL's class cost of service study account for Interruptible Service and Watergate classes in its various class cost of service studies, and how do those studies calculate the costs and class rate of returns for Interruptible Service and Watergate customers?*
>
> *(e) Should any changes to WGL's tariff, including but not limited to, Rate Schedules Nos. 3 (Interruptible Sales Services), 3A (Interruptible Delivery Service), 5 (Firm Delivery Service Supplier Agreement), and 6 (Small Commercial Aggregation Pilot), be made?*

Q. HAS WASHINGTON GAS ADDRESSED THE COMMISSION'S DESIGNATED INTERRUPTIBLE SERVICE ISSUES?

A. Yes. The Supplemental Direct Testimony of WG witness Wagner addresses the five elements of Issue No. 19 (i.e., sub-parts (a) through (e) in five pages of text which include a restatement of Issue No. 19 and each sub-issue.

1. Termination of Interruptible Sales Service (Issue 19a)

Q. WHAT IS THE COMPANY'S RESPONSE TO COMMISSION'S ISSUE 19(A): "*SHOULD* WGL'S INTERRUPTIBLE SALES SERVICE BE TERMINATED (AS THE MARYLAND PSC HAS DONE"?

A. Witness Wagner's Supplemental Direct Testimony states, "*I am not proposing any changes in the Company's Rate Schedule No. 3 related to Interruptible Sales Service, other than the Customer Charge rate change explained in Exhibit WG (M).*" He also suggests that elimination of the Company's Interruptible Sales Service would "***allow*** [interruptible customers] ***only one choice***."

Q. DO YOU AGREE THAT ELIMINATION OF INTERRUPTIBLE SALES SERVICE WOULD LEAVE ONLY ONE CHOICE FOR INTERRUPTIBLE SERVICE CUSTOMERS?

A. No. The District has a well-established competitive market for retail gas services that provides all customers, including interruptible service customers an array of service options from multiple Competitive Service Providers ("CSPs"). As WG recognizes in response to AOBA Data Request 13-22, witness Wagner is not involved in either the negotiation or pricing of competitive natural gas supply service contracts, nor has he made any assessment of alternate fuel prices for interruptible service customers. By contrast, I have personally worked with a number of interruptible gas service customers in the District and in other jurisdictions on matters relating to the negotiation and pricing of contracts for natural gas supply services.

Q. IS IT YOUR POSITION THAT WG'S INTERRUPTIBLE SALES SERVICE MUST BE ELIMINATED AT THIS TIME?

A. No. However, I believe that elimination of both value-of-service pricing and margin sharing is appropriate at this time. If Interruptible Sales Service is to be continued, sound regulatory policy would suggest that Interruptible Sales Service (Rate Schedule 3) customers should pay the same fixed distribution charges that are paid by interruptible Delivery Service customers under Rate Schedule 3A. Given well-established competitive markets for the retail provision of natural gas supply services, there remains no compelling need for pricing distribution service to any interruptible service customer on a value-of-service, rather than a cost-of-service, basis. Any requirement to adjust the delivered cost of natural gas to meet competition from alternative fuels will be addressed by competition within the gas supply market without any need for WG to adjust its margins on distribution service.

Q. WHAT PERCENT OF THE COMPANY'S INTERRUPTIBLE SERVICE CUSTOMERS AND INTERRUPTIBLE SERVICE LOAD WAS SERVED UNDER RATE SCHEDULE 3 (INTERRUPTIBLE SALES SERVICE) DURING THE TEST YEAR FOR THIS PROCEEDING?

A. The data provided in the attachment to WG's response to AOBA Data Request 3-2 indicates that during the test year only **5.8%** of the Company's average numbers of Interruptible Service customers in the District used Interruptible Sales Service under Rate Schedule No. 3. Moreover, WG's response to AOBA Data Request 3-3 indicates that the volumes provided to Interruptible **Sales Service** customers represented only **1.95%** of total Interruptible Service throughput volumes for the test year. Both during the test year and throughout the history of the Company's Customer Choice Program (i.e., now more than a decade), the vast majority of WG's Interruptible customers have chosen to use Interruptible Delivery Service under Rate Schedule 3A.

Q. DO YOU AGREE WITH WITNESS WAGNER THAT THE COMPANY'S CONTINUED OFFERING OF BOTH INTERRUPTIBLE SALES SERVICE AND

INTERRUPTIBLE DELIVERY SERVICE OPTIONS CAUSES NO HARM TO FIRM OR INTERRUPTIBLE SERVICE CLASSES?

A. No, I do not. Two elements of harm are imposed on District customers through both the Company's continued offering of Interruptible Sales Service in its current form. First, the Company's practice of flexibly pricing Interruptible Sales Service when no such pricing is necessary inappropriately distorts market price relationships and impedes the efficient operation of competitive markets. Second, continuation of WG's flexible pricing of Interruptible Sales Service forms the primary justification for the Company's continued participation in an interruptible margin sharing arrangement which unjustifiably gives the Company increased below-the-line profits while effectively increasing the revenue requirement that WG must recover from its firm and interruptible ratepayers in the District of Columbia. But for the Company's unnecessary retention of a portion of interruptible service margin revenue during the test year, charges billed to District customers during the test year could have been nearly **$1.2 million** lower. This second harm will be discussed further below under Commission Issue 19(b)

Q. **IS WG'S PRICING OF INTERRUPTIBLE SALES SERVICE DURING THE TEST YEAR AND THE TWO IMMEDIATELY PRECEDING FISCAL YEARS REASONABLE AND APPROPRIATE?**

A. No. WG's pricing of Interruptible Sales Service over the last three years can only be characterized as usurious. Over that period WG has frequently established pricing for Interruptible Sales Service that was in excess of the rates the Company charged firm sales service customers in the same month. That pricing was not driven by a need to meet competition from alternative fuels. Rather, it reflects an effort to extract large margins from customers who have demonstrated either: (1) insensitivity to prices charged and/or (2) an inability or unwillingness to use competitive market forces to control their gas service costs. The only customers who remain on Interruptible Sales Service are those who are either totally insensitive to the charges they pay for natural gas service or have little or no understanding of competitive markets. Given WG's pricing of Interruptible Sales Service, it is not surprising that 98% of total Interruptible service volumes and 94% of Interruptible customers utilize Interruptible Delivery Service. It is also not surprising that the customers who remain on Interruptible Sales Service in the District are generally much smaller in terms of their annual gas service requirements than customers who have elected to move to Interruptible Delivery Service.[74] If this Commission believes that it is necessary for WG to continue to offer an Interruptible Sales Service, then it should take action

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[74] As suggested by the test year data WG has provided through discovery, the average annual use per customer for those customers served under Interruptible Sales Service (Rate Schedule 3) in the District during the test year was less than 13,000 therms per year. That contrasts with an average use per customer for WG's Interruptible Delivery Service in the District which is approximately 44,000 therms per year. As might be anticipated, larger and more sophisticated users are more likely to take advantage of competitive service options.

to ensure that customers who utilize that service are not subjected to the unnecessary and unjustified price discrimination currently being practiced by WG.

Q. WHAT OPTIONS ARE AVAILABLE TO THE COMMISSION TO PROTECT INTERRUPTIBLE SALES SERVICE CUSTOMERS FROM ABUSIVE PRICING?

A. Protection of existing Interruptible Sales Service customers in the District can be accomplished through any of following three options.

One option would require that Interruptible Sales Service customers served under Rate Schedule 3 be billed for their use of the WG's distribution system at the same fixed distribution charges that apply to Interruptible Delivery Service customers served under Rate Schedule 3A. Since interruptible service customers are free at any time to move between Sales and Delivery service options, this approach ensures that interruptible customers make the same contribution per therm to the Company's revenue requirements regardless of the service option they chose. This ensures pricing neutrality in that customers are not advantaged or disadvantaged in terms of the charges for distribution service that they pay based on which service option they select. In addition, charging the same rates for distribution service for Sales and Delivery Service customers appropriately place the focus of competitive service considerations on unbundled charges for gas supply service. If WG can provide gas supply services to a customer at lower costs than CSP's, the customer is free to take service under

Rate Schedule 3 without fear that the election of Sales Service will result in higher charges for distribution service.

A second option is for the Commission to give notice that it will terminate all Interruptible Sales Service as of a certain future date. This option would essentially express the Commission's confidence that a viable competitive market for interruptible gas supply services has been established for customers in the District and that, with well-developed competition among CSPs, there is no longer a need for WG to engage in value-of-service pricing for any segment of interruptible service customers. The Commission is asked to recognize that when there is competition among CSPs, it is neither necessary nor appropriate for WG to adjust its pricing of distribution service to respond to competitive forces. Rather, that function is assumed by competitive suppliers, and WG's efforts to influence competitive market results by flexing its charges for distribution service only serve to distort market-based pricing signals. I can enthusiastically support either of these first two options.

