APARTMENT AND OFFICE BUILDING ASSOCIATION OF METROPOLITAN WASHINGTON

July 6, 2016

Electronic Filing and Hand Delivered

Brinda Westbrook-Sedgwick
Commission Secretary
D.C. Public Service Commission
1325 G Street, N.W., Suite 800
Washington, D.C. 20005

Re: In the Matter of the Application of Washington Gas Light Company for Authority to Increase Existing Rates and Chargers for Gas Service
Formal Case No. 1137

Dear Ms. Westbrook-Sedgwick:

Enclosed please find an original and twenty-five (25) copies of the **Non-Confidential** Direct Testimony of Bruce R. Oliver and Timothy Oliver on behalf of the Apartment and Office Building Association of Metropolitan Washington ("AOBA"). The Confidential Direct Testimony of Bruce R. Oliver will be filed separately.

Also enclosed is an additional copy. Please stamp the additional copy and return it to me in the enclosed envelope. Please call me if you have any questions. Thank you for your attention in this matter.

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Sincerely,

Frann G. Francis

Frann G. Francis, Esq.
Senior Vice President & General Counsel

CERTIFICATE OF SERVICE
Formal Case No. 1137

I hereby certify on this 6th day of July, 2016 that the attached **Non-Confidential Direct Testimony of Bruce R. Oliver and Timothy Oliver** was filed electronically on behalf of the Apartment and Office Building Association of Metropolitan Washington in Formal Case No. 1137 and an original and twenty-five (25) copies of the above testimony was sent by Federal Express to Brinda Westbrook-Sedgwick, Commission Secretary, District of Columbia Public Service Commission, 1325 G Street, N.W., Suite 800, Washington, D.C. 20005, and copies were either hand-delivered, or mailed, first-class, postage prepaid, or electronically delivered to the service list below:

Brinda Westbrook-Sedgwick
Commission Secretary
Public Service Commission
of the District of Columbia
1325 G Street, N.W., Suite 800
Washington, D.C. 20005

Cathy Thurston-Seignious, Esq.
Donald R. Hayes, Esq.
Washington Gas Light Company
101 Constitution Avenue, N.W., Suite 300
Washington, D.C. 20080

Richard D. Beverly, Esq.
Office of the General Counsel
D.C. Public Service Commission
1325 G Street, N.W., Suite 800
Washington, D.C. 20005

Danielle Lopez, Esq.
Office of the People's Counsel
1133 15th Street, N.W., Suite 500
Washington, D.C. 20005

Christopher Lipscombe, Esq.
Kimberly Lincoln-Stewart, Esq.
D.C. Public Service Commission
1325 G Street, N.W., Suite 800
Washington, D.C. 20005

Brian Caldwell, Esq.
Office of the Attorney General
441 4th Street, N.W., Suite 450
Washington, D.C. 20001

Dr. Phylicia Fauntleroy-Bowman
D.C. Public Service Commission
1325 G Street, N.W., Suite 800
Washington, D.C. 20005

John S. Tobey, Esq.
General Services Administration
1800 F Street, N.W., #2012B
Washington, D.C. 20405

Dennis Goins
Potomac Management Group
P.O. Box 30225
Alexandria, VA 22310-8225

John Macgregor
Chair, DC Climate Action
3743 Fessenden Street, N.W.
Washington, D.C. 20016

— APARTMENT AND OFFICE —
BUILDING ASSOCIATION OF
METROPOLITAN WASHINGTON

Nina Dodge
DC Climate Action
6004 34th Place, N.W.
Washington, D.C. 20015

Frann G. Francis

Frann G. Francis, Esquire

BEFORE THE
PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA

In the Matter of	)	
	)	
The Application of Washington Gas Light Company for Authority to Increase Existing Rates and Charges for Gas Service	)))	**Formal Case No. 1137**

The Apartment and Office Building Association of Metropolitan Washington hereby submits the following Issue Index to the Direct Testimony of Bruce R. Oliver

Issue	Question	Page Numbers
2	What is the appropriate capital structure and rate of return (including cost of equity and debt) for WGL? Should WGL's authorized rate of return on common equity be adjusted downward to reflect reduced risk resulting from the Company's proposed implementation of a Revenue Normalization Adjustment, and, if so, by how many basis points?	Page 33 through Page 73
4	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?	Page 163 through Page 165
5	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?	Page 154 through Page 163
8	Are WGL's test-year revenues, sales, and any proposed adjustments reasonable and appropriate?	Page 93 through Page 105

AOBA (A)

Before the

PUBLIC SERVICE COMMISSION
OF THE
DISTRICT OF COLUMBIA

IN THE MATTER OF	)	
	)	
The Application of Washington Gas Light	)	
Company for Authority to Increase Existing	)	**Formal Case No. 1137**
Rates and Charges for Gas Service	)	

Non-Confidential

VOLUME I OF I: DIRECT TESTIMONY OF AOBA WITNESS
BRUCE R. OLIVER

July 6, 2016

Apartment and Office Building Association
of Metropolitan Washington
1050 17th Street, NW, Suite 300
Washington, D.C. 20036
(202) 296-3390

FRANN G. FRANCIS
NICOLA Y. WHITEMAN
Counsel for the Apartment and
Office Building Association of
Metropolitan Washington
1050 17th Street, NW, Suite 300
Washington, D.C. 20036
(202) 296-3390

DIRECT TESTIMONY OF BRUCE R. OLIVER
DC PSC Formal Case No. 1137

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DIRECT TESTIMONY OF BRUCE R. OLIVER
DC PSC Formal Case No. 1137

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Bruce R. Oliver. My business address is 7103 Laketree Drive Fairfax Station, Virginia, 22039.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed by Revilo Hill Associates, Inc., and serve as President of the firm, and I manage the firm's business and consulting activities. I direct the preparation and presentation of economic, utility planning, and policy analyses for clients.

Q. ON WHOSE BEHALF DO YOU APPEAR IN THIS PROCEEDING?

A. I appear on behalf of the Apartment and Office Building Association of Metropolitan Washington (AOBA).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony in this proceeding addresses issues relating to the Washington Gas Light Company ("Washington Gas," "WG" or "the Company")[1] Application for

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[1] AOBA believes that the distinctions between Washington Gas Light Company and its parent, WGL Holdings, Inc. are important to the Commission's considerations in this proceeding. To avoid confusing

authority to increase its existing rates and charges for gas service. This testimony addresses portions of the Commission's Designated Issues 2, 4, 5, 8, 8(a), 9, 11, 11(a), 11(b), 14, and 19(a) through 19(e). This testimony also responds to portions of the pre-filed direct testimony and schedules of witnesses Sims, Gode, Hevert, Gibson, Tuoriniemi, Huey, Wagner, and Raab, as well as the Supplemental Direct Testimonies of witnesses Tuoriniemi, Huey, Wagner, Kenahan and Sluder.

Q. PLEASE SUMMARIZE YOUR EXPERIENCE AND QUALIFICATIONS.

A. I am an economist specializing in the areas of utility rates, energy, and regulatory policy matters. I have over 40 years of experience in the analysis of energy and utility policy issues. That experience includes employment in management positions in the rate departments of two major utilities (the Pacific Gas and Electric Company and the Potomac Electric Power Company), as well as service in management and senior staff positions for three firms engaged in energy, utility and

references to Washington Gas Light Company with references to its parent company any and all uses of the acronym "WGL" in this testimony will constitute references to WGL Holdings, Inc. Although the Commission and other parties have used the acronym "WGL" to reference Washington Gas Light Company, this testimony purposefully **avoids** using the acronym "WGL" to refer to Washington Gas Light Company and its regulated distribution utility operations. In fact, the WGL Holdings, Inc. website uses the acronym *"WGL"* to refer to an entity that is between Washington Gas and WGL Holdings, Inc. The WGL Holdings, Inc. home page under the heading *"About WGL Holdings, Inc."* states, *WGL Holdings, Inc. is a public utility holding company and the parent company of* ***WGL, a diversified energy business that provides natural gas, electricity, green power, carbon reduction and energy services."*** (Emphasis Added). This is clearly not the entity for which rates are being considered in this proceeding. When the page for WGL is visited, "Washington Gas" is listed as just one of four companies that operate under the entity referenced as "WGL."

public policy consulting. Those firms include: Revilo Hill Associates, Inc., the Resource Dynamics Corporation, and ICF Incorporated.

As a consultant, I have served a diverse group of clients on issues encompassing a wide range of energy and utility related matters. My clients have included state regulatory commissions, utilities, state Attorneys General, state-funded consumer advocacy groups, municipal governments, federal agencies, commercial and industrial energy users, hospitals and universities, suppliers of equipment and services to utility markets, residential consumer intervenors, the Electric Power Research Institute (EPRI), and the World Bank. Projects for those clients have included work on gas, electric, water, and wastewater utility regulatory proceedings, as well as analyses and forecasts of supply, demand, and prices for utility and non-utility energy markets. I have also assisted a number of commercial and industrial energy users in the negotiation of energy service contracts, including contracts for the procurement of competitive electricity and natural gas services.

To date, I have filed more than 400 separate pieces of testimony in over 250 proceedings before regulatory commissions in 24 jurisdictions. The regulatory jurisdictions in which I have testified include: the states of Pennsylvania, New York, New Jersey, Maryland, Delaware, Virginia, North Carolina, Rhode Island, Massachusetts, Vermont, Connecticut, Ohio, Illinois, Wisconsin, Arizona, New Mexico, South Dakota, and California, as well as the District of Columbia, Guam, the Virgin Islands, the City of Philadelphia, the Province of Alberta, Canada, and the U.S. Federal Energy Regulatory Commission (FERC). My testimonies in those jurisdictions have addressed such topics as industry restructuring, utility mergers and acquisitions, divestiture of generation assets, sighting of energy facilities, utility revenue requirements, capacity planning, cost of service allocations, costs of capital, rate design, rate unbundling, incentive ratemaking, revenue decoupling, capacity expansion planning, demand-side management, energy conservation, contracts for non-tariff service provided to large energy users, natural gas purchasing practices, gas transportation service, natural gas processing, competitive bidding, economic development rates, load research, load forecasting, weather normalization, metering, and fuel pricing issues.

Q. HAVE YOU PREVIOUSLY APPEARED BEFORE THIS COMMISSION?

A. Yes, I have appeared before this Commission in a number of prior gas and electric rate proceedings. The prior WG proceedings before this Commission in which I have testified include: Formal Case Nos. 787, 840, 845, 890, 922, 934, 989, 1016, 1054, 1079 and 1093.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN PROCEEDINGS IN OTHER JURISDICTIONS RELATING TO WASHINGTON GAS LIGHT COMPANY?

A. Yes, I have testified in numerous Washington Gas Light Company cases before the Maryland Public Service Commission (MDPSC) and the Virginia State Corporation Commission (VASSC). The Washington Gas Light Company proceedings in Maryland in which I have testified include: Case Nos. 7649, 8060, 8119, 8191, 8545, 8819, 8920 (Phases I and II), 8959, 8991, 9104, 9158, and 9267, 9322 and 9335. The WG proceedings in Virginia in which I have submitted testimony include: Case Nos. PUE 830008, PUE 830029, PUE 880024, PUE 900016, PUE 910047, PUE 920041, PUE 940031, PUE 960296, PUE 980812, PUE 000584, PUE 2002-00364, PUE 2003-00603, PUE 2005-00010, PUE 2006-00059 and PUE 2010-00139.

Q. **WERE THIS TESTIMONY AND ACCOMPANYING EXHIBITS PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION AND CONTROL?**

A. Yes, they were.

II. SUMMARY OF FINDINGS AND RECOMMENDATIONS

Q. **WHAT IS YOUR OVERALL ASSESSMENT OF THE COMPANY'S FILING IN THIS PROCEEDING?**

A. The ability of this Commission to render basic determinations regarding the level of revenues the Company requires, WG's costs of service by customer class, appropriate distribution of revenue requirements among classes, and the design of rates are greatly impeded by errors and inconsistencies in the measures of test year usage and revenues that the Company presents. The Company's filing is littered with numbers that do not reconcile, and AOBA believes that the Commission will find many aspects of this case difficult to resolve.

Sadly, some of the most encumbered elements of WG's filing in this proceeding relate to concerns raised in Formal Case No. 1093 that this Commission attempted to address in Order No. 17132. More specifically, in Formal Case No. 1093 this Commission responded to concerns raised by AOBA regarding the manner in which WG tracked and reported revenue for Transportation Service and Interruptible Service customers. Among other things, the Commission directed WG to more clearly identify and segregate Transportation Service[2] revenues from "Other Miscellaneous Service" revenues.[3] Yet, as explained later in this testimony, the Company's response to that Commission directive falls well short of offering a clear and easily discernible exposition of the Company's determinations of revenues and therms by rate class for the test year. Moreover, since greater than 98% of WG's estimated test year therms for Interruptible Service are Transportation therms, WG's failure to clearly delineate the components of its test year Transportation Service therms and revenue

[2] The terms "transportation service" and "delivery service" are used interchangeably in this testimony.
[3] Order No. 17132, paragraph 132, at pages 57-58.

directly impacts the Company's cost allocations and rate design recommendations for Interruptible service.