Finally, under the third option, which I find less appropriate, the Commission would adopt the approach that Washington Gas uses in Virginia. Under that approach, the Company's Interruptible Sales Service is closed to new customers. As stated in the "Availability" provisions of WG Interruptible Service Rate Schedule No. 4 in Virginia:

> *No customer not receiving service under this rate schedule as of September 27, 2004 will be served under this rate schedule after September 27, 2004, and any existing customer served under this rate schedule as of September 27, 2004 shall not be permitted to return to this rate schedule after service is terminated or obtained under another rate schedule.*[75]

Moreover, the pricing of service on WG's Rate Schedule No. 4 in Virginia for those customers who remain on that schedule provides that commodity charges continue to be predicated on consideration of the customer's alternate fuel, but are constrained such that commodity charges billed to Interruptible Sales Service customers:

> *... shall be established by the Company predicated on the customer's alternate source of No. 2, No. 4 or No. 6 fuel oil. Such charges shall be in excess of the highest incremental commodity charge of the Company's suppliers, plus an allowance for gross receipts taxes and unaccounted for gas. However, such charges for customers served under this rate schedule who are eligible for firm service under either the Commercial and Industrial or Group Metered Apartment rate schedules shall not exceed the sum of (1) the average non-gas margins included in the Commercial and Industrial and Group Metered Apartment tariffs, including system charges, respectively, and (2) the applicable Purchased Gas Charge "Current Cost" Factor.*[76]

Through these tariff provisions, the Virginia State Corporation Commission ensures that customers who remain on Interruptible Sales Service are not exposed to extreme, unreasonable, or highly discriminatory pricing practices.

[75] Rate Schedule No. 4, under WG currently effective Virginia tariff, Va S.C.C. No. 9, Seventh Revised Page No. 27, issued August 1, 2012.
[76] Ibid.

However, in the District of Columbia, WG's charges for Interruptible Sales Service have frequently exceeded the charges such customers would pay under otherwise applicable firm service sales service rates. The approach used in Virginia, however, leaves in place the misguided notion that WG must serve as the balancing factor between the overall costs of natural gas service (including gas supply costs) and customers' costs for alternative fuels.

As I have previously explained, any assumption that WG must manipulate its distribution service charges to meet competition from alternative fuels is unfounded and reflects a distorted and dated understanding of the role of Competitive Service Providers in unbundled markets for gas supply services. Furthermore, that misperception of the role of an unbundled gas distribution utility inappropriately feeds the illusion that interruptible margin sharing must be continued (at least for Interruptible Sales Service revenue margins). Thus, although this third option may provide a degree of administrative protection to Interruptible Sales Service customers against price gouging, it skirts more basic issues regarding the effectiveness of competition and the appropriateness of continuing otherwise unjustifiable interruptible margin sharing.

2. Termination of Revenue Sharing (Issue No. 19b)

Q. SHOULD WGL'S SHARING OF INTERRUPTIBLE SERVICE DISTRIBUTION REVENUE BE ADJUSTED OR ENDED? *Issue No. 19(b)*

A. AOBA's position is that WG's sharing of Interruptible Service margin revenue is no longer necessary or justifiable and should be eliminated.

Q. HOW DOES WASHINGTON GAS RESPOND TO ISSUE NO. 19(B)?

A. WG responds to this issue in the Supplemental Direct Testimony of witness Wagner, Exhibit WG (2M). In that testimony witness Wagner states, "*I am not proposing any change to the current interruptible margin sharing proposed in this proceeding.*"[77]

Q. WHAT RATIONALES ARE OFFERED BY WITNESS WAGNER TO SUPPORT THE COMPANY'S CONTINUED RETENTION OF 10% OF INTERRUPTIBLE MARGIN REVENUE?

A. Witness Wagner makes four representations. First, he asserts that the purpose of margin sharing is to provide an incentive for the Company to market interruptible service in a manner that maintains "*the largest possible margin amounts.*" Second, he suggests that the current margin sharing arrangement provides significant benefits to firm customers. Third, he alleges that the Company's

[77] Exhibit WG (2M), page 3, lines 8-12.

participation in interruptible margin sharing provides the Company incentive to minimize service interruptions for Interruptible Service customers under all but the most extreme weather conditions. Fourth, Witness Wagner speculates programs adopted by the Commission in Formal Case No. 1130 may provide WG opportunities to promote further development of natural gas usage, including the enrollment of new interruptible gas service customers.

Q. DOES THE COMPANY'S CURRENT MARGIN SHARING ARRANGEMENT PROVIDE EFFECTIVE INCENTIVES FOR WG TO MAXIMIZE ITS INTERRUPTIBLE SERVICE REVENUE MARGINS?

A. No. To understand why the current margin sharing arrangement does not provide effective incentives, it is helpful to: (1) understand the history of the Company's interruptible margin sharing arrangement; and (2) address separately the margins the Company derives from Interruptible Sales Service and the margins the Company obtains from Interruptible Delivery Service.

Q. DOES THE COMPANIES' CURRENT MARGIN SHARING ARRANGEMENT PROVIDE SIGNIFICANT BENEFITS TO WG'S FIRM SERVICE CUSTOMERS IN THE DISTRICT OF COLUMBIA?

A. No. The revenues collected from Interruptible Delivery Service customers are no longer at risk, and thus, no benefit is gained from continuing to allow the Company to share a portion of the distribution charge revenue collected from Interruptible Delivery Service customers.[78] But for, the unnecessary sharing of Interruptible Delivery Service margins with the Company, the credits that effectively flowed to WG firm service customers for the test year would have been approximately $1.1 million greater.[79] In other words, firm ratepayers are **losing benefits** to which they would otherwise be entitled if the Company's sharing of Interruptible Delivery Service distribution charge revenues is ended.

Q. WOULD ELIMINATION OF INTERRUPTIBLE MARGIN SHARING REMOVE INCENTIVES FOR WG TO MAXIMIZE THE AVAILABILITY OF SERVICE TO INTERRUPTIBLE SERVICE CUSTOMERS?

A. No. AOBA's concept is that with the elimination of margin sharing WG would appropriately become dependent upon interruptible service for recovery of a portion of its distribution service revenue requirement,[80] and that would provide the Company more than adequate incentive to maximize the availability of distribution service to interruptible customers.

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[78] The same could be said for Interruptible Sales Service if customers served under that rate schedule were not needlessly subject to value of service pricing under which they are billed distribution charges well in excess of the distribution charges applied to Interruptible Delivery Service customers.

[79] Of the $1.2 million of interruptible revenue margins retained by WG during the test year approximately $1.1 million is derived from Interruptible Delivery Service customers.

[80] Under the current margin sharing arrangement, distribution margin revenue obtained from Interruptible Service customers is not considered when revenue requirements for firm service rate classifications are established. As a result, revenue requirements and rates for firm service customers are increased as part of the establishment of base rates, subject to the application of subsequent rate credits for ratepayers' 90% share of actually achieved distribution margin revenue. Under AOBA's proposal, firm service customers would receive the benefit of 100% of approved test year distribution charge revenue from interruptible service customers.

Q. DOES WG NEED FINANCIAL INCENTIVES TO ENROLL NEW INTERRUPTIBLE CUSTOMERS SUCH AS THOSE THAT MIGHT USE NATURAL GAS IN SUPPORT OF PROGRAMS BEING CONSIDERED BY THIS COMMISSION IN FORMAL CASE NO. 1130?

A. No. Whether WG will have the opportunity to enroll new customers as a result of programs this Commission may adopt through its considerations in Formal Case No. 1130 is at best speculation at this time. Furthermore, to the extent there are potential uses of natural gas in support of such programs, the Company's challenges, if any, in attracting such new customers are primarily associated with their upfront costs in connecting with the WG system and are likely to have little or no relationship to the margins WG charges for distribution service. Once a customer is connected to the system, the comparative economics of natural gas use should be driven by pricing of gas supply services through the competitive market, not by WG's manipulation of distribution margins. Thus, WG needs no distribution margin-related incentives to attract such new customers.

Q. WHAT WAS THE GENESIS OF WG'S CURRENT INTERRUPTIBLE MARGIN SHARING ARRANGEMENT?

A. In the early to mid-1980s gas utilities were confronted with events that at times threatened to jeopardize their recovery of non-gas costs from interruptible service customers who had alternate fuel burning capabilities. With the passage of the Natural Gas Policies Act of 1978, the U.S. undertook a gradual deregulation of wellhead natural gas prices. Prior to the passage of that Act, wellhead prices for natural gas sold in interstate markets were regulated on a cost of service basis by the Federal Power Commission (i.e., the predecessor to the current Federal Energy Regulatory Commission). Since regulated prices for natural gas in the late 1970's were dramatically lower than comparable costs for fuel oil alternatives, customers who had the option of using alternative fuels generally showed a decided preference for natural gas. Yet, many firms and investors engaged in the exploration and development of natural gas found the disparity between fuel oil prices and regulated natural gas prices unacceptably large, and opted to reduce their investment in new natural gas production until greater compensation for natural gas producers was permitted. That was ultimately accomplished through the passage and implementation of the Natural Gas Policies Act of 1978 ("NGPA"). However, the gradual deregulation process mandated by the NGPA initially provided only limited volumes of gas at deregulated prices to a market that had substantial pent-up demand for natural gas.

The combination of limited deregulated natural gas supply and large pent-up natural gas demand sent prices for initially deregulated natural gas supplies soaring. Within a short time prices for deregulated natural gas prices rose above the costs of fuel oil alternatives, and natural gas users who had alternative fuel use capabilities (many of whom were interruptible service customers) began to find fuel oil alternatives more cost-effective. As interruptible service customers began to exercise alternative fuel options, gas distribution utilities found themselves in the position of not being able to rely on interruptible service margins to recover their regulated revenue requirements.

The regulatory response to this problem was generally the adoption of policies which:

(1) Instituted value-of-service pricing for interruptible customers under which utilities were permitted to flex their rates for interruptible service to meet competition from alternative fuels and maximize the contributions to fixed costs obtained from interruptible service customers;

(2) Provided incentives for distribution utilities to maximize interruptible customers margin revenues (i.e., contributions to system fixed costs) by allowing utilities to retain a portion of achieved interruptible revenue margins; and

(3) Shifted primary responsibility for all non-gas revenue requirements to firm gas service customers subject to their

receipt of credits for the portion of interruptible service margins not retained by the utility.

Although for most of the industry the competitive threat from alternative fuels was comparatively short-lived, use of value-of-service pricing and margin sharing arrangements continued primarily out of fear that sudden changes in energy prices could once again erode utilities' ability to recover their authorized non-gas revenue requirements. However, the movement toward deregulation of retail natural gas supply services and the unbundling of gas distribution utility services introduced a new dynamic to the industry. Competition among providers of retail gas supply services shifted much of the risk of associated with the pricing of alternative fuels from gas distribution utilities to CSPs. That, in turn, has helped to ensure the overall competiveness of natural gas service without the need for gas distribution utilities to flex rates or price on a value-of-service basis. Value-of-service pricing is now achieved through the competitive market, rather than through gas utilities' flexing of distribution service revenue margins for interruptible service customers.

Q. HOW ARE INCENTIVES FOR WG TO MAXIMIZE INTERRUPTIBLE SERVICE MARGINS PRESENTLY DETERMINED?

A. As currently determined WG's purported "incentive" reflects 10% of the sum of its distribution charge revenue from both Interruptible Sales Service and Interruptible Delivery Service. WG's response to AOBA Data Request No. 13-24 documents the net non-gas distribution revenue (excluding customer charges) that the Company derived from Interruptible Sales Service during the test year (i.e., the twelve months ended September 30, 2015) and the net distribution charge revenue obtained during the test year from Interruptible Delivery Service customers. As shown on page 3 of the Attachment to the Company response to AOBA Data Request 13-24a.b., WG's revenue margins from Interruptible Sales Service for the test year total to **$1,016,857**. The Company's margin revenue from Interruptible Delivery Service was **$10,960,737**. This produced total interruptible margin revenue subject to sharing from Interruptible Sales and Delivery service of **$11,977,594**. Thus, WG's 10% retention for Interruptible Sales and Delivery Service margins for the test year was **$1,197,759**.[81]

Q. IS THE COMPANY'S RETENTION OF NEARLY $1.2 MILLION OF INTERRUPTIBLE MARGIN REVENUE ECONOMICALLY JUSTIFIED?

A. No. When assessing the economic justification of WG's sharing of interruptible margin revenues, it is important that revenue margins obtained from Interruptible

[81] The Attachment to WG's response to AOBA Data Request 13-27a.b. indicates that for FY 2015 (i.e., the test year in this proceeding) WG's margin sharing retention was **$1,220,247**, while Firm Customers were credited $10,982,226. Thus, the total margin revenue subject to sharing for FY 2015 was **$12,202,473**. The difference between the amounts in WG's response to AOBA Data Request 13-27a.b appears to reflect sharing on Watergate revenue margins.

Sales Service be examined separately from the margin revenues that WG obtains from Interruptible Delivery Service.

As discussed above, the concept of interruptible margin sharing was developed to incent utilities to maximize their revenues from interruptible customers who were priced on a value-of-service basis and for whom competition from alternative fuels created substantial uncertainty regarding the amount of revenue the Company could expect from service provided to such customers on an annual basis. However, the only interruptible service customers who remain subject to **value of service pricing** are the Company's **Interruptible Sales Service** customers. WG's Interruptible Delivery Service customers pay fixed distribution charges that do not vary from month-to-month regardless of the costs of customers' alternative fuels. For the test year, WG derived **91.5%** of its **total interruptible margin revenue** from **Interruptible Delivery Service customers**.

The vast majority (i.e., 91.5%) of the Company's test year interruptible margin revenue was derived from Interruptible Delivery Service customers who pay fixed distribution charges. WG does little or nothing outside of the normal course of business to maximize these revenues, and warrants no sharing of revenue margins derived from its Interruptible Delivery Service customers. In fact, over the Company's last three fiscal years, WG's Interruptible Delivery Service Volumes have declined noticeably, and it appears that weather (as measured by Heating Degree Days) is a more important driver of the margin revenues that WG derives from its Interruptible Delivery Service customers than any action taken by the Company to purportedly maximize such revenue. Furthermore, I find no evidence that WG's distribution charge revenue from Interruptible Delivery Service customers would have been any different if WG was provided no incentive relating to its provision of Interruptible Delivery Service.

If the Commission recognizes that WG does nothing to earn an incentive on its provision of Interruptible Delivery Service, then all of the incentives provided to the Company for the test year through the existing margin sharing mechanism must be justified on the basis of margins obtained from Interruptible Sales Service. Yet, the Company's total margin revenue from Interruptible Sales Service for the test year was **$1,016,857** while its margin sharing "incentive" for the test year was **$1,197,759**. In other words, the Company's "incentive" equates to about **118%** of the **entire** margin revenue from Interruptible Sales Service (i.e., the only service over which WG exercised influence over the size of the margins billed).

Q. IS THERE EVIDENCE THAT WG ACTED TO MAXIMIZE ITS REVENUE MARGINS FROM INTERRUPTIBLE SALES SERVICE CUSTOMERS?

A. Yes. However, the Company's pricing of Interruptible Sales Service is less a response to competitive pressures and more a gouging of a limited number of generally smaller interruptible service customers who remain on that service. Line 15 on page 3 of the Attachment to WG's response to AOBA Data Request 13-24a.b. provides the average revenue margins per therm that the Company billed to Interruptible Sales Service Customers for the test year. Those average margins range from $0.4501 per therm for December 2014 to $1.1483 per therm for March 2015. Those margins also contrast sharply with WG's average revenue margins for Interruptible **Delivery** Service shown on line 29 of the same page. For each month of the test year WG's Interruptible Sales Service revenue margins are at least **$0.30 per therm greater** than its margins per therm for Interruptible Delivery Service. Moreover, that differential rises as high as $1.0135 per therm for the month of March 2015. On average WG's Interruptible Sales Service distribution revenue margins are **4.67 times** the comparable average margins for Interruptible Delivery Service (i.e., an average rate differential of more than $0.51 per therm).

Exhibit AOBA (A)-12 provides a comparison of WG average revenue per therm for Interruptible Sales Service with the average revenue per therm paid by customers served under: (1) WG's Interruptible Delivery Service rates; and (2) under WG's firm service rates for Commercial and Industrial and Group Metered

Apartment customers that would be applicable to Interruptible Sales Service customers who may seek to transfer to firm sales service.

Q. WOULD THE ELIMINATION OF WG'S CURRENT MECHANISM FOR SHARING INTERRUPTIBLE SERVICE MARGIN REVENUE IMPEDE THE COMPANY'S OPPORTUNITY TO EARN ITS AUTHORIZED RATE OF RETURN?

A. No. The margin revenues that WG presently retains are not presently considered in the Commission's establishment of WG's revenue requirements. Presumably the Commission will continue to establish revenue requirements for the Company in a manner that provides WG a reasonable opportunity to earn its authorized rate of return without consideration of such below-the-line additions to earnings. Thus, elimination of the current margin sharing will NOT adversely impact the regulatory mathematics through which the Company's revenue requirements are established.

3. Interruptible CCOSS and Revenue Issues (Issues 19c & d)

Q. HAVE REVENUES FROM THE INTERRUPTIBLE SERVICE AND WATER-GATE CLASSES BEEN REASONABLY INCLUDED IN WGL'S CLASS COST OF SERVICE STUDIES?

A. No. As presented by WG, revenues and usage for standard tariff interruptible service customers are inappropriately combined with revenues and therm use for Special Contract customers, and the result is an inaccurate and misleading assessment of WG's costs of providing service to standard tariff interruptible service customers.

Q. HAVE YOU MADE AN ASSESSMENT OF THE INTERRUPTIBLE SERVICE REVENUES THAT WG HAS INCLUDED IN ITS CLASS COST OF SERVICE STUDIES IN THIS CASE?

A. Yes. I have examined the Class Cost of Service analyses that WG has presented in the pages of Exhibit WG (M)-3, as well as a number of data request responses that address the content and methods used in those analyses and the interruptible revenues that the Company's analyses reflect.