The Company's filed testimony in this proceeding discusses its recently approved Special Contract with the Architect of the Capitol ("AOC"), but based on the information WG has provided through discovery, it appears the AOC contract is not the only Special Contract under which service is provided.[4] Data WG has provided through discovery suggests that even greater Special Contract volumes are being delivered on an annual basis under a Special Contract with GSA. Although AOBA does not challenge the appropriateness of those Special Contracts in this proceeding, WG's inclusion of substantial Special Contract volumes in its interruptible cost of service and rate design analyses greatly distorts the Company's determinations with respect to its costs of providing service to Interruptible Sales Service and Interruptible Delivery Service customers under Rate Schedules 3 and 3A. Of WG's estimated 86 million therms of normal weather test year interruptible service requirements, it appears that AOC and GSA Special Contract volumes (including significant AOC **firm service** volumes) constitute nearly 33 million therms. That is more than 38% of

[4] WG's responses to AOBA Data Requests 16-1a.1 and 16-1.a.2 reference 24.9 million therms of interruptible gas use that is labeled as "GSA Interruptible Therms" and billed at a rate of $0.083 per therm (i.e., a rate well below WG's standard tariff charges for interruptible delivery service under Rate Schedule 3A). Further, Exhibit WG (2D)-4, provides monthly gas use detail for AOC which shows AOC's total annual therm use as accounting for only about 11 million therms. These two observations combine to suggest that the Company provides substantial interruptible Special Contract volumes in excess of AOC's requirements.

the total interruptible therms reflected in WG cost of service and rate design presentations.

This testimony also finds that the capital structure the Company proposes for ratemaking purposes in this proceeding contains an unduly large amount of Common Equity, and the Return on Equity that the Company seeks noticeably exceeds returns on comparable risk investments. Moreover, the determination of appropriate costs of capital for WG's distribution utility operations has become an increasingly difficult task. Yet, from a consumer perspective, it is an important task that regulators must confront head-on. This Commission and others charged with regulation of distribution utility operations face an increasingly difficult task of determining rates of returns for distribution utilities operations when there are few remaining companies in the industry that are pure gas distribution utilities. Efforts to determine appropriate rates of return on equity for gas distribution utilities are now greatly impeded by the increasing consolidation within the industry. That consolidation leaves little if any observable market data regarding differences between risks and rates of return for distribution utilities and risks and rates of return for more diversified utility holding companies.

Much anecdotal information is available that support the notion that distribution utility operations generally reflect lower risk and should have lower equity return requirements than the utility holding companies. Although observable capital market data is available for utility holding companies, no straightforward or adequate methodologies exist for quantifying risk differentials between distribution utility operations and the overall operations of utility holding companies. Without adjustment for such risk differentials, the usefulness of proxy groups comprised primarily, if not exclusively, of utility holding companies to estimate distribution utility rates of return must be rejected.

In addition, holding company capital structures, financing considerations, and profit incentives can exert important influence on utility costs of financing. Current data for Washington Gas and WGL Holdings, Inc. suggest that WGL Holdings is presently financing its non-utility operations with far less equity and much greater debt than it uses for Washington Gas. This reflects a leveraging of WG's comparatively low risk utility operations to permit lower cost financing and increased profitability for WGL's non-utility operations. While this strategy may be beneficial for WGL Holdings, Inc. and its shareholders, it does not yield just and reasonable rates for WG's utility customers.

Another area of concern in this proceeding is found in the multiple proposals set forth by Washington Gas for approval of new or expanded rate-making mechanisms that are inappropriate and do not reflect sound regulatory policy. Included in the new or expanded uses of rate adjustment and cost deferral mechanisms that WG requests in this proceeding are: (1) a Revenue Normalization Adjustment ("RNA"); (2) regulatory asset treatment of costs associated with the Company's transition to what it calls BPO 2.0; (3) regulatory asset treatment of vaguely specified pipeline integrity expenditures; and (4) regulatory asset treatment of costs in excess of the cap that was established by the Commission in Formal Case No. 1027 for the Company's replacement or encapsulation of vintage mechanically coupled pipe.

The RNA mechanism WG proposes in this proceeding is riddled with flaws and does not warrant approval by this Commission. The mechanism is premised on an assessment of normal weather degree days that does not conform to this Commission's determinations in Formal Case No. 1093, Order No. 17132. It would also inappropriately adjust Peak Usage Charges for non-residential customers in a manner that is inconsistent with the Peak Usage Charge provisions of the Company's tariff. Furthermore, as proposed by WG, the RNA will inappropriately shift cost responsibilities between heating and non-heating service classifications within each customer class, and it will add instability to the bills of non-heating customers in all firm service rate classes.

WG's proposals to make expanded use of regulatory asset accounting are poorly supported and generally unjustifiable. The attribution of regulatory asset treatment to a category of costs conveys to investors a probability of rate recovery. Yet, the often vaguely specified programs and unreliable estimates that WG presents as the basis for its proposed uses of regulatory assets do not justify a regulatory treatment that suggests any "probability" or cost recovery through rates. In the absence of a more well-developed evidentiary record regarding the reasonableness of costs actually incurred, a presumption of probable recovery is unwarranted.

An example of the Company's misuse of regulatory asset concepts is found in its proposed treatment of costs to achieve a second phase of its Business Process Outsourcing plan ("BPO 2.0"). That proposal suffers from a number of infirmities. The likelihood that WG would incur significant costs to terminate its existing relationship with Accenture and transition to a new approach for the provision of outsourced services was identified in Formal Case No. 1054,[5] but WG offered no consideration of those costs at that time. In the comparatively short time since the filing of WG's application in this proceeding, the Company has already revised elements of its estimated BPO 2.0 costs to achieve noticeably upward. Furthermore, significant portions of the purported "costs to achieve" the Company's BPO 2.0 appear to represent costs of terminating WG's existing Master Services Agreement with Accenture ("Accenture MSA"). Those costs should be costs associated with that existing Accenture MSA and charged against any claimed savings achieved under that relationship since 2007.

The Corporate Scorecard WG presents in this proceeding through the Direct Testimony of witness Sims is of little relevance to the ratemaking determinations this Commission will need to render with respect to the Company's

[5] See the December 4, 2007 **CONFIDENTIAL** Supplemental Testimony of AOBA witness Bruce R. Oliver at page 5, lines 4-12, in Formal Case No. 1054.

pending Application. The Corporate Scorecard was prepared for WGL Holdings, Inc., not for Washington Gas Light Company, and it provides no information specific to WG's performance with respect to the quality and reliability of services that WG has provided for District of Columbia ratepayers. Since WG's operations in the District represent only about one-fifth (i.e., about 20%) of Washington Gas' regulated distribution utility operations, it is at best, difficult to decipher how much, if any, of the changes in performance that WG reports in its Corporate Scorecard were actually experienced by WG's ratepayers in the District. As in the Company's last base rate case (i.e., Formal Case No. 1093), the performance targets set forth in the Corporate Scorecard have been established independently by Company personnel without prior input or prior approval of this Commission.[6] Further, the weighting of achievements with respect to specific Scorecard targets is a best arbitrary and provide no sound or reasonable basis on which this Commission can evaluate either the Company's performance within the District of Columbia or the reasonableness of incentive compensation for which WG seeks cost recovery in this proceeding.

This testimony further demonstrates that WG's purported "Fee-Free" Credit/Debit Card Bill Payment Program is uneconomic and encourages cus-

[6] The only measure that reflects some consideration of direct input from the DC PSC is the utility rate of return target which is computed to reflect the weighted average of the ROEs approved for the Company in each of the jurisdictions in which it provides retail gas distribution service. However, as will be explained herein, the target for utility ROE is developed on a basis that is inconsistent with the measure of actual ROE performance that is presented in the Scorecard, and that inconsistency biases the measure of actual performance upward, increasing the likelihood that the Company can claim that its ROE target is met.

tomers to use a bill payment method that is vastly more expensive than the methods that are most commonly used by customers. The Company has failed to show that its "Fee-Free" Credit/Debit Card Bill Payment program lowers its overall costs of payment processing. WG has also failed to demonstrate other benefits from this program that might justify the increases in payment processing costs that this program produces. Although the Company's "Fee-Free" Credit/ Debit Card Bill Payment program may provide lower cost payment processing for customers who rely on credit/debit cards to pay their bills, the program is **not** a "fee-free" service for WG. Rather, the costs that WG incurs for that program are dramatically higher than the costs that WG currently incurs to process bill payments for the vast majority of its customers, and those increased costs will ultimately be passed to WG's customers through rates that are higher than they would be in the absences of this program. For this reason, the Commission should either terminate this credit/debit card bill payment program or limit its application to low-income customers who may have few options other than use of more costly forms of payment processing.

The pricing of interruptible service and the Company's participation in the sharing of interruptible revenue margins are issues that have been carried forward from the Commission's decision in Formal Case No. 1093.[7] Since the time that value-of-service pricing for interruptible service customers and margin sharing policies were first adopted nearly three decades ago, the industry has

[7] See Order No. 17132, paragraph 132, at page 58.

experienced substantial changes. Among those changes are the unbundling of gas services and the development of a competitive market for the provision of gas supply services. The current structure of the industry eliminates the need for gas distribution utilities to adjust the pricing of distribution services to meet competition from customers' alternative fuels; and that, in turn, removes the need for regulators to provide incentives for distribution utilities to maximize the distribution margins they derive from interruptible service customers. This testimony demonstrates that it is now time for this Commission to update its policies and eliminate both unnecessarily discriminatory pricing practices for Interruptible Sales Service and WG's unjustifiable participation in the sharing of interruptible revenue margins. Claims by the Company that margin sharing incentives are necessary for it to attract new interruptible load reflect a misunderstanding or mischaracterization of WG's role in the District's evolving energy markets.

Finally, AOBA is particularly troubled by the inordinately high rates of return that WG computes for its non-residential rate classifications, as well as the dramatic differential in rates of return between the residential and non-residential classes of service. As developed in the Direct Testimony of Timothy Oliver, Exhibit AOBA (B), the Company's residential classes have a combined rate of return of **-0.41%** while the total non-residential (excluding non-firm service) rate of return at present rates is **22.12%**.[8] Non-residential rates of return grow even larger under the Company's proposed rates in this proceeding. No reasonable

[8] Exhibit AOBA (B)-1, page 1.

basis can be established for extracting such high rates of return (i.e., greater than 20%) from non-residential rate classes when the Company's current authorized rate of return is 7.93%[9] and WG's requested overall rate of return is **8.23%**.[10] Given the current low interest rate economy in the U.S., such high rates of return on regulated utility services can only be characterized as usurious and unjust.

Q. ARE THERE OTHER KEY FINDINGS THAT RESULT FROM YOUR REVIEW OF WG'S FILING IN THIS PROCEEDING THAT YOU WOULD LIKE TO NOTE AT THIS TIME?[11]

A. Yes. The additional findings of note include the following:

Capital Structure and Rate of Return

- The Common Equity component of the Company's proposed capital structure is inappropriately large and reflects unjustified subsidization of WGL Holdings' non-distribution utility operations by District of Columbia ratepayers.

9 Order No. 17132, page 22, paragraph 50.
10 Tuoriniemi Direct Testimony, Exhibit WG (D)-1, page 1 of 4, REVISED 05-31-2016.
11 The following is not offered as a comprehensive listing of all findings presented in this testimony nor is it intended to suggest the relative importance of findings presented herein. Omission from this listing of any finding set forth elsewhere in this testimony is not intended to suggest that such a finding is of lesser importance or can be ignored.

- The combination of ROE and capital structure that WG requests in this proceeding places unnecessary revenue requirements burdens on its District of Columbia customers.

- WG's requested ROE is not developed in a manner that reflects consideration of returns on **comparable risk** investments, and as a result, the Company's ROE request overstates WG's equity return requirements for its gas distribution utility operations in the District of Columbia.

- The distribution utility operations of Washington Gas in the District of Columbia are not comparable in risk to the holding companies on which DCF analyses must generally rely. Therefore, a downward adjustment to DCF rates of return computed primarily if not solely on the basis of proxy groups comprised of holding companies is necessary to reflect the equity return requirements for WG's District of Columbia distribution utility operations.

- The holding companies used to construct proxy groups for ROE estimation have significant business operations that are not subject to rate regulation, and in that context, their overall operations are generally more risky than WG's regulated distribution utility operations in the District of Columbia.

- If the Company's requested RNA mechanism is approved, WG's lone shareholder (WGL Holdings, Inc.) and its investors will benefit directly from lowered risk exposure and the potential avoidance of costs for the purchase of weather-related instruments.

- WG has achieved more than $5.6 million of additional below-the-line earnings through its sharing of net Asset Optimization revenue for its District of Columbia operations, as well as $1.2 million of below-the-line revenue associated with its sharing of Interruptible Margin Revenue. Those below-the-line additions to earnings substantially enhance the Company's opportunity to achieve or exceed its authorized rate of return, and serve to further reduce the risk to which the Company's sole investor, WGL Holdings is exposed.

- WG's jurisdictional cost of service study assigns no income taxes to below-the-line additions to earnings the Company derives through revenue sharing mechanisms.

- Appropriate adjustment of ROE and capital structure that WG presents in this testimony would eliminate $3.7 million of WG's $17.4 million revenue increase request in this proceeding without any consideration of other revenue requirements issues.

<u>Normal Weather Therms and Revenue</u>

- WG's inclusion of Special Contract volumes in the Company's class cost of service and rate design analyses, as well as in the data used to compute normal weather therms and revenue for interruptible service is inappropriate and unwarranted and leads to an overstatement of the Company's costs of serving standard tariff Interruptible Delivery Service customers.

- WG's computation of normal weather revenue is incorrect as it relates to Peak Usage Charge revenue in that it fails to recognize that Peak Usage Charge revenue is not based on current period (or in this instance test year) measures of gas use. It is also not based on individual customer maximum month demands as required by WG's tariff.

- WG's methods for estimation of normal weather gas use do not reflect best practices for the industry and cannot be relied upon to produce reasonable and reliable estimates of therms and revenue under normal weather conditions for all classes of customers.

- Washington Gas has failed to provide any data or analyses which demonstrate that its method for estimating test year Peak Usage Charge Revenue reasonably reflect the relationship between individual customer peak usage determinations required under the Company's tariff and the Company's estimates of class peak month usage.

Credit/Debit Card Processing

- The Company's Credit/Debit Card Bill Payment Program is not "Fee-Free" to the Company and ultimately not free to customers.

- WG provided the Commission and the parties in Formal Case No. 1093 with **inaccurate** information regarding the costs of credit/debit card processing.

- The Company's "Fee-Free" Credit/Debit Card Bill Payment Program is unnecessary and inappropriate for the vast majority of WG's customers who presently utilize substantially lower cost methods of bill payment.

- The WG's "Fee-Free" Credit/Debit Card Bill Payment Program is uneconomic and should be either discontinued or limited in its application to payments by customers who qualify for low income assistance.

<u>WG's Adjustment to Late Payment Charge Revenue</u>

- WG's adjustment to Late Payment Charge revenues, which is based on an assumption that Late Payment Charge revenues increase or decrease in proportion to the Company's gross revenue is unfounded and should be rejected.

<u>Revenue Normalization Adjustment</u>

- WG's proposed Revenue Normalization Adjustment Mechanism ("RNA") includes a number of significant shortcomings and should not be approved.

- The RNA mechanism WG proposes is structured in a manner that inappropriately shifts revenue requirements between heating and non-heating customers within each rate class and adds instability to non-heating customers' bills.

- WG's proposed RNA mechanism lacks reasonable limitations on the size of rate adjustments that can be imposed on customers on a monthly basis.

- The methods WG proposes to use to compute customer growth adjustments for non-residential rate classes within its RNA mechanism are inappropriate and inaccurately assesses the manner in which customer growth would impact Peak Usage Charge Revenue.

- Any variations in revenue for Special Contract customers that are exempted from the monthly RNA rate adjustments must be borne by the Company without opportunity for compensation through the RNA or through any other rate adjustment mechanism.

WG's Regulatory Asset Proposals

- The portion of WG's estimated BPO 2.0 costs to achieve that comprises costs for termination payments to Accenture and wind-down costs should be considered costs associated with the existing Accenture MSA and should be treated as offsets against any savings WG has purportedly achieved under that agreement.

- No elements of WG's BPO 2.0 costs to achieve ("CTA") should be recovered from ratepayers until such time that the Company can demonstrate **actual** cost savings achieved by its new vendors while maintaining or improving service quality that equal or exceed CTA actually incurred.

- Assessments of the economics of WG's BPO 2.0 vendor contracts should include allowances for end-of-contract termination payments and other costs necessary to transition to the next contractor or to an in-house option for provision of presently outsourced services.

- If WG's estimates of savings associated with its BPO 2.0 plan are judged to be credible, then the Commission must reassess the levels of savings actually achieved under the current MSA and the comparative inefficiency of services WG obtained from Accenture.

- The Pipeline Integrity costs for which WG seeks regulatory asset treatment are poorly defined and do not establish a compelling argument for the establishment of a regulatory asset. WG is simply seeking authorization for recovery of very broadly specified categories of ***potential*** expenditures.

- WG's Plant Recovery Adjustment ("PRA") surcharge should be terminated at the conclusion of this proceeding, and the Company should be denied recovery of any costs that it incurs for replacement or encapsulation of Mechanical Coupled Pipe in the District of Columbia that exceed the Commission's established $28 million cap for such costs.

- If prior to the conclusion of this proceeding WG receives compensation through the PRA for costs in excess of the Commission established $28 million cap, a **regulatory liability** should be established in the amount of such excess to allow for crediting District ratepayers for that amount plus interest in the Company's next base rate proceeding.

<u>Interruptible Service Issues</u>

- WG's sharing of interruptible service revenue margins is no longer justified and should be terminated.

- Termination of the Company's margin sharing mechanism for interruptible service revenue margins will yield a **$1.2 million reduction** in the amount of additional revenue that WG requires from its firm service customers at the conclusion of this proceeding.

- The class cost of service study ("CCOSS") WG presents in Exhibit WG (M)-3, does not properly identify the costs and revenues associated with the service WG provides to standard tariff interruptible service customers in the District and understates the actual rate of return that WG derives from those customers.

- WG's revision of its assessment of its actual interruptible cost of service in Attachment 2 of the Replacement Pages for Exhibit (M)-3 filed on May 11, 2016 fails to reflect any allocation or assignment of operating expenses (other than income taxes) or rate base costs to **firm service** that it provides under its Special Contract with the Architect of the Capitol ("AOC") or under other Special Contracts.

- When Distribution Charge Revenue for Interruptible Service customers is properly reflected, the Company's earned return on that service is more than twice the system average rate of return at present rates.

- For the test year WG's average margin on volumes provided to Interruptible Sales Service customers is more than **4.6 times greater** than its average margin revenue per therm from Interruptible Delivery Service customers.

- WG's charges for Interruptible Sales Service in the District have frequently exceeded comparable charges for Firm Sales Service customers.

- WG's pricing of Interruptible Sales Service is inappropriate and unjustified and that rate offering should be either eliminated or modified as set forth in Section G of this testimony.

- WG's Special Contracts (e.g., the AOC Special Contract) must be treated as separate classes of service in: (1) the Company's class cost allocation studies, (2) determinations of class revenue requirements, and (3) the design of rates for customers served under Standard Tariff rate schedules.

- Special Contracts should not be used to inappropriately shift cost responsibilities to standard tariff customers.

Q. **WHAT ACTIONS DO YOU RECOMMEND THAT THE COMMISSION TAKE WITH RESPECT TO THE COMPANY'S PROPOSALS IN THIS PROCEEDING?**

A. Major elements of the recommendations that I present in this testimony are summarized below. This summary is not necessarily comprehensive, and thus, omission from this summary of any recommendation that appears elsewhere in this testimony is not intended to suggest that it is of lesser importance or priority.

Capital Structure and Rate of Return

1. To avoid cross-subsidization of WGL Holdings non-utility business activities, the Commission should reduce the equity component of the capital structure used for ratemaking purposes in this proceeding for Washington Gas to not more than **50.16%**.

2. If the Commission elects to approve WG's RNA proposal, such approval should be accompanied by an additional 25 basis point downward adjustment to WG's authorized ROE.

3. If WG's proposed RNA is rejected, the Commission should approve an authorized ROE for WG in this proceeding of not greater than **9.25%** and an overall rate of return not greater than **7.39%**. If WG's requested RNA mechanism is approved, the Company's authorized ROE should be reduced to not greater than 9.00% and its overall rate of return should be set at not greater than 7.30%.

WG's Normal Weather Study

4. The Commission should reject WG's estimates of normal weather revenue and the methods the Company has used to generate those estimates.

5. The Commission should find that WG's estimates of normal weather Peak Usage Charge therms and revenue are developed in a manner that is inconsistent with the methods specified in WG's tariff for billing Peak Usage Charges and are not presented within the context of any analysis that would justify the assumptions and methods that underlie the development of WG's estimates.

6. The Commission should find that WG has failed to demonstrate any relationship between the measures of **individual customer** Peak Usage upon which non-residential customers are billed for Peak Usage Charges under WG tariff and the estimates of **class** peak month usage upon which WG's development of Normal Weather Peak Usage Charge revenue is premised.

Revenue Requirements

7. Given the extensive problems identified in WG's attempt to weather normalize test year therms and revenue, the Commission should reject entirely WG's rate increase request in this proceeding.

8. The Commission should require WG to compute Federal and State income taxes on DC revenue sharing amounts retained by the Company and deduct those computed amounts for income taxes from WG's test year costs of service.

9. The Commission should terminate WG's mechanism for sharing interruptible margin revenues and recognize that termination of such sharing would provide an **additional $1.2 million** of revenue to offset WG's computed revenue requirements in this proceeding.

10. With termination of WG's "Fee-Free" Credit/Debit Card Bill Payment Program, the Commission should eliminate at least **$161,343** of WG's test year expenses.[12]

[12] Exhibit WG (2D)-3, page 1 of 1, line 15.

11. The Commission should find that WG proposed adjustment to Late Payment charge revenue is unjustified and should be eliminated.

<u>WG's Fee Free Credit/Debit Card Payment Processing Program</u>

12. The Commission should conclude that general application of WG's "Fee-Free" Credit/Debit Card Bill Payment Program is uneconomic and will only serve to increase the Company's costs of payment processing resulting in the Company's incurrence of increased payment processing expenses and ultimately increased rates.

13. The Commission should require that WG's "Fee-Free" Credit/Debit Card Bill Payment Program in the District of Columbia be terminated within 180 days of the conclusion of this proceeding for all customers with the possible exception of customers who qualify for low income assistance.

<u>WG's Proposed Revenue Normalization Adjustment</u>

14. The Commission should find that WG's proposed Revenue Normalization Adjustment ("RNA") mechanism inappropriately and

inequitably shifts cost responsibilities between heating and non-heating customers within each customer classification.

15. The Commission should reject the Company's proposed Revenue Normalization Adjustment ("RNA") mechanism. However, if despite the presentation herein, the Commission approves WG's request to implement a RNA for WG, the Company's authorized ROE should be reduced by at least 25 basis points.

<u>Regulatory Asset Proposals</u>

16. The Commission should conclude that WG's claimed costs to achieve BPO 2.0 do not warrant regulatory asset treatment, since: (1) significant elements of those costs should be viewed as offsets to claimed savings under the existing Accenture MSA; and (2) WG's characterization of BPO 2.0 savings is at best questionable.

17. The Commission should deny WG's request for regulatory asset treatment of speculative future expenditures relating to its Pipeline Integrity Cost Deferral Program.

18. The Commission should require WG to identify, accumulate, and record as a regulatory liability, any costs recovered through the PRA prior to the termination of that mechanism which reflect recovery of costs associated with capital expenditures in excess of the Commission-established cap of $28 million.

Interruptible Service Issues

19. The Commission should find that value-of-service pricing for Interruptible Sales Service customers is no longer necessary or appropriate and that WG's charges to Interruptible Sales Service customers have been inordinately high and unduly discriminatory.

20. The Commission should either require that all distribution service provided to Rate Schedule No. 3 customers be billed at the same distribution charges applicable to Interruptible Delivery Service customers under Rate Schedules 3a or order the termination of WG's Interruptible Sales Service under Rate Schedule No. 3.

21. The Commission should terminate WG's participation in the sharing of interruptible service revenue margins finding that the Company's

retention of a portion of Interruptible Service margin revenue is no longer warranted and unnecessarily denies firm service customers reductions in their base rate charges.

22. The Commission should find that WG's estimates of Normal Weather therms for Interruptible Service are distorted by the inclusion of Special Contract **firm** and interruptible service volumes that are not priced at standard contract rates.

III. DISCUSSION OF ISSUES

Q. HOW IS YOUR DISCUSSION OF ISSUES RELATING TO WG'S DIRECT TESTIMONY AND SCHEDULES IN THIS PROCEEDING ORGANIZED?

A. My Discussion of Issues is presented in seven parts.

Part A addresses WG's proposed Capital Structure and Rate of Return proposals in response to Commission Designated Issue 2.

Part B begins my response to Commission Designated Issue No. 8 with a reply to Commission Designated Issue No. 8a that evaluates WG's development of test year estimates of Normal Weather therms and revenues.

Part C completes my response to Commission Designated Issue No. 8 with a discussion of other elements of WG's revenue increase request.

Part D reviews the information WG has provided regarding the Company's experience under its Fee-Free" Credit/Debit Card Bill Payment Program (Commission Designated Issue No. 14). It also assesses the merits of WG's continued offering of that program.

Part E examines WG's proposal for implementation of a Revenue Normalization Adjustment ("RNA") mechanism (Commission Designated Issue No. 9) as well as the analyses and assumptions underlying that proposal.

Part F addresses the Company's proposals for regulatory asset treatment of: (i) BPO 2.0 transition costs; (ii) Pipeline Integrity expenditures; and (iii) costs for Replacement and Encapsulation of Mechanically Coupled Pipe that exceed the Commission's established cap for such expenditures.

Part G responds to Commission Designated Issue No. 19 and its subparts (a), (b), (c) and (d) with particular focus on interruptible service pricing and margin sharing issues.

A. CAPITAL STRUCTURE AND RATE OF RETURN

Commission Designated Issue No. 2:

What is the appropriate capital structure and rate of return (including cost of equity and debt) for WGL? Should WGL's authorized rate of return on common equity be adjusted downward to reflect reduced risk resulting from the Company's proposed implementation of a Revenue Normalization Adjustment, and, if so, by how many basis points?