Q. DO YOU FIND THAT THE COMPANY HAS PROPERLY REPRESENTED ITS INTERRUPTIBLE REVENUE IN THE PREPARATION OF ITS CCOSS?

A. No, I do not. To fully address WG's treatment of its interruptible service revenues within WG's class cost of service exhibits, it is necessary to first understand the structure of those studies and the manner in which WG's **estimates** of test year revenue for its interruptible (i.e., Non-Firm) service customers have been developed. However, the most basic observation is that WG's assessment of its interruptible service rate of return does not depict the rate of return that WG derives from its standard tariff customers and is, once again, distorted by the Company's failure to provide separate consideration of the of Special Contract service requirements. In both its class cost of service analyses and its normal weather study, WG has failed to properly isolate and separately analyze its Special Contract service therms and revenues. This failure to separately address the service characteristics and costs associated with WG's provision of Special Contract services distorts the Company's determinations with respect to appropriate rates for all of WG's firm and interruptible standard tariff customers.

Q. HOW IS WG'S REFLECTION OF INTERRUPTIBLE REVENUE IN ITS CLASS COST OF SERVICE ANALYSES INFLUENCED BY THE STRUCTURE OF THE COMPANY'S CLASS COST OF SERVICE PRESENTATION?

A. WG's class cost of service analysis in Exhibit WG (M)-3 is presented in two parts. The first part[82] provides the Company's base study in which only a portion of the

[82] As originally filed, Exhibit WG (M)-3 comprised three pages. The first two pages presented a summary of the Company's base class cost of service analysis, but provided no rate of return for the Non-Firm (Interruptible) service class. The third page computed a rate of return for the Company's Non-Firm class after adding consideration of Non-Firm distribution charge revenue which constitutes more than 50% of WG's estimated normal weather test year revenue for that class.

However, on May 11, 2016, WG filed replacement pages for Exhibit (M)-3. Those replacement pages are presented in two attachments. Attachment 1 replaces the cost of service summary pages presented in pages 1 and 2 of the originally filed exhibit with a 44 page document that incorporates greater detail regarding the Company's underlying allocations of costs by class of service. No revisions to the detail or results of the Company's base study are made in Attachment 1 of the replacement pages. However, Attachment 2 of the replacement pages provides a revised assessment of the Non-Firm (Interruptible) class rate of return where the only revisions reflect removal of the Company's representation of its anticipated revenue under its Special Contract with the Architect of the Capitol (AOC) and associated adjustments to state and federal income taxes for the Non-Firm (Interruptible) class.

test year revenue for the "Non-Firm" (i.e., Interruptible) service class is recognized. The second part reflects WG's effort to separately address the rate of return that it earns on service provided to its Non-Firm (Interruptible) service class. To understand and appreciate the Company's treatment of interruptible service revenue in its class cost of service analyses, the Commission must understand the rationales for the structure of the Company's presentation and the relationship between those rationales and the information presented.

Q. WHY DOES WG PRESENT ITS COST OF SERVICE ANALYSES IN TWO PARTS?

A. WG's cost of service analysis in Exhibit (M)-3 offers a separate assessment of its non-firm (interruptible) rate of return for two reasons. First, the Company believes that because its interruptible margin revenues are subject to market competition and are therefore, not sufficiently reliable and predictable to serve as a basis for recovery of regulated revenue requirements. Second, WG believes that inclusion of interruptible revenues that are subject to margin sharing in its base class cost of service study would be inconsistent with the current crediting of 90% of interruptible service margin revenues to firm service customers through the ACA and would effectively double count those revenues.

Q. DO YOU AGREE WITH THE COMPANY'S RATIONALES FOR ITS TREATMENT OF INTERRUPTIBLE MARGIN REVENUES?

A. I agree that it would be inappropriate to include interruptible service revenues in the Company's base class cost of service study if those revenues are subject to sharing with a portion of those revenues credited to firm customers through the ACA. On the other hand, I disagree with any suggestion that Interruptible margin revenues are not sufficiently predictable to warrant reliance on those revenues to recover an allocated portion of WG's authorized revenue requirements. As I have previously explained, acceptance of this reality removes any justification for continued margin sharing. Moreover, termination of margin sharing would allow WG's full interruptible revenue to be reflected in its base class cost of service analysis, thereby, negating the need for a separate computation of the rate of return earned by WG from its interruptible service customers.

When the only element outside of normal tariff interruptible service revenue was Watergate revenue, WG's treatment of Special Contract therms, costs of service, and revenues did not have a significant impact on the Company's assessment of costs and revenue requirements for its Rate Schedule 3 and Rate Schedule 3A customers. However, with the introduction of AOC as a Special Contract customer and evidence that other significant volumes have been served on a Special Contract basis, the need for, and appropriateness of, separate consideration of Special Contract service therms and revenues is difficult to deny.

Q. WHAT ARE THE PROBLEMS YOU HAVE IDENTIFIED IN THE MEASURES OF INTERRUPTIBLE REVENUE THAT WG USES IN ITS CLASS COST OF SERVICE ANALYSES?

A. I have identified at least four substantive problems in the manner in which WG determines the revenues it includes in its cost of service analyses for Interruptible Service customers.

First, when WG revised its Interruptible cost of service analysis in Exhibit (M)-3,[83] the Company's estimate of AOC firm service revenue was removed from the interruptible class. However, the only corresponding adjustments made to the Company's Interruptible (Non-Firm) costs of service were adjustments to income taxes. The implication is of the Company's failure to adjust any other elements of the test year expenses and rate base allocated to AOC is that WG incurs no costs to support its provision of firm service firm to AOC, not even billing, accounting, and general and administrative expenses. That blanket exemption of AOC firm service volumes from all rate base and expense responsibilities (other than income taxes) is not reasonable or appropriate. It also yields a distorted assessment of Interruptible Service customers' cost responsibilities.

[83] WG's interruptible cost of service analysis was originally provided as Exhibit WG (M)-3, page 3 of 3, but was subsequently revised in a filing made on May 11, 2016 and replaced with Attachment 2, page 1 of 1, of the Company's Replacement Pages for Exhibit WG (M)-3.

Second, WG's interruptible cost of service analysis includes approximately **33 million** therms of Special Contract gas use for AOC and GSA, in addition to any volumes for Watergate. Yet, those therms are included in the service volumes that WG uses to assess the measures Interruptible costs of service on which it relies to design rates for standard tariff interruptible service customers. As a result, the costs on which those rates are developed are greatly overstated.[84]

For these reasons special contract services are not appropriately included in WG's Non-Firm cost of service analyses as part of the class of customers for which Interruptible Service rates are developed. WG's inclusion of Special Contract volumes in the Non-firm class for the purposes of the analysis presented on page 3 of witness Wagner's Exhibit WG (M)-3, causes the cost of service responsibilities of WG's tariffed interruptible customers to be significantly overstated. It also results in an overstatement of the rate base and expenses that are appropriately recovered from interruptible service customers in the District of Columbia who are served under the Company's tariffed rates.

The Supplemental Direct Testimony of WG witness Tuoriniemi states, "*AOC's Special Contract does not impact the costs of service either through rate base or operating expenses.*" That statement lacks credibility and must NOT be

[84] The Special Contract service volumes WG has included in its cost of service and rate design analyses represent **38%** of WG's total interruptible throughput for the District of Columbia. However, those Special Contracts volumes often do not pay standard tariff distribution charges and may be excluded from applications of surcharges and rate adjustments, such as the Company's proposed RNA.

accepted at face value. At a minimum, the Company's service to AOC must be allocated or assigned costs for: (1) the high pressure lines through which AOC is served; (2) costs for meters and regulators used in the provision of service to AOC; (3) costs of stores and equipment used to maintain facilities to serve AOC; (4) costs of metering, billing, and customer accounting, including costs of IT systems and contractors used to perform those functions; (5) cost incurred for negotiating and administering the provisions of the AOC contract, as well as presenting that contract to the Commission for approval; and (6) general and administrative expenses. Just accounting for the per therm amounts associated with DC Delivery Tax, SEFT and EATF charges, and DC Rights of Way Fees for the AOC Firm therms removed from the Non-Firm class would eliminate nearly **$1,028,000** of expenses inappropriately applied to DC standard tariff interruptible service customers.

Third, given that Interruptible Delivery Service customers are billed fixed rates for distribution charges under an approved tariff, there is no reason the entirety of WG's Interruptible Delivery Service revenue cannot be removed from revenue sharing, included in WG's base Class Cost of Service Study, and treated in a manner more analogous to the Company's cost of service treatment of firm service rate classes. In fact, there is no greater uncertainty associated with WG's recovery of costs through fixed rates for its Interruptible Delivery Service customers than there is for any of WG's existing firm service rate classes.

Fourth, with the removal of AOC firm service volumes, AOC's interruptible service takes on a much different character. WG's response to AOBA Data Request 6-9 provides a table showing the test year load factors for each rate class based on the Company's estimates of normal weather therms. That table computes a 40% annual load factor for the Company's overall interruptible service. However, when the AOC firm service volumes defined in its newly approved Special Contract are removed from total AOC volumes, the remaining AOC interruptible service requirements are found almost exclusively in the winter months. The result is a noticeable decline in the load factor for AOC's interruptible service requirements and a significant increase in the portion of AOC's interruptible service requirements that is considered weather-sensitive and fluctuates with variations in heating degree days. As shown in Exhibit WG (2D)-4, page 1 of 2, column B, **all** of AOC's non-firm volumes are expected in the months of December through May.