1. *Capital Structure*

Q. WHAT CAPITAL STRUCTURE DOES WG PROPOSE TO USE FOR RATE-MAKING PURPOSES IN THIS PROCEEDING?

A. Exhibit WG (B), the Direct Testimony of WG witness Gode at page 2, presents the Company's recommended capital structure. WG's proposed capital structure includes 57.76% Common Equity, 1.48% Preferred Stock, 37.81% Long-Term Debt, and 2.95% Short-Term Debt.

Q. HOW DOES WG'S PROPOSED CAPITAL STRUCTURE IN THIS PROCEEDING COMPARE WITH THAT WHICH WG PROPOSED IN ITS LAST THREE BASE RATE CASES BEFORE THIS COMMISSION?

A. Table 1 compares the Company's requested capital structure in this proceeding with the capital structures WG requested in Formal Case Nos. 1093, 1054 and 1016.

Table 1

Comparison of WG's Requested Capital Structures

	FC 1137	FC 1093	FC 1054	FC 1016
Common Equity	57.76%	59.30%	55.480%	50.30%
Long-Term Debt	37.81%	38.23%	38.993%	42.08%
Short-Term Debt	2.95%	0.84%	3.795%	5.84%
Preferred Stock	1.48%	1.63%	1.732%	1.78%
TOTAL	100.00%	100.00%	100.000%	100.00%

Although slightly lowered from the equity component of WG's proposed capital structure in Formal Case No. 1093, the capital structure the Company seeks to use in this proceeding continues to include an inordinately large amount of comparatively expensive Common Equity. The disproportionately large amount of Common Equity that WG proposes to use for its District of Columbia utility operations in this proceeding becomes even more apparent when compared with the overall capital structure used by WGL Holdings, Inc. and the effective capital structure that is used by WGL Holdings for its non-utility operations. The WGL Holdings SEC 10-K for FY 2015, states:

> *In support of our credit ratings, we have a goal to maintain our common equity ratio in the 50% range of total consolidated capital over the long term. As of September 30, 2015, total consolidated capitalization, including current maturities of long-term debt and notes payable, comprised 48.3% common equity, 1.1% preferred stock and 50.6% long-term debt.*[13]

If the consolidated capital structure for WGL Holdings, Inc. is adjusted to include Short-Term Debt and reflect five-quarter average capitalization for the test year, the holding company's capital structure becomes:

[13] WGL Holdings, Inc. SEC Form 10-K filed November 19, 2015, page 43.

Table 2

WGL Holdings Capital Structure Including Short-Term Debt

	Capitalization	Ratio
Long-Term Debt	$ 931,001	37.05%
Short-Term Debt	293,300	11.67%
Preferred Stock	28,173	1.12%
Common Equity	1,260,506	50.16%
TOTAL	$2,512,980	100.00%

After adding consideration of short-term debt, the Common Equity ratio that WG witness Gode presents in this proceeding for Washington Gas remains well above the WGL Holdings Common Equity for its consolidated operations. It is also important to observe that, as shown in Exhibit AOBA (A)-1, the WGL Holdings, Inc. SEC 10-K data as of September 30, 2015 suggests that the capital structure for WGL Holdings, Inc. business activities **other than** Washington Gas (i.e., WGL Holdings non-utility operations) had an effective capital structure which comprised **60.5%** Long-Term Debt and only **39.5%** Common Equity. Those ratios are roughly the reverse of the debt and equity ratios maintained for Washington Gas. Moreover, the capital structure of WGL Holdings' **non-utility operations** would be difficult to sustain if those entities had to obtain their financing on a stand-alone basis. These observations strongly suggest that WGL Holdings is leveraging Washington Gas Light Company and its utility ratepayers to facilitate its financing of non-distribution utility operations at lower cost. The higher equity percentage maintained for Washington Gas places unnecessary and unjustifiable financing costs on users of WG's retail natural gas distribution utility services in the District of Columbia and throughout its retail distribution utility operations.

Moreover, with WG carrying a disproportionately high percentage of common equity, the overall holding company can finance non-utility investments, such as the WGL Midstream investments in new interstate pipeline projects, using capital structures that includes less common equity than the holding company overall and considerably less common equity than WG's utility operations. Thus, with entities such as WGL Midstream holding less Common Equity and greater debt, the holding company reduces its costs of financing non-distribution utility investments and improves the profitability of those organizations at the expense of Washington Gas utility ratepayers.

This may have been less of a concern when WGL Holding's non-utility activities were less capital intensive. However, with WGL MidStream now investing in the construction of new interstate pipelines, the capital requirements of WGL Holdings' non-utility activities have increased significantly and are expected to continue to grow over the next few years.

Q. IS THE CAPITAL STRUCTURE THAT WG REQUESTS IN THIS PROCEEDING REASONABLE?

A. No, it is not. WG requests approval of a capital structure which overstates its need for Common Equity. Moreover, given that Common Equity has **by far** the highest effective cost to ratepayers, WG's proposed capital structure places substantial undue cost increases on its District of Columbia consumers.

Q. WHAT ARE THE COMPARATIVE COSTS OF DEBT AND EQUITY TO WG'S RATEPAYERS?

A. As noted in witness Gode's Direct Testimony, the Company's weighted average cost of Long-Term Debt is 5.83% and its cost of Common Equity is 10.25%. However, when the effects of income taxes on Common Equity returns are considered, the effective cost of Common Equity increases to **17.52%**.[14] Thus, the effective cost of Common Equity to ratepayers under WG's proposals in this case is **three times greater** than the cost to ratepayers of Long-Term Debt. While it is important to maintain a financially healthy utility, the extreme amounts of Common Equity used by WG are unnecessary and do not represent a cost-effective use of ratepayer dollars. Each dollar of Common Equity that is replaced by Debt in the Company's capital structure for ratemaking purposes lowers the Company's overall costs of capital.

[14] To obtain the effective cost of Common Equity to ratepayers, the return on Common Equity must be increased to reflect income taxes. Given WG's requested ROE of 10.25% and a composite tax rate of 41.484% (from Exhibit WG (D)-1, page 3 of 4), the effective cost of Common Equity is computed as follows: *10.25% / (1-.41484) = 17.52%.*

Q. WOULD LOWERING WG'S EQUITY PERCENTAGE ADVERSELY IMPACT ITS OVERALL COSTS OF CAPITAL?

A. No. As noted above, each dollar of Common Equity that is replaced by a dollar of long-term debt lowers the Company's overall cost of capital. For example, Exhibit AOBA (A)-2 demonstrates that, if WG's Common Equity percentage for ratemaking purposes is lowered by 500 basis points to 52.75%,[15] the Company's overall cost of capital for ratemaking purposes would decline from 8.23% to 8.01%, and that in turn would lower WG's revenue requested revenue increase in this proceeding by about **$1.0 million** annually.

Q. WOULD USE OF GREATER PROPORTIONS OF DEBT LOWER WG'S BOND RATING AND EXPOSE THE COMPANY TO HIGHER BORROWING COSTS ON NEW DEBT ISSUANCES?

A. That is a possible, if not likely scenario. However, the Commission must understand that such potential increases in borrowing costs are small in comparison to the savings in equity costs that can be achieved by making greater use of debt and lesser use of Common Equity. Any increase in the cost of long-term debt pale in comparison to the premium paid for greater equity financing, and any resultant increase in debt cost would only impact costs for new debt offerings. Thus, the cost rates on WG existing long-term debt would be unaffected.

[15] At 52.75% Common Equity, WG's Common Equity percentage would still be well above the average for its selected proxy group companies. (See Exhibit WG (B)-9, page 1 of 1, column H).

Furthermore, the spread in yields between bond ratings are minor in comparison to the difference between the effective cost of WG's existing long-term debt and common equity. As demonstrated above, the Company's effective cost of equity at its requested ROE is 17.52% while WG's claimed average cost of debt is 5.83%. That represents a spread of 1,169 basis points. By comparison, the current spread between "AAA" rated corporate bonds and "A" rated corporate bonds is 143 basis points. Although such spreads in bond yields vary over time, the spread between "AAA" and "A" corporate bonds over the past year has fluctuated between 120 basis points to about 180 basis points. Over the last five years, that spread never exceeded 280 basis points.[16] Even during extreme events, such as the 2008-09 economic recession, this spread in effective bond yields never reached the magnitude of the 1,169 basis point spread between the effective costs for Debt and Equity that WG presents in this in this proceeding.

Q. DOES WG'S PROPOSED CAPITAL STRUCTURE IN THIS PROCEEDING REFLECT ITS ACTUAL CAPITAL STRUCTURE?

A. No, it does not. The capital structure WG proposes to use for ratemaking purposes in this proceeding represents a mix of inconsistent measures for the components of the Company's capital structure that fails to portray its actual capital structure for any given period of time or at any point in time. The

[16] Retrieved from FRED, Federal Reserve Bank of St. Louis, June 4, 2016.

Common Equity, Long-Term Debt, and Preferred Stock components of WG's proposed capital structure are measured as of September 30, 2015 (i.e., the end of the Company's requested test year), but the Short-Term Debt component reflects the Company's computed average daily balance for Short-Term Debt rather than an end-of-test-year value.

The proportions of debt (long-term and short-term), equity, and preferred stock that are assumed to comprise the Company's financing determine the overall return that the Company is permitted on invested capital between rate cases. Recognizing that the total amount of invested capital for the Company is constantly changing, point in time measures are not necessarily reflective of either the actual mix of capital that WG has used during the test period or the mix of capital it will employ in the rate effective period. The notion that the Company's end-of-test period measures of Long-Term Debt and Common Equity are more recent and therefore more likely to be reflective of the mix of capital WG will use in the rate effective period is totally fallacious. For example, while WG uses an end of test year (September 30, 2015) measure of Common equity to suggest that its use of equity capital has declined since its last base rate case, the two most recent SEC Form 10-Qs filed by WGL Holdings, Inc. indicate that WG's Common Equity has increased more than $100 million over the last six months while its Long-Term Debt has declined by $25 million.[17]

[17] See Exhibit AOBA (A)-3.

From a public policy perspective, the Commission's establishment of a capital structure for ratemaking purposes should focus on the mix of capital that will reasonably limit costs to ratepayers while maintaining financially healthy utility operations to support the Company's fulfillment of its on-going public service responsibilities. Efforts to measure either what the Company's actual mix of capital has been during a historic period (e.g., the test year) or what the Company's actual capital structure may be for the rate effective period, are far less important than efforts to identify a mix of capital, be it actual or hypothetical, that strikes a reasonable balance between ratepayer and shareholder interests.

Q. DOES YOUR CAPITAL STRUCTURE RECOMMENDATION ASK THE COMMISSION TO DEPART FROM ITS PRACTICE OF USING ACTUAL CAPAITAL STRUCTURES FOR WG?

A. Yes, it does. Order No. 17132 in Formal Case No. 1093 references the Commission's "long-standing policy" of using actual capital structures and expresses its assessment that the reasons provided for departing from that 'long-standing" policy were not sufficiently compelling. However, the utility industry has changed dramatically with the recent formation of utility holding companies and expansion of their non-utility operations. In the context of holding company financing that includes both rate regulated and non-rate regulated activities, a greater burden is now imposed on state and local regulatory commissions to ensure that utility ratepayers are not used to subsidize non-utility enterprises in which a holding company may choose to engage outside the authority of this Commission. The benefits of WG's comparatively low risk distribution utility operations should accrue to its utility ratepayers, not to the holding company or its other affiliates.[18]

Yet, within WGL Holdings corporate structure, WG's comparatively safe, low-risk distribution utility operations now carry extra amounts of high cost common equity to facilitate greater use of lower cost debt financing by affiliates such as WGL Midstream. Although the overall capitalization of the holding company may appear reasonable to its investors and holding company senior management, the ratemaking implications of such practices are not reasonable and appropriate for WG's ratepayers. Only through the adoption of new regulatory policies which allow for the use of a hypothetical capital structure for WG can the holding company's efforts to leverage the good faith and credit of its utility subsidiary be kept in check. There is no justification for WG to carry a greater proportion of common equity in its capital structure than WGL Holdings' non-utility operations. Yet, that is exactly what is reflected in the recent Form 10-

[18] As discussed in the Exelon – Pepco merger proceeding, Formal Case No. 1119, the Commission must also act to ensure that the utility's finances and costs of service are not adversely impacted by poor performance within the holding company's non-utility subsidiaries. In Formal Case No. 1119, AOBA identified a number of examples of situations in which the credit rating of a utility was negatively affected by the credit rating of its parent company. As WGL Holdings' non-utility business activities grow, the importance of such concerns also increases.

K and Form 10-Q filings that WG has submitted to the Securities and Exchange Commission.

The Commission should also recognize that an authorized overall rate of return does not bar WG from altering the mix of debt or equity that it holds at any point in time. In fact, the Company can and does constantly alter its mix of capital, and debt and equity ratios are not constant over time. Thus, a key function of an authorized rate of return is to set a benchmark which helps to ensure that the interests of ratepayers and the Company are reasonably balanced. Simply, accepting an actual capital structure does not ensure such a balance. Rather, it allows the utility to dictate key determinants of its overall costs of capital, and a utility determined capital structure, particularly in the context of holding company financing considerations, may not reflect an adequate weighting of ratepayer interests.

Q. THE DIRECT TESTIMONY OF WG WITNESS GODE SUGGESTS THAT THE LEVEL OF COMMON EQUITY INCLUDED IN THE COMPANY'S PROPOSED CAPITAL STRUCTURE IN THIS PROCEEDING IS JUSTIFIED BY WG'S GREATER USE OF DEFERRED TAXES. DO YOU AGREE?

A. No. The Company's argument with respect to its use of deferred taxes is a "*red herring*."[19] Inclusion of deferred taxes in the Company's capital structure does

[19] A "*red herring*" is something that misleads or distracts from a relevant or important issue. It may be either a logical fallacy or literary device that leads readers to a false conclusion.

not alter the fact that the capital structure WG proposes in this proceeding contains a disproportionately large amount of Common Equity which imposes inordinately high financing costs on the Company's utility ratepayers. The amount of deferred taxes that WG accrues is not a function of the extent to which it uses equity versus debt financing. Deferred taxes are the result of temporary differences between book depreciation and tax depreciation, and such differences are unrelated to the mix of capital used to finance projects. WG's use of deferred taxes is a function of the types and amounts of investing in which it has engaged. Since deferred taxes are by their very nature "*temporary*" sources of cash-flow, use of deferred taxes to finance projects does not supplant the need for long-term capital. Rather, use of deferred taxes only changes the timing of a utility's requirements for additional long-term capital. Over time, differences between book depreciation and tax depreciation must be eliminated, and temporary gains derived through the use of deferred taxes are offset by requirements for issuances of greater debt and/or equity. Furthermore, the tax policies that allow the Company to generate deferred taxes can and do change over time, and changes in such policies can make it difficult to rely on continued accumulation of deferred taxes as part of a long-term financial plan. Thus, deferred taxes are not a source of permanent capital.

Q. WHAT CAPITAL STRUCTURE FOR WG IS APPROPRIATE FOR RATE-MAKING PURPOSES IN THIS PROCEEDING?

A. The Capital Structure used for ratemaking purposes in this proceeding should reflect the percentage of Common Equity held by WG's parent company, WGL Holdings, Inc. Based on a five-quarter average for the test year, WG's Common Equity should represent 50.16% of the Company's capitalization. The balance should reflect WG's actual Preferred Stock, as well as Long-Term and Short-Term Debt sufficient to meet the remainder of WG's capital requirements. The resulting capital structure is as follows:

Table 3
Recommended Capital Structure

	Capitalization	Ratio
Common Equity	$ 956,382	50.16%
Preferred Stock	28,173	1.48%
Long-Term Debt	865,888	45.41%
Short-Term Debt	56,219	2.95%
Total	$1,906,662	100.00%

Q. WHAT ARE THE RATES OF RETURN FOR WHICH WASHINGTON GAS SEEKS APPROVAL IN THIS PROCEEDING?

A. WG seeks authorization of an overall rate of return of 8.23% and a return on common equity ("ROE") of **10.25%**. The Company also seeks a 5.83% cost rate for Long-Term Debt, a 1.06% cost rate for Short-Term Debt, and a 4.79% return on Preferred Stock.

Q. HOW DO THE COMPANY'S PROPOSED COST RATES FOR CAPITAL IN THIS PROCEEDING COMPARE WITH THOSE THE COMPANY REQUESTED AND WAS GRANTED IN ITS LAST BASE RATE PROCEEDING?

A. Table 4, below, provides a comparison of the Company's requested cost rates by type of capital for the current case with WG's requested and granted cost rates in Formal Case No. 1093.

Table 4
Comparison of WG's Requested Cost Rates

	FC 1137 Requested[20]	FC 1093 Requested[21]	FC 1093 Decision[22]
Long-Term Debt	5.83%	6.16%	6.16%
Short-Term Debt	1.06%	1.21%	1.21%
Preferred Stock	4.79%	4.79%	4.79%
Common Equity	10.25%	10.90%	9.25%
Weighted Cost	8.23%	8.91%	7.93%

Q. DOES TABLE 4 REFLECT THE EFFECTIVE COST TO RATEPAYERS OF EACH CAPITAL STRUCTURE COMPONENT?

A. No. The effective cost rates for Long-Term and Short-Term Debt are the rates cited above. However, for Common Equity the **effective cost to ratepayers** after accounting for income taxes is **17.51%.** When the effective cost of Common Equity to ratepayers is compared to WG's 5.83% cost of Long-Term

[20] Exhibit WG (B) at 2 in this proceeding.
[21] Exhibit WG (B) at 2 in Formal Case No. 1093.
[22] Order No. 17132, page 22, paragraph 50.

Debt, we find an **1,168 basis point** differential between the effective costs of Long-Term Debt and Common Equity for WG. The effective cost of Common Equity is thus **three (3) times** WG's average cost of Long-Term Debt.

Most businesses seek to minimize their use of high cost capital and maximize their use of less costly forms of capital (e.g., Long-Term and Short-Term Debt). However, WG is doing just the opposite.

Q. IS IT IMPORTANT THAT THE COMPANY'S CAPITAL STRUCTURE FOR RATEMAKING PURPOSES REFLECT ITS ACTUAL CAPITAL STRUCTURE FOR THE TEST YEAR?

A. No, it is not. In fact, WG's effective capital structure for ratemaking purposes rarely reflects a utility's actual capital structure. Moreover, allowing a utility's **actual** capital structure to determine its capital structure for **ratemaking purposes** does not reflect sound ratemaking practice. It might be considered analogous to "***letting the tail wag the dog***." The Commission has a fiduciary responsibility to ensure that rates are set at just and reasonable levels, and it cannot do so if the Company is free to determine its capital structure for ratemaking purposes on the basis of decisions driven by its holding company which do not provide a reasonable balancing of ratepayer interests. It is the Commission's responsibility to ensure that its capital structure and equity return determinations for WG balance the Company's needs to raise capital with exercise of reasonable control over the costs capital included in rates.

In combination, the Company's requested capital structure and its requested 10.25% cost of equity, have a noticeable impact on the overall level of the Company's revenue increase request in this proceeding. The Commission must ensure that the overall cost of capital imposed on WG's District of Columbia ratepayers is not unduly burdensome. It cannot meet that fiduciary responsibility to ratepayers if the Company's management is free to dictate the Commission's ratemaking capital structure determinations through its own decisions regarding the mix of capital actually employed.

Q. WHAT EVIDENCE DOES THE COMPANY OFFER TO DEMONSTRATE THAT ITS PROPOSED CAPITAL STRUCTURE AND COST RATES FOR DEBT AND EQUITY ENABLE THE COMPANY TO MEET ITS CAPITAL REQUIREMENTS AT A REASONABLE COST?

A. None. The Company's presentation is devoid of any analysis that would support a conclusion that WG's capital structure and cost rates for debt and equity reasonably serve to minimize the Company's overall cost of capital that its District of Columbia ratepayers must bear.

Q. DO THE DETERMINATIONS OF THIS COMMISSION WITH RESPECT TO THE COMPANY'S AUTHORIZED CAPITAL STRUCTURE AND ROE FOR RATE-MAKING PURPOSES IN THE DISTRICT OF COLUMBIA HAVE A DIRECT IMPACT ON THE COMPANY'S FINANCIAL RATIOS AND BOND RATINGS?

A. Not necessarily. Bond ratings for Washington Gas are reflective of the Company's overall performance which includes consideration of the performance of its regulated operations in Maryland and Virginia, as well as below-the-line earnings the Company achieves through activities such as its sharing of Asset Optimization Revenue. As the Commission is well aware, DC represents 20% or less of WG operations, the marginal changes that would result from any Commission decision in this case are unlikely to have a material impact on the Company's overall financial ratios.

Q. DOES THE COMPANY PROVIDE ANY INFORMATION REGARDING THE MANNER IN WHICH THE COMMISSION'S GRANTING OF ITS REVENUE INCREASE REQUEST IN THIS PROCEEDING WOULD ALTER ITS FINANCIAL RATIOS FOR BOND RATING PURPOSES?

A. No, it does not. Nor, should the Commission expect that the Company could produce such computations given the limited influence that regulators in any given jurisdiction have on the Company's overall financial ratios. However, it is somewhat disingenuous for WG to argue the need to achieve certain "target ranges" for key financial ratios when the Company is not in position to provide the Commission meaningful quantitative assessments of the manner in which the Commission's decisions in this case can be expected to impact WG's financial ratios.

Q. DO REGULATORY COMMISSION DECISIONS REGARDING AN APPROPRIATE CAPITAL STRUCTURE FOR RATEMAKING PURPOSES RESTRICT THE ACTUAL CAPITAL STRUCTURE THAT A COMPANY MAY EMPLOY?

A. No. The Company's capital structure can and does change over the course of any twelve month period. As shown in Table 5 below, the capital structure reported for WG as of the end of the test year (i.e., September 30, 2015 is not the same as its capital structures at the end of December 2015 or the end of March 2016.

Table 5
Comparative Actual Capital Structures

	9/30/2015	12/31/2015	3/31/2016
Common Equity	56.34%	53.80%	56.90%
Preferred Stock	1.47%	1.36%	1.35%
Long-Term Debt	37.56%	34.83%	33.27%
Short-Term Debt	2.95%	10.01%	8.48%
Total	100.00%	100.00%	100.00%

Source: WGL Holdings SEC 10-K and 10-Q filings; includes Current Maturities in Long-Term Debt.

Q. SHOULD THE COMMISSION FIND THAT THE CAPITAL STRUCTURE THE COMPANY PROPOSES IN THIS PROCEEDING IS REASONABLE AND APPROPRIATE FOR RATEMAKING PURPOSES?

A. No. WG's proposed capital structure includes too much Common Equity and too little Debt to reasonably minimize its costs of capital.

Q. WHAT CAPITAL STRUCTURE SHOULD THE COMMISSION USE IN SETTING RATES FOR WG IN THIS PROCEEDING?

A. The capital structure for WG that I recommend for the Commission to use in its cost of capital determinations in this proceeding is as follows:

Common Equity	50.16%
Long-Term Debt	45.41%
Short-Term Debt	2.95%
Preferred Stock	1.48%
TOTAL	100.00%

This recommended capital structure reflects the average Common Equity percentage for WGL Holdings for the five quarters ended September 30, 2015. It also maintains WG's level of preferred stock in dollar terms, and WG's average test year short-term debt balance, with WG's long-term debt percentage adjustment to offset the effective reduction for ratemaking purposes in WG's common equity.

2. Cost of Equity

Q. ARE THE COST RATES THAT WG PROPOSES FOR THE COMPONENTS OF ITS PROPOSED CAPITAL STRUCTURE REASONABLE?

A. I do not take issue with the cost rates that WG seeks for Long-Term Debt and Preferred Stock. However, I find that the Company's claimed 10.25% cost of equity is overstated.

Q. WHAT SUPPORT DOES WG OFFER FOR ITS REQUESTED 10.25% COST OF EQUITY?

A. The Company's support for its requested cost of equity is presented in the Direct Testimony of witness Hevert. Witness Hevert offers cost of equity analyses that are developed using four different approaches to the estimation of the costs of common equity for WG. Those approaches include: (1) a constant growth discounted cash-flow ("DCF") model; (2) a multi-stage DCF model; (3) a Capital Asset Pricing Model ("CAPM"); and (4) a Bond Yield Risk Premium (Risk Premium) model. He also provides multiple estimation scenarios under some of those methods using different sets of data inputs. Overall witness Hevert produces no less than 29 cost of equity estimates.

Q. WHAT IS THE RANGE OF ROE ESTIMATES THAT RESULTS FROM THE COST OF EQUITY ESTIMATION SCENARIOS THAT WITNESS HEVERT PRESENTS?

A. The cost of equity estimates he presents range from a low of 8.52% to a high of 11.49%.

Q. SHOULD THE COMMISSION ACCEPT WITNESS HEVERT'S ROE RECOMMENDATION?

A. No. The 10.25% ROE that he supports is well above the cost of equity that WG requires for its comparatively low-risk distribution utility operations in the District of Columbia. Witness Hevert's analyses and rationales do not properly consider the comparative risk of WG's gas distribution utility operations in the District. Instead, his recommendation is highly dependent upon results for scenarios that do not reflect costs for comparable risk investments. In addition, the methods and adjustments witness Hevert employs to raise his overall cost of equity recommendation are based on erroneous, misleading, and speculative analyses.

Q. WHAT CRITICISMS DO YOU OFFER OF WITNESS HEVERT'S COST OF EQUITY ANALYSES?

A. Despite witness Hevert's references to *Hope* and *Bluefield,* his cost of equity analyses fail to maintain appropriate focus on the development of cost of equity estimates for comparable risk investments. I greatly appreciate the limitations imposed on cost of equity estimation by the shrinking pool of companies in the gas utility industry that might be reasonably characterized as having comparable risk. However, that challenge does not justify reliance on analytic methods that essentially ignore comparable risk considerations.

Witness Hevert introduces two new approaches to the estimation of WG's cost of equity for this proceeding not employed in his testimonies in prior proceedings before this Commission in which he has testified. Those additional approaches include the use of a "retention growth model" within his constant growth DCF model and the use of a Multi-Stage DCF model. However, those new approaches offer little, if any, additional insight regarding the costs of comparable risk investments. As noted in witness Hevert's response to AOBA Data Request 9-11b, "*Mr. Hevert does not state anywhere in his testimony that his multi-stage model is an improvement over the constant growth DCF model.*"

Furthermore, witness Hevert's tendency to overstate utility equity return requirements is not new. Over the last three years regulatory commissions before whom witness Hevert has presented testimony on cost of equity issues have generally approved rates of return noticeably below the levels that witness Hevert recommends. Exhibit AOBA (A)-4, page 4 of 4, demonstrates that witness Hevert's ROE recommendations in concluded cases have on average been 77 basis points above the ROE's ultimately approved.