Finally, an examination of the detail of the Company's base class cost of service study as presented on pages 1 through 44 of the Replacement pages for Exhibit WG (M)-3 finds that the Company's base study includes Special Contract volumes in its allocations of cost to its Non-Firm (Interruptible) class. Pages 24 of 44 and 25 of 44 in Exhibit WG (M)-3 detail the development of key volumetric allocation factors used in the Company's base study. Clearly, shown on those pages is the development of two allocation factors used for multiple allocations of test year rate base and expense amounts within the Company's apportionment of costs among rate classes. Those allocators are: (1) Comp_Peak_Ann_NW; and (2) Total_Weather_All_NW. Rate base costs and associated expenses and depreciation for such items as Storage Plant, Transmission Plant, and Compressor Station Equipment are clearly shown to be allocated to Interruptible service on the basis of these factors.

Further, in the development of those allocators on pages 24 of 44 and 25 of 44 in Exhibit WG (M)-3, those allocators are shown to be developed from total annual test year therm sales for Non-Frim service of over **82 million therms.** However, as previously noted in Section B.3. of this Discussion of Issues, the Company's response to AOBA Data Request 3-3 reflects 80,128,770 therms of actual test year throughput for the interruptible class which comprises 65,667,228 therms of Interruptible Delivery Service, 1,559,415 therms of Interruptible Sales Service, **and 12,902,127 therms of Special Contract service**. Since actual Interruptible Delivery Service and Interruptible Sales Service volumes total to only 67,226,643 therms, there can be no question that costs allocated to WG's Non-Firm service within its base class cost of service study include costs associated with WG's provision of service to Special Contract customers.

Q. WHAT IS THE AMOUNT OF INTERRUPTIBLE DISTRIBUTION CHARGE REVENUE OMITTED FROM THE COMPANY'S COST OF SERVICE REVENUE FOR THE TEST YEAR REVENUE IN THIS CASE?

A. Prior to the Company's revision to Exhibit WG (M)-3 to remove AOC Firm Service therms and revenue, the Company represented its total test year distribution charge revenue as $12,159,373.[85] As presently revised with AOC Firm Service volumes and revenues removed, WG suggests that its total of non-firm (interruptible) distribution charge revenue for the test year is **$10,896,089**.

Q. IS THE $10,896,089 AMOUNT OF INTERRUPTIBLE DISTRIBUTION CHARGE REVENUE IN THE COMPANY'S UPDATE OF EXHIBIT WG (M)-3 ACCURATELY COMPUTED?

A. No, it is not. I reach this conclusion based on two observations.

First, there is no indication that non-gas revenue margins on Interruptible Sales Service and distribution margins on Watergate Service have been included, or if included, that they were priced at appropriate rates. Second, when the AOC volumes were removed from total Non-Firm (Interruptible) distribution margin revenue, those volumes were deducted from Interruptible Delivery Service therms that were priced at the tariffed distribution rates for Rate Schedule 3A customer. However, it would appear more appropriate for the AOC Firm Service volumes to be removed from what the Company has labeled as

[85] Exhibit WG (M)-3, page 3 of 3, as filed on February 26, 2016.

"GSA Interruptible Therms" and priced at a rate of $0.083 per therm. If the AOC Firm Service volumes were deducted from the Company's reported total Interruptible Service volumes at the GSA (Special Contract) rate of $0.083 per therm, they would have had a value of $663,938 rather than the effective $1,259,373 amount WG computed. In turn, that would leave a total amount of Interruptible Distribution Charge revenue remaining for the Interruptible class, after deducting AOC Firm Service, would be $11,495,435 or $599,346 more than the $10,896,089 shown in Pepco's updated distribution charge revenue determination for Exhibit WG (M)-3.

Second, as noted in Section B.4. of this Discussion of Issues the attachment to WG's Response to AOBA Data Request 10-23 suggests that **$1,279,697** of "**Interrupt-Cool-Cool & Heat-DC**" revenues were included under Group Metered Apartment and apparently excluded from the Non-Firm (Interruptible) Revenues shown in Exhibit WG (M)-3, Replacement Pages, Attachment 2.

5. Interruptible Tariff Issues (Issue 19e)

Q. DO YOU RECOMMEND ANY CHANGES IN WG'S CURRENT INTER-RUPTIBLE SERVICE TARIFFS?

A. Yes. As stated above, I recommend that if the Commission deems it necessary for WG to continue to offer Interruptible Sales Service, that service should be closed to new customers and the distribution charges for customers served under Rate Schedule No. 3 should be set at the same levels as those for customers served under Rate Schedule 3A for Interruptible Delivery Service.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. It does.

Washington Gas Light Company

Formal Case No. 1137

WGL Holdings, Inc. Five Quarter Average Capital Structures

Includes Short-Term Debt and Includes Current Maturities in Long-Term Debt

		Five-Quarter Average for Period Ended September 30, 2015					
		WGL Holdings	%	Wash Gas	%	Non-Utility	%
Common Equity	CE	$ 1,260,506	50.16%	$ 1,099,695	57.17%	$ 160,811	27.28%
Preferred Stock	PS	$ 28,173	1.12%	$ 28,173	1.46%	$ -	0.00%
Long-Term Debt	LTD	$ 931,001	37.05%	$ 732,342	38.08%	$ 198,659	33.70%
Short-Term Debt	STD	$ 293,300	11.67%	$ 63,200	3.29%	$ 230,100	39.03%
Total		$ 2,512,980	100.00%	$ 1,923,410	100.00%	$ 589,569	100.00%

Source: WGL Holdings, Inc. SEC Form 10-K and 10-Qs.

Washington Gas Light Company

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Effect of 500 Basis Point Shift of Common Equity to Long-Term Debt

	Capitalization	Ratio	Cost	Return
Common Equity	$ 1,101,270	**57.76%**	10.25%	5.92%
Preferred Stock	$ 28,173	1.48%	4.79%	0.07%
Long-Term Debt	$ 721,000	37.81%	5.83%	2.20%
Short-Term Debt	$ 56,219	2.95%	1.06%	0.03%
Total	$ 1,906,662	100.00%		8.23%

	Capitalization	Ratio	Cost	Return
Common Equity	$ 1,101,270	**52.76%**	10.25%	5.41%
Preferred Stock	$ 28,173	1.48%	4.79%	0.07%
Long-Term Debt	$ 721,000	42.81%	5.83%	2.50%
Short-Term Debt	$ 56,219	2.95%	1.06%	0.03%
Total	$ 1,906,662	100.00%		8.01%
Change in Overall Rate of Return				**-0.22%**
Rate Base	$ 261,882,302			
Change in Required Return	$ (578,760)			
Tax Gross Up Factor	0.58516			
Revenue Requirement Adjustment	**$ (989,063)**			

Washington Gas Light Company
Formal Case No. 1137

WG Actual Capital Structures for its Three Most Recent Three Quarters

Line No.		As of September 30, 2015 Capitalization	%	As of December 31, 2015 Capitalization	%	As of March 31, 2016 Capitalization	%
1	Common Equity	$ 1,081,292	56.34%	$ 1,115,648	53.8%	$ 1,190,189	56.9%
2	Preferred Stock	$ 28,173	1.47%	$ 28,173	1.4%	$ 28,173	1.3%
3	Long-Term Debt 1/	$ 720,885	37.56%	$ 722,243	34.8%	$ 695,888	33.3%
4	Short-Term Debt	$ 89,000	4.64%	$ 207,475	10.0%	$ 177,307	8.5%
5	Total	$ 1,919,350	100.0%	$ 2,073,539	100.0%	$ 2,091,557	100.0%

Source: WGL Holdings, Inc. 10-K and 10-Qs
1/ Includes Current Maturities of Long-Term Debt

Washington Gas Light Company
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Cost of Equity - Proxy Group Analysis

Ln No	Analytic Model	Average Dividend Yield	Dividend Growth Component	Adjusted Dividend Yield	Earnings Growth Rate	Indicated Rate of Return
	DCF Cost of Equity					
1	Zacks	3.22%	0.18%	3.39%	5.45%	8.84%
2	CNN	3.22%	0.19%	3.41%	5.94%	9.35%
3	Yahoo	3.22%	0.17%	3.39%	5.24%	8.62%
4	**Average of DCF Results**					**8.94%**
	CAPM Analysis *(Value Line Betas)*		**Based on Current 30-Year Teasury Rate**	**Based on Projected 30-Year Teasury Rate**		**Average**
5	@ 7.00% MRP		8.35%	8.82%		8.58%
6	@ 8.00% MRP		9.11%	9.58%		9.35%
7	**Average of CAPM Results**					**8.97%**
8	**Average of DCF and CAPM Results**					**8.95%**
	Regulator Adjustment Method					
9	WG Recommendation					10.25%
10	Less Hevert Flotation Cost Adjustment					0.14%
11	Less Regulators' Adjustment Factor					0.77%
12	**Adjusted WG Recommendation**					**9.34%**
13	**Recommendation** *(Current Authorized ROE)*					**9.25%**