Q. WHAT METHODS ARE USED BY WITNESS HEVERT TO ESTIMATE THE COST OF EQUITY FOR PEPCO'S DISTRIBUTION UTILTY OPERATIONS?

A. Witness Hevert's testimony provides ROE estimates using three types of ROE estimation methodologies. His methodologies include Constant Growth Discounted Cash-Flow ("DCF") analyses, Multi-Stage DCF analyses; Capital Asset Pricing Model ("CAPM") analyses, and Risk Premium analyses.

Q. ARE THE DATA AND METHODS THAT WITNESS HEVERT USES TO ESTIMATE THE COST OF EQUITY REASONABLE AND APPROPRIATE?

A. No. Any rate of return recommendation in this proceeding should be reflective of investments of comparable risk to WG's distribution utility operations in the District of Columbia. Witness Hevert's cost of equity analyses fail to meet that basic threshold requirement. Overall the companies included in the proxy group upon which he relies to develop his DCF, CAPM and ECAPM analyses are noticeably riskier than WG's distribution utility operations. In addition, the CAPM, ECAPM, and Risk Premium analyses witness Hevert uses measures of risk premiums that are derived in a manner that basis the magnitude of the risk premium on returns for investments that are NOT reflective of risk that is comparable to that for WG's distribution utility operations.

The Bloomberg-derived and Value Line-derived Ex-Ante Market Risk Premiums that witness Hevert uses in his CAPM and ECAPM analyses are premised on an estimate of the average "required market return" for all of the companies included in the S&P 500. (This is shown in witness Hevert's Exhibit WG (C)-5). However, the S&P 500 companies on average are not reflective of WG's risk characteristics. For example, projected earnings growth rates for the S&P 500 companies are significantly above similar projections for WG, and the dividend yields for the S&P 500 companies are generally well below dividend yields for either WG or the primarily gas distribution utilities included in witness Hevert's proxy Group. Thus, those analyses provide no useful insight to WG's equity return requirements.

Further, Witness Hevert's Bond Yield Plus Risk Premium analysis relies on a generalized assessment of the market risk premium. That generalized assessment of a market risk premium is not limited to, or intended to portray, a risk premium for investments that embody risk comparable to that for WG.

Thus, the inputs to witness Hevert's CAPM, ECAPM, and Bond Yield Plus Risk Premium analyses are inconsistent with one of the basic tenants of the Court's *Hope* and *Bluefield* decisions that witness Hevert cites at page 6 of his Direct Testimony, and those results of those analyses should be given little, if any, weight.

Q. DO YOU HAVE OTHER CONCERNS REGARDING WITNESS HEVERT'S DCF ANALYSES?

A. Yes, I do. In the calculation of the dividend yields used in his DCF analyses, witness Hevert has employed three measures of stock prices. He uses 30-day, 90-day, and 180-day average periods. He employs those measures of average stock price purportedly to balance concerns regarding: (1) the potential that results might be skewed by anomalous events; and (2) the desire to produce results that are "*reasonably representative of expected capital market conditions over the long term.*"[23] However, the averaging periods that he employs accomplish neither of those objectives. The more traditional approach is to use stock prices averaged over an annual period. Witness Hevert's use of shorter averaging periods provides no protection against the inclusion of anomalous data within his averages. Rather, shorter stock price averaging periods actually expose his analysis to greater risk that the stock prices during those periods are not reflective of longer-term assessments of stock prices for the Company's included in his proxy group. The use of shorter averaging periods actually increases the potential that the resulting average is dominated by a comparatively short-lived market surge or down turn that is not reflective of longer-term market price expectations.

[23] Exhibit WG (C) at page 21, lines 13-14.

Q. SHOULD THE COMMISSION GIVE WEIGHT TO THE "MEAN LOW" AND "MEAN HIGH" DCF RESULTS THAT WITNESS HEVERT'S REPORTS?

A. No, it should not. Those results undermine the very purpose of using a proxy group. As witness Hevert states in his Direct Testimony in this proceeding, "*A significant benefit of using a proxy group is that it serves to moderate the effects of anomalous, temporary events associated with any one company.*"[24] By segmenting his proxy group results, witness Hevert diminishes the "*significant benefit*" of using a proxy group that he has identified. Use of results for an individual company or subgroup of companies also increases the likelihood the risk characteristics for the entity or entities associated with a reported result will not reasonably correspond to risk associated with WG's operations.

Q. DO YOU ACCEPT THE APPROPRIATENESS OF WITNESS HEVERT'S FLOTATION COST ADJUSTMENT TO HIS COST OF EQUITY ESTIMATES?

A. No. At page 27 of his Direct Testimony, witness Hevert indicates that issuance costs are out-of-pocket expenditures associated with the issuance of new common stock for such activities as the preparation, filing, and underwriting of the issuance. I accept witness Hevert's general description of those costs. However, I find no support for witness Hevert's assertion that flotation costs are

[24] Exhibit WG (C) at page 14, lines 14-16.

"*properly reflected on the balance sheet under 'paid in capital'.*"[25] Flotation costs are not "*paid in capital*" and are not recognized as "*paid in capital*" in SEC filings.

Q. HOW DOES WITNESS HEVERT COMPUTE HIS PROPOSED ADJUSTMENT FOR FLOTATION COSTS?

A. Witness Hevert's flotation cost calculation is presented in Exhibit WG (C)-11. Although only two of his six proxy group companies, i.e., Atmos Energy and Laclede Group, Inc., (a.k.a. Espire) have floated issues of Common Equity within the last 10 years,[26] Witness Hevert computes an average floatation cost percentage based on a very limited set of observations. Next, he uses that average flotation cost to re-compute DCF results for all of the companies in his proxy group. His ultimate flotation cost adjustment is a reflection of the difference between his flotation-cost-adjusted average DCF for his proxy group and his original unadjusted proxy group mean constant growth DCF result for his 30-day average stock price scenario. Based on those calculations witness Hevert concludes that a 0.14% or 14 basis point upward adjustment is necessary for each of the ROE estimates he generates regardless of the cost of equity model employed to generate the estimate.

[25] Exhibit WG (C) at page 47, lines 16-17.

[26] Witness Hevert's Exhibit WG (C)-11 indicates that WGL Holdings, Inc., has not floated an issuance of Common Equity since June of 2001, i.e., 15 years ago. The fact that WGL Holdings has been able to go for such a long period despite substantially growing its rate base is testament to the fact that its earnings have been sufficient to retain sufficient earnings to support substantial growth in WG's rate base while still paying an annually increased dividend to shareholders. These are not characteristics of a firm that has been unable to achieve reasonable returns on invested equity.

Q. IS WITNESS HEVERT'S FLOTATION COST ADJUSTMENT NECESSARY AND APPROPRIATE?

A. No, it is not. Witness Hevert's Exhibit WG (C)-11 indicates that WGL Holdings, Inc., has not floated an issuance of Common Equity since June of 2001, i.e., 15 years ago. If the Commission applies a 14 basis point upward adjustment to WG's ROE and the Company goes 15 years without floating a new equity issuance, WG would over-recover significantly greater flotation costs than were experienced by any of the proxy group companies in recent equity issuances. Based on WG's total capitalization and its proposed common equity percentage, a 14 basis point upward adjustment to the Company's ROE multiplied by the equity component of its total company capitalization would generate additional earnings of more than $1.5 per year. Over a 15-year period, that would equate to greater than $23 million despite the fact that in 2001 when WGL Holdings last issued common equity, its total flotation cost was less than $1.9 million. No recent equity issuance by a proxy group company incurred flotation costs of greater than $18.7 million, and that was for an issuance that netted nearly $480 million in addition equity investment.

The foregoing analysis suggests that ratepayers are better served by amortizing equity issuance costs over a time period reflective of long-term investment (e.g., 30 years), than they would be if WG is granted the upward ROE adjustment that witness Hevert proposes. Moreover, the amortization approach would ensure that WG recovers neither more nor less than its actual flotation costs. Thus, I recommend rejection of witness Hevert's flotation cost adjustment.

Q. IF THE COMMISSION REJECTS WITNESS HEVERT'S FLOTATION COST ADJUSTMENT, HOW WOULD THAT IMPACT HIS COST OF EQUITY RECOMMENDATION?

A. Given that he has added that adjustment to all of his reported ROE results, elimination of his flotation cost adjustment would be expected to lower his ROE recommendation by 14 basis points. In other words, his 10.25% recommendation would become 10.11%.

Q. WHAT RATE OF RETURN ON EQUITY SHOULD THIS COMMISSION AUTHORIZE FOR WG IN THIS PROCEEDING?

A. This Commission should approve a ROE for WG of 9.25%, thereby maintaining WG's authorized ROE at the level this Commission established in Formal Case No. 1093.

Q. WHAT IS THE BASIS FOR THE 9.25% ROE THAT YOU RECOMMEND?

My ROE recommendation for WG is supported by the analyses presented in the pages of Exhibit AOBA (A)-4. Page 1 of Exhibit AOBA (A)-4 summarizes those analyses and presents my ROE recommendation. As shown on that page, the average of my DCF results is 8.94%. The average of my CAPM results is 8.97%. I also show witness Hevert's ROE recommendation with his flotation cost adjustment eliminated with an additional downward adjustment to reflect the average of the adjustments made by other regulators to witness Hevert's recommendations in recent proceedings. That analysis is based on proceedings in which witness Hevert has testified over the last three years for which final determinations were readily available from commission websites. The resulting adjustment is -0.77% or -77 basis points. In other words, **on average** witness Hevert's ROE recommendations have been 77 basis points above the levels ultimately approved by regulators. Support for that adjustment, which I label the Regulators' Adjustment Factor ("RAF") is presented on page 4 of Exhibit AOBA (A)-4.

With the aforementioned adjustments to witness Hevert's ROE recommendation that recommendation falls to 9.34%. When viewed in the context of my DCF and CAPM results and witness Hevert's adjusted recommendation, I submit that it would be reasonable for the Commission to maintain WG's authorized ROE at the level approved in the Company's last base rate case (i.e., Formal Case No. 1093, Order No. 17132).

Q. WOULD A DECISION BY THIS COMMISSION TO APPROVE WG'S RNA PROPOSAL IMPACT YOUR ROE RECOMMENDATIONS?

A. Yes, it would. If the Commission approves the Company's proposed RNA mechanism, such a decision would directly benefit the Company and its sole shareholder, WGL Holdings, Inc. While in concept that mechanism would have a neutral impact on WG's District of Columbia ratepayers, WG and its shareholder would benefit through the avoidance of weather-related risk and/or avoidances of the costs of weather derivatives which the Company has employed at times to limit its exposure to weather risk. For this reason, I recommend that any decision by this Commission to approve a RNA for Washington Gas should be accompanied by a reduction in the Company's ROE. Although the appropriate magnitude of an ROE amount for WG is difficult to quantify, I believe that a 25 basis point reduction would be appropriate.

Q. ON WHAT DO YOU BASE THE MAGNITUDE OF THE 25 BASIS POINT ROE ADJUSTMENT THAT YOU SUGGEST ABOVE?

A. In Formal Case No. 1103, this Commission re-evaluated the appropriate adjustment to Pepco's ROE to reflect its Bill Stabilization Adjustment ("BSA"), and concluded that a 10 basis point adjustment was appropriate.[27] For two reasons, I assess that a somewhat larger adjustment is appropriate for WG if its proposed RNA is approved.

[27] Order No. 17424 at page 123, paragraph 326.

First, although similar in some respects, the Pepco BSA and WG's proposed RNA contain important differences. In particular, the Pepco BSA places a cap on monthly adjustments and includes a deferral mechanism for adjustments that would exceed the cap. As discussed in more detail in Section E of this Discussion of Issues, WG's proposed RNA does not include such a cap on rate adjustments and does not include a similar revenue recovery deferral mechanism. This difference, if accepted by the Commission, would provide WG faster recovery of revenue adjustments at the expense of the potential for larger monthly rate adjustments for District ratepayers. That faster recovery of revenue adjustments has value to the Company, and should be factored into the Commission evaluation of an appropriate ROE adjustment for WG, if the Company's RNA proposal is approved.