Washington Gas Light Company

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Dividend Yields & Earnings Growth for Selected Primarily Gas Distribution Companies

Company		Market Price Per Share 1/			Indicated Dividend	Dividend	Projected 5-Year Earnings Growth		
		High	Low	Average	Per Share 1/	Yield	Zacks 2/	CNN 3/	Yahoo 4/
Gas Companies									
Atmos Energy Corp.	ATO	$ 75.10	$ 50.83	$ 62.97	$ 1.68	2.67%	6.60%	7.00%	6.40%
Spire Inc. (Laclede Group Inc.)	LG/SR	$ 68.79	$ 49.66	$ 59.23	$ 1.96	3.31%	4.60%	4.75%	4.52%
New Jersey Rescources Corp.	NJR	$ 37.17	$ 26.77	$ 31.97	$ 0.96	3.00%	6.50%	6.00%	6.50%
Northwest Natural Gas Co.	NWN	$ 57.95	$ 42.00	$ 49.98	$ 1.87	3.74%	4.00%	4.00%	4.00%
South Jersey Industries, Inc.	SJI	$ 29.14	$ 21.24	$ 25.19	$ 1.06	4.21%	6.00%	9.90%	6.00%
Southwest Gas Corp.	SWX	$ 70.51	$ 50.53	$ 60.52	$ 1.80	2.97%	5.00%	4.00%	4.00%
Average		**$ 56.44**	**$ 40.17**	**$ 48.31**	**$ 1.56**	**3.22%**	**5.45%**	**5.94%**	**5.24%**
WGL Holdings, Inc.	WGL	$ 74.10	$ 51.86	$ 62.98	$ 1.95	3.10%	7.30%	7.00%	8.00%

1/ From www.finance.yahoo.com 5-26-16
2/ From www.Zacks.com 5-26-16
3/ From www.cnn.com 5-26-16
4/ From www.finance.yahoo.com 5-26-16

Washington Gas Light Company
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Capital Asset Pricing Model (CAPM) Cost of Equity Estimates- Value Line Betas

Using Current Cost of 30-Year Treasury Bonds

		Value Line Adjusted Beta 1/	Assumed Risk Premium 7.00%	Risk-Free Rate 2.98%	**Value Line** Adjusted Beta 1/	Assumed Risk Premium 8.00%	Risk-Free Rate 2.98%
Atmos Energy Corp.	**ATO**	0.80	5.60%	8.58%	0.80	6.40%	9.38%
Spire Inc. (The Laclede Group In	**LG/SR**	0.70	4.90%	7.88%	0.70	5.60%	8.58%
New Jersey Rescources Corpora	**NJR**	0.80	5.60%	8.58%	0.80	6.40%	9.38%
Northwest Natural Gas Co.	**NWN**	0.70	4.90%	7.88%	0.70	5.60%	8.58%
South Jersey Industries, Inc.	**SJI**	0.80	5.60%	8.58%	0.80	6.40%	9.38%
Southwest Gas Corp.	**SWX**	0.80	5.60%	8.58%	0.80	6.40%	9.38%
Average		0.77	5.37%	8.35%	0.77	6.13%	9.11%

Using Current Cost of 30-Year Treasury Bonds

Proxy Group Companies		**Value Line** Adjusted Beta 1/	Assumed Risk Premium 7.00%	Risk-Free Rate 3.45%	Value Line Adjusted Beta 1/	Assumed Risk Premium 8.00%	Risk-Free Rate 3.45%
Atmos Energy Corp.	**ATO**	0.80	5.60%	9.05%	0.80	6.40%	9.85%
Spire Inc. (The Laclede Group In	**LG/SR**	0.70	4.90%	8.35%	0.70	5.60%	9.05%
New Jersey Rescources Corpora	**NJR**	0.80	5.60%	9.05%	0.80	6.40%	9.85%
Northwest Natural Gas Co.	**NWN**	0.70	4.90%	8.35%	0.70	5.60%	9.05%
South Jersey Industries, Inc.	**SJI**	0.80	5.60%	9.05%	0.80	6.40%	9.85%
Southwest Gas Corp.	**SWX**	0.80	5.60%	9.05%	0.80	6.40%	9.85%
Average		0.77	5.37%	8.82%	0.77	6.13%	9.58%
Median		0.80	5.60%	9.05%	0.80	6.40%	9.85%

1/ From www.valueline.com 5-26-16

Washington Gas Light Company
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Gas Utility Rate Cases

	Jurisdiction	Utility	Gas/Electric	Docket No.	Date	Proposed ROE	Approved ROE	Difference
1	Arkansas	SourceGas Arkansas	Gas	15-011-U	Mar-15	10.25%	9.40%	0.85%
2	Colorado	Public Service Company of CO	Gas	15AL-0135G	Mar-15	10.30%	9.50%	0.80%
3	Illinios	Ameren Illinois Company	Gas	15-0142	Jan-15	10.25%	9.60%	0.65%
4	Illinios	Liberty Utilities	Gas	14-0371	Mar-14	10.50%	9.76%	0.74%
5	Illinios	Ameren Illinois Company	Gas	13-0192	Jan-13	10.40%	9.08%	1.32%
6	Kansas	Kansas City Power & Light	Gas & Electric	15-KCPE-116-RTS	Jan-15	10.30%	9.30%	1.00%
7	Massachusetts	NSTAR Gas Compny	Gas	DPU 14-150	Dec-14	10.25%	9.80%	0.45%
8	Massachusetts	Fitchburg Gas and Electric	Gas & Electric	DPU 13-90	Jul-13	10.25%	9.70%	0.55%
9	Minnesota	CenterPoint Energy Minnesota	Gas	G-008/GR-13-316	Aug-13	10.20%	9.59%	0.61%
10	Missouri	Kansas City Power & Light	Gas & Electric	ER-2014-0370	Nov-13	10.30%	9.50%	0.80%
11	New York	Orange and Rockland Utilities	Gas	14-G-0494	Nov-14	9.75%	9.00%	0.75%
					Average	**10.25%**	**9.48%**	**0.77%**

Electric Utility Rate Cases

	Jurisdiction	Utility	Gas/Electric	Docket No.	Date	Proposed ROE	Approved ROE	Difference
1	Colorado	Public Service Company of CO	Electric	14AL-0660E	Jun-14	10.25%	9.83%	0.42%
2	Connecticut	Connecticut Light and Power	Electric	14-05-06	Jun-14	10.20%	9.17%	1.03%
3	Delaware	Delmarva	Electric	13-115	Mar-13	10.25%	9.70%	0.55%
4	District of Columbi	Pepco	Electric	FC 1103	Mar-13	10.25%	9.50%	0.75%
5	Florida	Tampa Electric Company	Electric	130040-EI	Apr-13	11.25%	10.25%	1.00%
6	Kansas	Kansas City Power & Light	Gas & Electric	15-KCPE-116-RTS	Jan-15	10.30%	9.30%	1.00%
7	Maryland	Pepco	Electric	9336	Dec-13	10.25%	9.62%	0.63%
8	Maryland	Delmarva	Electric	9317	Mar-13	10.25%	9.81%	0.44%
9	Massachusetts	Fitchburg Gas and Electric	Gas & Electric	DPU 13-90	Jul-13	10.25%	9.70%	0.55%
10	Minnesota	Northern States Power	Electric	E-002/GR-13-868	Nov-13	10.25%	9.72%	0.53%
11	Missouri	Kansas City Power & Light	Gas & Electric	ER-2014-0370	Nov-13	10.30%	9.50%	0.80%
12	Missouri	Union Electric	Electric	ER-2014-0258	Jul-14	10.40%	9.53%	0.87%
13	New York	Orange and Rockland Utilities	Electric	14-E-0493	Nov-14	9.75%	9.00%	0.75%
14	New York	Consolidated Edison	Electric	13-E-0030	Jan-13	10.35%	9.20%	1.15%
15	South Carolina	Duke Energy Carolinas	Electric	2013-59-E	Mar-13	11.25%	10.20%	1.05%
16	Texas	Southwestern Public Service Co	Electric	43695	Dec-14	10.25%	9.70%	0.55%
17	Texas	Sharyland Utilites, L.P.	Electric	41474	May-13	10.75%	9.70%	1.05%
					Average	**10.39%**	**9.61%**	**0.77%**

Washington Gas Light Company

Formal Case No. 1137 - Workpaper

Rhode Island Asset Management Revenue Sharing

FY 2016 Net Asset Management Revenue Sharing - Old Sharing Formula

	Amount Available For Sharing	Ratepayer Sharing %	Utility Retention %	Ratepayer Benefit	Shareholder Benefit
First $1 million of Net Revenue	$ 1,000,000	100.00%	0.00%	$ 1,000,000	$ -
Excess Over $1 million	$ 14,113,165	80.00%	20.00%	$ 11,290,532	$ 2,822,633
Total	$ 15,113,165			**$ 12,290,532**	$ 2,822,633

FY 2016 Net Asset Management Revenue Sharing - New Sharing Formula

	Amount Available For Sharing	Ratepayer Sharing %	Utility Retention %	Ratepayer Benefit	Shareholder Benefit
First $2 million of Net Revenue	$ 2,000,000	100.00%	0.00%	$ 2,000,000	$ -
Over $2 million to $5 million	$ 3,000,000	80.00%	20.00%	$ 2,400,000	$ 600,000
Over $5 million to $10 million	$ 5,000,000	90.00%	10.00%	$ 4,500,000	$ 500,000
Greater than $10 million	$ 5,113,165	94.00%	6.00%	$ 4,806,375	$ 306,790
Total	$ 15,113,165			**$ 13,706,375**	$ 1,406,790

Sources:
1. Memorandum of Bruce R. Oliver to the RI PUC, Docket 4038, March 23, 2016.
2. Docket 4038 - Revised National Grid Natural Gas Portfolio Management Plan Annual Report, dated June 2, 2016.