Second, there is clear evidence in WGL Holdings SEC filings that WG has used "weather-related instruments" to mitigate shareholder exposure to weather variations that impact District of Columbia operations.[28] Costs associated with the use of such instruments have been incurred by WG on a below-the-line basis

[28] WG's use of weather-related instruments to address weather risk associated with its District of Columbia operations is discussed in multiple WGL Holdings 10-K and 10-Q filings with the SEC. See for example, the WGL Holdings, Inc. most recent 10-K, filed on November 19, 2015, at page 50. The Company's use weather-related instruments reflect business decisions by the Company's management. Expectations that weather will be normal or colder than normal during a prospective winter period may argue against the use of such instruments for that winter. In fact, the reference 10-K, indicates that WG elected not to use any weather-related instruments during each its last two fiscal years. However, those observations do not warrant a conclusion that WG's shareholder would derive no value from Commission adoption of the proposed RNA. Rather, the Company and its shareholder still benefit from avoidance of weather-related risk, as exemplified by the fact the WGL Holdings, Inc. 10-Q filed on May 9, 2016 indicates that the Company's election not to use a weather-related instruments during the winter of 2015-16 resulted in WG experiencing a negative impact on its earnings.

at a direct cost to WG's shareholder. Adoption of the proposed RNA would thus provide direct benefit to WG's shareholder in terms of avoided risk and/or avoided costs for risk mitigation. By contrast, prior to the adoption of Pepco's BSA there was no evidence of Pepco's use of similar risk mitigation instruments at shareholder expense. Thus, the RNA would provide direct value to WG the equal of which was not observable for Pepco.

3. Other Return on Equity Considerations

Q. ARE THERE OTHER FACTORS THAT THE COMMISSION SHOULD CONSIDER IN MAKING ITS RETURN ON EQUITY DETERMINATIONS IN THIS CASE?

A. Yes, I believe there are. Among the risk-related factors that S&P and others consider in their ratings of utility bonds is the level of "support" that a utility receives from its regulators. However, regulatory support may come in many forms. One form of support that WG receives from this Commission, that I have rarely seen discussed explicitly in ratings reports, is the opportunity to derive considerable additional below-the-line earnings through activities such as Asset Management Revenue Sharing. In comparison to similar programs for other gas utilities, including the programs in which WG participates in Maryland and Virginia, the Company's Asset Management Revenue Sharing program in the

District is quite favorable. Under the District's currently effective Asset Management Revenue Sharing Program, WG retains 50% of all net Asset Optimization revenue reported by the Company. Sharing percentages for other gas utilities generally receive lesser shares of realized net asset management revenues.

For example, National Grid in Rhode Island has had an Asset Management Revenue Sharing program in place since 2010. That program guarantees that ratepayers will at a minimum receive annual benefit of not less than $1 million per year. Thus, the first million dollars of actual net asset management revenue is dedicated 100% to the benefit of Rhode Island ratepayers. All net asset management revenue in excess of $1.0 million per year have been divided 80% to ratepayers and 20% to shareholders. However, that arrangement was recently re-negotiated, and under the new mechanism which became effective April 1, 2016, a four-tiered structure was agreed to and presented by the Company and adopted by the Rhode Island Public Utilities Commission. The new four-tiered sharing arrangement is structured as follows:

(1) Ratepayers receive credit for **100%** of the first $2.0 million of annual net asset management revenue;

(2) Ratepayers receive **80%** annual net asset management revenue between \$2.0 and \$5.0 million and National Grid retains **20%**;

(3) Ratepayers receive **90%** annual net asset management revenue between \$5.0 and \$10.0 million and National Grid retains **10%**; and

(4) For annual net asset management revenue in excess of \$10 million, ratepayers receive **94%** and National Grid's retention is **6%**.

For National Grid's fiscal year ended March 31, 2016, National Grid achieved \$15.1 million of net revenue from asset management activities, and firm ratepayers in Rhode Island share of that net revenue was over \$12.2 million. See Exhibit AOBA (A)-5. That was under the old sharing arrangement. Under the new sharing arrangement, which became effective April 1, 2016, Rhode Island firm gas customers would receive \$13.7 million based on the total revenue sharing amount achieved by National Grid in its 2016 fiscal year (i.e., April 1, 2015 through March 31, 2016). In the most recent fiscal years, for WG and

National Grid, National Grid's Rhode Island customers have received **4.36 times** the benefit WG's DC gas customers received in FY 2015.

By comparison, the current DC sharing methodology for net asset management (i.e., Asset Optimization) revenue is quite generous. WG's allocated net Asset Optimization Revenue for the District of Columbia was $5.6 million of which the Company retained about 50% or $2.8 million. As shown in Exhibit WG (D)-1 REVISED May 31, 2016, page 1 of 4, the Company's requested Net Income for return on Common Equity is $15,502,868. After adjustment for income taxes, the $2.8 million share of Asset Optimization revenue WG retained for the test year (as below-the-line earnings from asset management revenue sharing) equates to a $1.65 million addition to after tax earnings and more than a 10.6% adder to the Company's earnings from base rate revenues.

Q. DOES THE HIGHER LEVEL OF ASSET MANAGEMENT REVENUE SHARING THAT IS PROVIDED TO WG IN THE DISTRICT OF COLUMBIA YIELD GREATER BENEFITS FOR WG'S DISTRICT OF COLUMBIA CUSTOMERS THAN THEIR COUNTERPARTS IN MARYLAND AND VIRGINIA RECEIVE?

A. No. In response to AOBA Data Request 1-81, part (b), in VASCC Case No. PUE 2006-00059, the Company stated:

> *"There are no optimization activities that the Company can pursue that would benefit one jurisdiction over another. Therefore, the Company strives to maximize its asset management benefits for all customers."*[29]

That statement unquestionably demonstrates that the higher level of asset management sharing enjoyed by WG in the District provides **no** added benefits to WG customers in the District of Columbia. To the contrary, the Company's retention of a higher percentage of net asset management revenue in the District than in other its jurisdictions results in District ratepayers receiving comparatively less benefit from the Company's asset management activities than their counter-parts in Maryland and Virginia now receive.

Q. HOW MUCH ASSET MANAGEMENT REVENUE DOES WG RETAIN ANNUALLY BASED ON THE ASSET MANAGEMENT INCENTIVE STRUC-TURE PRESENTLY IN-PLACE IN THE DISTRICT OF COLUMBIA?

A. WG's response to AOBA Data Request 13-27 indicates that for the twelve-months ended September 30, 2015, its Asset Optimization revenue subject to sharing for the District of Columbia totaled $5.633 million. After the application of Asset Optimization Revenue Sharing percentages, the Company retained more than **$2.8 million** for the benefit of its shareholder.

[29] A copy of WG's response to AOBA Data Request 1-81, part (b), in VASCC Case No. PUE 2006-00059, is included in the attachments to this testimony.

Q. ARE YOU RECOMMENDING A REDUCTION IN THE LEVEL OF ASSET MANAGEMENT SHARING THAT WG RECEIVES IN THE DISTRICT?

A. No. My understanding is that the level of the Company's sharing for Asset Optimization revenue is not a designated issue in this case. Although I believe there is need for review of the existing sharing mechanism, the foregoing observation are intended to highlight an often overlooked form of supporting regulation that clearly serves to enhance WG's overall earnings potential and reduce the risk faced by its investors.

4. Overall Cost of Capital

Q. WHAT OVERALL RATE OF RETURN RESULTS FROM YOUR COMBINED CAPITAL STRUCTURE AND COST OF CAPITAL RECOMMENDATIONS?

A. My recommendation for WG is computed in Exhibit AOBA (A)-6. That overall rate of return is premised on my capital structure and ROE recommendations for WG. The resulting weighted cost of capital for WG is **7.39%**.

Q. HOW DOES THE COMBINATION OF YOUR CAPITAL STRUCTURE AND RATE OF RETURN RECOMMENDATIONS IMPACT THE COMPANY'S REVENUE INCREASE REQUEST IN THIS PROCEEDING?

A. The capital structure and rate of return recommendations presented herein would lower the Company's overall return from 8.23% to **7.39%**. That lowers WG's requested overall rate of return by 84 basis points. Based on the Company's requested Rate Base of $261,872,762, this reduction in the Company's overall rate of return produces a $2,193,913 reduction in the Company's overall return requirement which, after allowances for income taxes, yields a **$3,730,129 reduction** in WG's requested revenue requirement in this proceeding.

B. NORMAL WEATHER THERMS AND REVENUES

Q. WHAT IS ISSUE 8A?

A. **Issue 8a** asks: Is the weather normalization adjustment reasonable?

Q. HAVE YOU REVIEWED THE ANALYSES WG PRESENTS IN THIS PROCEEDING TO SUPPORT ITS ESTIMATION OF NORMAL WEATHER REVENUE BY RATE CLASS?

A. Yes, I have. I have also reviewed numerous responses to data requests relating to the Company's weather normalization of therms and revenues that WG has provided in response to data requests submitted to the Company by AOBA and OPC.

Q. DOES THE COMPANY'S CALCULATION OF NORMAL WEATHER HEATING DEGREE DAYS IN THIS PROCEEDING CONFORM WITH THE COMMISSION'S DETERMINATION IN ORDER NO. 17132?

A. The calculation of normal weather heating degree days presented in the Direct Testimony of witness Gibson appears to be consistent with the Commission's directives in Order No. 17132. It is computed to reflect a 30-year average of reported actual heating degree days ("HDDs"). As computed by WG Witness Gibson that average is 3,910 HDDs on an annual basis.

However, witness Raab presents a significantly different assessment of Normal Weather HDDs as part of his justification for adoption of the Company's proposed Revenue Normalization Adjustment ("RNA") mechanism. Witness Raab's assessment of normal HDD expectations departs significantly from the methodology this Commission's found appropriate in Order No. 17132 Witness Raab's analysis suggests that normal weather expectations for the rate effective period would represent 3,770 HDDs. That is only slightly different from the 3,777 HDD measure that WG proposed and the Commission specifically rejected in Formal Case No. 1093.

Q. DO YOU FIND WG'S ESTIMATES OF TEST YEAR REVENUE BY RATE CLASS REASONABLE?

A. No, I do not. My reviews of the Company's Normal Weather Study and its Revenue Study have identified three areas of particular concern.

First, WG has computed normal weather billing units for Peak Usage Charges billed to each of WG's non-residential rate classifications in a manner that is inconsistent with the requirements of the Company's tariff. Those inappropriate estimates of Peak Usage Charge billing units cause the Company to understate test year Peak Usage Charge revenue. Those misstated test year Peak Usage Charge revenue calculations infect numerous elements of WG's revenue requirements, cost of service, revenue increase distribution, and rate design recommendations.

Second, WG has failed to properly segregate and separately analyze Interruptible and Special Contract customer therm usage, and that, in turn, causes the Company's estimates of normal weather interruptible therms and revenues for the test year to be understated.

Third, the Company has failed to adequately "clean" the data inputs it has used as input for its normal weather study prior to computing the estimates of variation in therm use per HDD and base gas factors. The Company's data inputs include a number of large anomalies which may reflect errors in the reporting of use, errors in billing, or correction to billing errors that are often more appropriately associated with HDD's in a different month. To the extent there are billing adjustments associated with prior periods reflected in the reported usage for a given month such usage is unrelated to the weather conditions for the months in which such billing adjustments are reported. As a result, estimates of relationships between therm use and HDDs become distorted and unreliable.

1. Peak Usage Therms and Revenue

Q. HOW ARE PEAK USAGE CHARGE BILLING UNITS DETERMINED UNDER THE PEAK USAGE CHARGE PROVISIONS OF THE COMPANY'S TARIFF?

A. The Company's currently effective and proposed tariffs for non-residential firm service rate classifications employ identical language to describe the manner in which Peak Usage Charges are to be determined. That language reads as follows:

> *The peak usage charge is a monthly charge, **re-established each November** billing period based on application of the peak usage rate to **the customer's maximum billing month's usage during the immediately preceding November through April billing periods**. For customers commencing service subsequent to the April billing period, the peak usage rate shall be applied to the maximum billing month's usage experienced during the current November – April billing period. **The maximum billing month is defined as the month in which the customers maximum average daily consumption (total therms/cycle billing days) occurs.***[30]

This language, which been in effect for more than twenty years, establishes the methods that WG is required to use in its computation of Peak

[30] Exhibit WG (M)-5 pages 7 of 66, 11 of 66, 17 of 66, and 21 of 66.

Usage Charges for all non-residential firm service customers in the District of Columbia. Key parameters set forth in that paragraph include:

1. The peak usage rate is applied to "***the customer's maximum*** *billing month's usage.*"

2. The maximum billing month is defined as "***the month in which the customers maximum average daily consumption (total therms/cycle billing days) occurs.***

Q. HAS THE COMPANY DEVELOPED NORMAL WEATHER PEAK USAGE CHARGE BILLING UNITS BASED ON EACH CUSTOMER'S MAXIMUM BILLING MONTHS USAGE?

A. No. None of the estimates of Normal Weather Peak Usage the Company presents in this proceeding are derived from analyses of individual customers' maximum billing month demands. Rather, witness Gibson indicates that in the development of Normal Weather Revenue the Company uses "*the peak month usage from the Normal Weather Study*"[31] where the peak month usage for all class in that study is assumed to occur in the month of January. In addition, witness Wagner RNA calculations use "*Test Year Average use per Customer*" to estimate changes in Peak Usage charge billing determinants. Neither of these

[31] WG's response to AOBA Data Request 5-23b.

proxies for peak usage reflects requirement of WG's tariff that Peak Usage be determine on the basis of **each customer's maximum billing month usage**.

Q. IS THERE REASON TO BELIEVE THAT INDIVIDUAL CUSTOMERS' PEAK MONTH USAGE WOULD OCCUR IN A MONTH OTHER THAN THE CLASS PEAK MONTH?