Washington Gas Light Company
Formal Case No. 1137

AOBA Recommended Overall Cost of Capital
Based on AOBA Recommended Capital Structure and Cost of Equity

	Capitalization	Ratio	Cost	Return
Common Equity	$ 956,382	**50.16%**	9.25%	4.64%
Preferred Stock	$ 28,173	1.48%	4.79%	0.07%
Long-Term Debt	$ 865,888	45.41%	5.83%	2.65%
Short-Term Debt	$ 56,219	2.95%	1.06%	0.03%
Total	$ 1,906,662	100.00%		**7.39%**

Washington Gas Lignt Company

DCPSC Formal Case No. 1137

Composition of Test Year Interruptible Therms and Distribution Charge Revenue

As Reflected in the Initial and Updated Versions of Exhibit WG (M)-3

	Including AOC Firm Service 1/			**Excluding** AOC Firm Service		
	Therms	Rate	Revenue	Therms	Rate	Revenue
Interruptible Delivery Service						
Block 1 Therms	36,920,676	$ 0.1700	$ 6,276,515	36,020,676	$ 0.1700	$ 6,123,515
Block 2 Therms	24,365,481	$ 0.1564	$ 3,810,761	17,266,481	$ 0.1564	$ 2,700,478
Total	61,286,157		$ 10,087,276	53,287,157		$ 8,823,993
GSA Interruptible Service						
AOC Interruptible Service 3/	3,782,933					
Other	**21,182,084**					
	24,965,017	$ 0.0830	$ 2,072,096	24,965,017	$ 0.0830	$ 2,072,096
Total Interruptible	86,251,174		$ 12,159,373	78,252,174		$ 10,896,089
AOC Firm Service	-			7,999,000		$ 1,263,284
Total with AOC Firm	86,251,174			86,251,174		$ 12,159,373

1/ From WG Response to AOBA Data Request 16-1a.1, page 2 of 2
2/ From WG Response to AOBA Data Request 16-1a.2, page 1 of 1
3/ From Exhibit WG (2D)-4, page 1; Total AOC Normal Weather Therms (Column F) less Total of (Column I)

AOC Total Normal Weather Therms	**11,782,187**
WG Est of AOC TY NW Firm Therms	7,999,254
Implicit AOC TY NW Non-Firm Therms	3,782,933

Note: No explicit recognition of either distribution charge therms and revenue for Watergate or Interruptible Sales Service therms and distribution revenue margins.

Washington Gas Lignt Company

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Analysis of WG Late Payment Charges by Rate Class - FY 2015

	FY 2015 (Test Year)		Total Test Year	Average	Average	% of	% of	Ratio	Ratio
	Late Payments 1/	Late Pymt Amount 1/	Operating Revenue 2/	Number of Customers 3/	Revenue Per Bill	Total Customers	Total LP Chrgs	LP Chrgs to Customers	LP Revenue Oper Rev
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Res Htg/Clg	140,976	$ 582,132	$ 135,521,733	129,700	$ 87.07	81.96%	63.40%	1.09	0.43%
Res Non-Htg IMA	8,439	11,802	$ 1,855,040	11,845	$ 13.05	7.48%	1.29%	0.71	0.64%
Res Non-Htg Other	2,553	5,254	$ 2,358,745	3,879	$ 50.67	2.45%	0.57%	0.66	0.22%
Total Residential	151,968	$ 599,188	$ 139,735,518	145,424	$ 80.07	91.89%	65.26%	1.04	0.43%
C&I Htg/Clg	3,690	$ 129,037	$ 12,735,651	7,344	$ 144.51	4.64%	14.05%	0.50	1.01%
C&I Non-Htg	1,007	$ 12,429	$ 48,162,639	2,363	$ 1,698.50	1.49%	1.35%	0.43	0.03%
Total C&I	4,697	$ 141,466	$ 60,898,290	9,707	$ 522.80	6.13%	15.41%	0.48	0.23%
GMA Htg/Clg	1,287	$ 33,306	$ 22,787,630	2,135	$ 889.45	1.35%	3.63%	0.60	0.15%
GMA Non-Htg	440	$ 10,910	$ 3,515,245	828	$ 353.79	0.52%	1.19%	0.53	0.31%
Total GMA	1,727	$ 44,216	$ 26,302,875	2,963	$ 739.76	1.87%	4.82%	0.58	0.17%
Interruptible	175	$ 133,287	$ 22,773,731	161	$ 11,787.65	0.10%	14.52%	1.09	0.59%
Total	158,567	$ 918,157	$ 249,710,414	158,255	$ 131.49	100.00%	100.00%	1.00	0.37%

1/ From WG's Respone to AOBA Data Request 10-20ab, Attachment.

2/ From Exhibit WG (M)-1, Schedule B, page 3 of 5, line 57, except Interruptible from Exhibit WG (M)-3, Replacement Pages, Attachment 2, line 1.

3/ From Exhibit WG (M)-1, Schedule C, page 1 of 2, Column C.

Washington Gas Light Company

DC PSC Formal Case No. 1137

WG's Revenue Sharing Retentions and Associated Income Taxes

	DC Asset Optimization Revenue	DC Interruptible Margin Revenue	Total
FY 2015 Revenue Availaable for Sharing	$ 5,633,883 1/	$ 12,202,473 2/	$ 17,836,356
Company Retention Percentage	50.0% 3/	10.0%	
Company Sharing Amount (Retention)	$ 2,816,942	$ 1,220,247	$\boxed{\$\ 4,037,189}$
DC Income Tax Rate	9.975%	9.975%	9.975%
DC Income Tax	$ 280,990	$ 121,720	**$ 402,710**
Federal Income Tax Rates	31.509%	31.509%	31.509%
Federal Income Tax	$ 887,590	$ 384,488	**$ 1,272,078**
Total Applicable Income Taxes	$ 1,168,580	$ 506,207	$\boxed{\$\ 1,674,787}$
Net After Tax Earnings from Revenue Sharing	$ 1,648,361	$ 714,040	**$ 2,362,401**

1/ From WG Response to AOBA Data Request 10-36.
2/ From WG Response to AOBA Data Request 13-27a.b., Attachment
3/ The majority of net asset management revenue for the District of Columbia is shared 50/50 between ratepayers and the Company. However, some elements are assigned 100% to WG. This typically results in WG's actual retention percentage being somewhat greater than 50%. For the purposes of this analysis, it is assumed that WG's retention will be just 50%. If the effective retention percentage is higher the amounts for total Company Sharing and Total Income Taxes may need to be adjusted upward.

Exhibit AOBA (A)-10

Washington Gas Light Company

DC PDC Formal Case No. 1137

Revenue Requirement Impacts of AOBA Adjustments

Line No.				Adjustment For Taxes	Revenue Requirement
1	**WGL Original Revenue Increase Request**				**$ 17,408,063**
2	Removal of AOC Special Contract Revenue				$ (2,648,451)
3	Removal of Late Payment Charge Adjustment				$ (216,073)
4	**Adjusted Revenue Increase After Revenue Adjustments**				**$ 14,543,539**
5	Adjustment to Authorized Rate of Return				
6	WG Requested ROR	8.23%			
7	AOBA Recommended ROR	7.39%			
8	ROR Reduction	-0.84%			
9	**Rate Base**		$ 261,672,762		
10	Adjustment to Required Return		$ (2,198,051)		
11	Tax Gross-up Factor		58.516%		
12	Revenue Requirement Adjustment		$ (3,756,325)		$ (3,756,325)
13	**Test Year Expense Adjustments**				
14	Removal of Income Taxes on WG Retained DC Revenue Sharing				
15	DC Income Tax		$ (402,710)		
16	Federal Income Tax		$ (1,674,787)		
17	Total Income Tax Adjustment		$ (2,077,497)		$ (2,077,497)
18	Elimination of "Fee-Free" Credit/Debit Card Bill Payments		$ (161,343)	$ 66,932	$ (94,411)
19	Elimination of GTI Funding		$ (179,034)	$ 74,270	$ (104,764)
20	**AOBA Adjusted Revenue Increase**				$\boxed{\textbf{\$ 8,510,542}}$

Exhibit AOBA (A)-11

Washington Gas Light Company
Formal Case No. 1137

WG Payments Processed by Type of Transaction

Number of Payments by Type of Transaction

							Percent Increase			
Type of Payment		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016 Thru Apr	FY 2012 to FY 2013	FY 2013 to FY 2014	FY 2014 to FY 2015	FY 2012 to FY 2015
Check Payments	Checks to Lockbox	4,238,158	4,024,642	3,764,793	3,752,508	1,921,314	-5.0%	-6.5%	-0.3%	-11.5%
EBPP Payments	ACH	3,103,811	3,232,581	3,524,758	3,751,491	1,991,775	4.1%	9.0%	6.4%	20.9%
Web/IVR ACH	ACH	1,840,397	1,760,519	2,316,890	2,653,368	1,205,266	-4.3%	31.6%	14.5%	44.2%
APPL Payments	ACH	561,807	861,924	712,044	734,600	424,412	53.4%	-17.4%	3.2%	30.8%
Web/IVR CC/DC	Credit/Debit	207,610	407,842	527,292	722,428	470,811	96.4%	29.3%	37.0%	248.0%
Phone ACH (Call & Pay)	ACH	212,715	181,786	198,045	433,636	123,297	-14.5%	8.9%	119.0%	103.9%
3rd-Party Processor Payments	ACH	153,517	146,286	150,372	145,006	77,583	-4.7%	2.8%	-3.6%	-5.5%
Walk-In Payments	Walk-in	82,398	81,026	92,072	113,653	56,964	-1.7%	13.6%	23.4%	37.9%
Energy Assistance Pymts	ACH	21,244	37,588	29,800	22,661	16,317	76.9%	-20.7%	-24.0%	6.7%
Collector Payments	Cash/ACH	14,141	13,345	18,135	18,080	5,622	-5.6%	35.9%	-0.3%	27.9%
Govt ePayments	ACH	76,281	90,075	48,739	49,901	31,172	18.1%	-45.9%	2.4%	-34.6%
WAFF Donations	Checks to Lockbox	18,190	19,656	41,331	35,093	18,993	8.1%	110.3%	-15.1%	92.9%
3rd Party Supplier Pymts	ACH	-	-	302,657	358,628	187,052	0.0%	0.0%	18.5%	nm
eBox Payments	ACH	-	-	39	10,537	18,263	0.0%	0.0%	nm	nm
Other Payments	Checks to Lockbox	82	9,855	22,198	21,948	8,249	nm	125.2%	-1.1%	nm
Total		10,530,351	10,867,125	11,749,165	12,823,538	6,557,090	3.2%	8.1%	9.1%	21.8%

Percent of Payments by Type of Transaction

Type of Payment		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016 Thru Apr
Check Payments	Checks to Lockbox	40.25%	37.04%	32.04%	29.26%	29.30%
EBPP Payments	ACH	29.47%	29.75%	30.00%	29.25%	30.38%
Web/IVR ACH	ACH	17.48%	16.20%	19.72%	20.69%	18.38%
APPL Payments	ACH	5.34%	7.93%	6.06%	5.73%	6.47%
Web/IVR CC/DC	Credit/Debit	1.97%	3.75%	4.49%	5.63%	7.18%
Phone ACH (Call & Pay)	ACH	2.02%	1.67%	1.69%	3.38%	1.88%
3rd-Party Processor Pymts	ACH	1.46%	1.35%	1.28%	1.13%	1.18%
Walk-In Payments	Walk-in	0.78%	0.75%	0.78%	0.89%	0.87%
Energy Assistance Pymts	ACH	0.20%	0.35%	0.25%	0.18%	0.25%
Collector Payments	Cash/ACH	0.13%	0.12%	0.15%	0.14%	0.09%
Govt ePayments	ACH	0.72%	0.83%	0.41%	0.39%	0.48%
WAFF Donations	Checks to Lockbox	0.17%	0.18%	0.35%	0.27%	0.29%
3rd Party Supplier Pymts	ACH	0.00%	0.00%	2.58%	2.80%	2.85%
eBox Payments	ACH	0.00%	0.00%	0.00%	0.08%	0.28%
Other Payments	Checks to Lockbox	0.00%	0.09%	0.19%	0.17%	0.13%
Total		100.00%	100.00%	100.00%	100.00%	100.00%

Source: WG Response to AOBA Data Request 15-1, Attachment 3.
"nm" indciates not meaningful

Washington Gas Light Company

Formal Case No. 1137

Comparison of Billed Charges and Average Revenue per Therm for WG's Interruptible Sales Service and C&I Heating > 3,075 Firm Sales Service Rate

	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	TME September (FY 2015)
Interruptible Sales Service													
Therms	26,176	53,426	191,573	245,281	327,412	247,744	205,495	128,698	37,524	36,811	40,415	18,862	1,559,417
No. of Customers	9	9	9	9	10	10	10	11	11	11	11	11	121
UPC	2,908.4	5,936.2	21,285.9	27,253.4	32,741.2	24,774.4	20,549.5	11,699.8	3,411.3	3,346.5	3,674.1	1,714.7	12,887.7
Non-Gas Revenue	$ 13,964	$ 26,252	$ 86,228	$ 121,397	$ 168,273	$ 284,485	$ 142,525	$ 91,820	$ 25,934	$ 23,898	$ 21,236	$ 10,845	$ 1,016,857
Cost of Gas	8,638	19,367	76,246	106,869	136,956	161,504	75,663	31,956	9,561	8,809	10,055	4,112	649,736
Costs per Therm													
Non-Gas Revenue	$ 0.5335	$ 0.4914	$ 0.4501	$ 0.4949	$ 0.5139	$ 1.1483	$ 0.6936	$ 0.7135	$ 0.6911	$ 0.6492	$ 0.5254	$ 0.5750	**$ 0.6521**
Cost of Gas Revenue	$ 0.3300	$ 0.3625	$ 0.3980	$ 0.4357	$ 0.4183	$ 0.6519	$ 0.3682	$ 0.2483	$ 0.2548	$ 0.2393	$ 0.2488	$ 0.2180	$ 0.4167
Total Charge per Therm	$ 0.8635	$ 0.8539	$ 0.8481	$ 0.9306	$ 0.9322	$ 1.8002	$ 1.0618	$ 0.9618	$ 0.9459	$ 0.8885	$ 0.7742	$ 0.7930	$ 1.0687
Avg Billed Charges - Interrupt. Sales Service 1/	$ 2,511	$ 5,069	$ 18,053	$ 25,363	$ 30,523	$ 44,599	$ 21,819	$ 11,252	$ 3,227	$ 2,973	$ 2,845	$ 1,360	$ 13,773
Interruptible Delivery Service													
Avg Distribution Charge per Therm	$ 0.1601	$ 0.1594	$ 0.1503	$ 0.1463	$ 0.1307	$ 0.1348	$ 0.1281	$ 0.1297	$ 0.1367	$ 0.1377	$ 0.1937	$ 0.0840	**$ 0.1395**
Firm Service Alternative													
Non-Gas Distribution Charges (at Present Rates)													
C&I Heating > 3,075 Therms	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802	$ 0.3802
Purchased Gas Charge	$ 0.5395	$ 0.5395	$ 0.5753	$ 0.5753	$ 0.4953	$ 0.6274	$ 0.6274	$ 0.5467	$ 0.5625	$ 0.5625	$ 0.4484	$ 0.4484	$ 0.4703
Total per Therm Charges	$ 0.9197	$ 0.9197	$ 0.9555	$ 0.9555	$ 0.8755	$ 1.0076	$ 1.0076	$ 0.9269	$ 0.9427	$ 0.9427	$ 0.8286	$ 0.8286	$ 0.8505
Average Peak Usage Charges 1/	$ -	$ 82.16	$ 82.16	$ 82.16	$ 82.16	$ 82.16	$ 82.16	$ -	$ -	$ -	$ -	$ -	$ 492.96
Average Billed Charges - Firm Sales Service 1/	$ 2,675	$ 5,542	$ 20,421	$ 26,123	$ 28,747	$ 25,045	$ 20,788	$ 10,845	$ 3,216	$ 3,155	$ 3,044	$ 1,421	$ 11,454
Interruptible Sales vs Firm Sales													
Charge per Therm	$ (0.0562)	$ (0.0658)	$ (0.1074)	$ (0.0249)	$ 0.0567	$ 0.7926	$ 0.0542	$ 0.0349	$ 0.0032	$ (0.0542)	$ (0.0544)	$ (0.0356)	$ 0.2182
Average Bill	$ (164)	$ (473)	$ (2,368)	$ (760)	$ 1,776	$ 19,554	$ 1,031	$ 408	$ 11	$ (181)	$ (200)	$ (61)	**$ 2,320**

1/ Excludes System charges and Surcharges

2/ From Exhibit WG (M)-1, Schedule B, page 2 of 5, reflects total Peak Usages Charges for C&I Heating > 3,075 class divided by number of customers in that class and spread evenly over six winter months.

Note: Interruptible Sales Service charges are higher than C&I Heating service by $2,320 annually.
Interruptible Delivery Service average Distribution Charge of **$0.1395** compares to the average Non-Gas marging on Interruptible Sales Service of **$0.6521**.