A. Yes. WG's response to AOBA Data Request 10-13c indicates that over 6,068 of WG's non-residential customers had a peak month for peak usage charge determinations that was different from the class peak month. Based on the average numbers of test year customers used in witness Wagner's Exhibit (M)-2, Schedule C, page 1 of 2, column C, I compute that the total number of non-residential (i.e., Commercial and Industrial and Group Metered Apartment customers) for the test year was 12,670. In other words, nearly 48% of WG's Firm Service customers who are subject to Peak Usage Charges experienced their individual maximum billing months in a month other than the peak month for their rate class.

Q. DOES WG'S DEVELOPMENT OF NORMAL WEATHER PEAK USAGE BILLING UNITS CONSIDER THE NUMBER OF CLYCLE BILLING DAYS IN EACH WINTER MONTH WHEN ATTEMPTING TO IDENTIFY THE CLASS PEAK MONTH?

A. No, it does not. WG's response to AOBA Data Request 13-5a, indicates that the Company's determination of the "peak month" for use in calculating Peak Usage Charge revenue is based on "*the highest monthly throughput for all firm customers*." It also states, "*the Company's estimation method does not consider usage per cycle billing day*."

Witness Tuoriniemi's response to AOBA Data Request 13-5a goes on to argue that consideration of cycle billing days is unnecessary since the number of cycle billing days is "***consistently 21***." However, his response reflects a misunderstanding of the use of the phrase "cycle billing days" in the Company's tariff. The Company maintains 21 meter reading cycles in each month. The number of "*cycle billing days*" reflects the number of days between meter readings, not the number of days on which meters are read. On average the number of days between meter readings for individual customers is about 30 days. However, due to differences in the number of days in each month and consideration of the influences of weekend days and holidays (i.e., days on which meters are not typically read) on meter reading schedules, the actual number of days between meter reads for any given billing cycle can vary. Attachment 1 to WG's response to AOBA Data Request 5-9 provides WG's meter reading schedules for the last several years. From the data provided in that response, I determined that the number of days between meter readings for the test year varied both among billing cycles within each month and across the months of the year, ranging from a low of 29 days to a high of 34 days.

Although billed usage for the one month may be greater than the billed usage for another month, that does not necessarily mean that the average use per cycle billing day is also greater for that month. For example, a customer whose meter was read in the Company's 20th billing cycle would have had 34 billing cycle days associated with the usage measured for the month of January 2015, but only 29 cycle billing days for the usage reported for the month of February. As a result, the customer's January usage would have to be **17.24%** greater in January for the customer's average use per cycle billing day for January to exceed the customers average use per cycle billing day for the month of February. WG's approach to the estimation of normal weather peak usage billing determinants totally ignores the importance of differences in the number of days for which service is metered and reported each month.

Q. HOW DO YOU RESPOND TO WG'S ASSUMPTION THAT ESTIMATED USAGE FOR "*THE HIGHEST MONTHLY THROUGHPUT FOR ALL FIRM CUSTOMERS*" PROVIDES A REASONABLE PROXY FOR ANTICIPATED NORMAL WEATHER PEAK USAGE BILLING DETERMINANTS?

A. WG offers no analytic support for the validity of that assumption. Moreover, in the context of my response to the previous question, it should be clear that WG's assumption is inappropriate and unfounded.

Q. HOW SHOULD PEAK USAGE CHARGE THERMS AND REVENUES BE DETERMINED FOR THE PURPOSES OF THIS PROCEEDING?

A. I understand that in the context of efforts to weather normalize test year therms and revenues, some adjustment of Peak Usage therms and revenues may be justifiable. However, billing determinants for peak usage charge revenue are subject to a **significantly different** method of determination. Further, under the provisions of the Company's tariff, any effort to weather normalize peak usage must consider weather in the month in which each customers maximum usage month occurred, and that necessarily involves weather normalization of usage for periods outside the test year. Given that nearly half of all non-residential customers have had a maximum for Peak Usage Charge determinations that is different from the system peak month or their class peak month, it is difficult to believe that a simple relationship between peak usage billing determinants and individual customers' peak usage used can be justified.

Proper weather normalization of peak usage requires that each customer's monthly usage be weather normalized for all winter months of the November – April period preceding the test year must be weather normalized. It also requires that average use per cycle billing day must be recomputed for each of those months. This is necessary to properly re-determine the customer's maximum usage month. Since weather normalizations generally do not have proportional impacts on usage across the months of a winter, differences in the magnitude of HDD variations by month can cause a customer's maximum usage month to shift from one month to another. Thus, the mathematics required to reasonably and reliably weather normalize peak usage are far more complex than the simple and unsupported relationship that WG assumes. Moreover, the fact that nearly half (i.e., 48%) of all non-residential customers have been identified as having a "peak month" for Peak Usage Charge determinations that is other than the month of peak firm sendout for the system. This observation suggests that the relationship between peak usage and heating degree days is not as strong as WG assumes.

WG must be required to develop greater analytic support for the methodology it proposes and demonstrate the validity of the computational assumptions it employs. Clearly, WG has not met its burden for justifying the peak usage charge weather normalizations it uses in this proceeding. Thus, WG's *ad hoc* methods for estimating peak usage must be rejected. Consideration must be given to: (1) the timing of individual customer maximum demands; and (2) the influences of average use per cycle billing day calculations on peak usage charge billing determinants.

2. *Weather Normalization Best Practices*

Q. DOES THE COMPANY'S APPROACH TO THE ESTIMATION OF NORMAL WEATHER THERM USE REPRESENT AN EFFORT TO REFLECT A "*BEST PRACTICE*" FOR THE GAS DISTRIBUTION INDUSTRY?

A. No. The Company's responses to AOBA Data Request 5-4, 5-5b, and 5-10b, demonstrate a complete lack of effort on the part of WG identify and use best practices within the industry for estimating normal weather therm use. The Company's response to AOBA Data Request 5-4 indicates that "[Witness Gibson's] *experience in the area of weather normalization is limited to [his] work at Washington Gas Light Company."* In response to AOBA Data Request 5-5b the Company states, "[Witness Gibson has] *not attempted to identify the practices of other gas utilities with respect to weather normalization*." Likewise, WG's response to AOBA Data Request 5-10b states, "*The Company has not conducted a study of what is common place within the industry*" regarding methods for determining base gas use, and WG's response to AOBA Data Request 5-10c establishes that "[Witness Gibson has] *not performed any analysis of other gas utilities' approaches" to the assessment of base use*." In an industry which comprises a large number of companies that regularly engage in weather-normalization analyses, there is no reason that WG should operate in a manner that is so disconnected from its peers.

Q. HASN'T WG USED ESSENTIALLY THE SAME WEATHER NORMALIZATON METHODOLODY FOR A NUMBER OF YEARS?

A. WG's methods for weather normalizing therm usage by rate class are similar to those it has used in past proceedings. However, when WG first started using those methods, it was in the context of Purchased Gas Cost adjustment filings, and the adjustments to therms only affected the levels of charges subject to future reconciliation. That contrasts with WG's weather normalizations in this proceeding which have impacts on numerous ratemaking determinations that are not subject to future reconciliation, including revenue requirements determinations, class cost of service results, and rate designs.

Q. DO YOU FIND WG'S APPROACH TO THE ESTIMATION OF NORMAL WEATHER THERMS COMPARABLE TO THE METHODS USED BY OTHER GAS UTILITIES TO ESTIMATE NORMAL WEATHER THERM USE?

A. No. Over the last several decades I have reviewed weather normalization analyses developed by a number of U.S. gas utilities. In each case, the utility's estimation of therm use per degree day starts with the estimation of base gas use and removal of base gas therms from total gas use for each period analyzed before regression analyses are performed to assess degree day related variations in therm use. In other words, an effort is made to identify and segregate non-weather-related gas use such that regression analyses that attempt to relate weather sensitive load to degree day variations focus on the portion of gas use that is weather sensitive. By contrast, WG approaches the same problem by regressing total gas use against degree day measures and assuming that the intercept value represents base gas use. As demonstrated in the Company's weather normalization workpapers, this approach yields measures of base gas use which can vary widely from month-to-month and in some instance are **negative**.[32] Thus, WG's approach to the estimation of normal weather therm use departs from what I have observed to be standard practice for the diverse group of gas utilities with which I have experience.

Q. IS WG'S APPROACH TO THE ESTIMATION OF NORMAL WEATHER THERMS REASONABLE AND APPROPRIATE?

A. No, it is not. WG has argued in past proceedings that its computation of normal weather therms was only used to assess changes in the therms that result from changes in degree day measures. Since the focus of WG's normal weather analysis is limited to changes in therm use associated with variations from normal degree days, the Company rationalized that accurate estimation of base

[32] It should be understood that **negative** gas use implies that retail gas service customers are providing more gas to the system than they use. Since retail gas customers do not produce or store natural gas, the notion that they could under any circumstances have **negative Base Gas Use** is **unrealistic**.

load gas use was not important to the computation of such the impacts of weather on therms and revenues. While that argument may have some validity in certain limited applications, WG's estimation of Base Gas Use has a direct and noticeable impact on its assessment of **total** annual normal weather therms and **total** annual normal weather revenue by rate class in this proceeding.

Witness Gibson's response to AOBA Data Request 5-10 is illustrative of the Company's lack of understanding of weather-normalizations use by other companies in this industry. In particular, his response to part b of that request suggests that he is wholly unaware of the fact that others within the industry typically develop estimates of base gas use separately and only run regression on the remaining weather-sensitive elements of gas use, after separately developed estimates of base gas use are subtracted. This is important in the context of the simple linear regression models that WG employs. When reliance is placed on a simple (one independent variable) regression model to estimate both variations in gas use with variation in HDDs and base gas use, the regression model must attempt to explain non-weather related factors that may cause fluctuation in base (non-weather sensitive) uses of gas from month-to-month through degree day data. This causes degree day sensitivities to be distorted. It also produces some very strange, and at times totally inexplicable, estimates of base gas use.

3. Interruptible and Special Contract Services

Q. DO YOU HAVE ANY GENERALIZED OBSERVATIONS REGARDING THE COMPANY'S ANALYSES FOR INTERRUPTIBLE SERVICE CUSTOMERS IN THIS PROCEEDING?

A. I do. Throughout this proceeding to date, the Company's explanations and documentation of the development its analyses for interruptible service customers has been inadequate. The result is a distorted assessment of the therm use, cost responsibilities, rate of return and rate designs for customers who are served under Rate Schedules 3 and 3A. Since the Company's assessment of normal weather therm use of each class is a key building block from which other analyses (e.g., revenue estimation, cost of service analyses, and rate designs) are developed, its estimates of normal weather therms is a central element of nearly all subsequent analyses for that class. Thus, the methods used by WG to estimate normal weather therms for interruptible service customers permeate large elements of this case.

A particular problem is the Company's failure to fully document the components of the total therms The Direct Testimony of witness Gibson discusses the inclusion of AOC volumes in the interruptible service class, but offers no assessment of the impacts of the decision to include, rather than exclude AOC volumes.

A summation of the monthly therms that Witness Gibson uses for FY 2015 input volumes for the linear regression analysis he runs for the interruptible class reveals a total of 90 million therms. However, the Company's response to AOBA Data Request 3-3 reflects 80 million therms for the interruptible class and that 80 million therm total 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. So what explains the difference between this 80 million therm total and the 90 million therms witness Gibson uses to estimate the relationship between usage and heating degree days (i.e., "variation per DDD") and base gas factors. Moreover, the roughly 10 million therm difference between these two sets of what were understood to represent actual usage was confounding since the FY 2013 and FY 2014 total annual therms from these sources directly matched.

Using something akin to forensic analysis, I was finally able to determine that what appeared to be "*ghost volumes*" are actually volumes for another Special Contract customer (i.e., a customer other than AOC) that was not discussed explicitly anywhere in the Company's Direct of Supplemental Direct testimonies in this case. Further insight was gained through the Company's responses to AOBA Data Requests 16-1a and 16-2a. As set forth in those attachments, the interruptible therms used by witness Wagner in Attachment 2 of the Replacement Pages for Exhibit WG (M)-3 incorrectly treat AOC firm service volumes. The attachments to those responses also provide at least a somewhat greater breakdown of the therm measures upon which distribution charge revenue for the interruptible service class was computed before and after the removal of AOC firm service volumes.[33] Yet, that still does not tie up all the loose ends in terms of the components of the Company's interruptible therm volumes.

A key problem with the Company's analysis for interruptible service customers is that WG includes monthly throughput volumes for Firm and Interruptible **Special Contract service** in numerous elements of its presentation in this case (i.e., in witness Wagner's cost of service and rate design analyses, in witness Gibson's Normal Weather Study, and in witness Tuoriniemi's Revenue Study.

WG's inclusion of Firm AOC volumes in its computation of Interruptible Distribution charge revenue is demonstrated in Table 6 below, as well as in Exhibit AOBA (A)-7 which also shows the components of WG's representation of Interruptible Distribution Charge Revenue. These analyses are important for several reasons. First, they clearly demonstrates that the AOC Firm Service therms were incorrectly included in the 86,251,174 therms of interruptible use that witness Wagner reflects in his rate design analyses.[34]

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[33] On May 11, 2015, WG filed updates to its cost of service analysis that reflect the Commission approval of the AOC Special Contract and resultant removal of AOC firm service volumes from the interruptible service class.
[34] The same 86,251,174 therm amount, which as shown above includes AOC **Firm Service** volumes, is found in Exhibit WG (M)-1, Schedule B, page 2 of 5 and page 3 of 5, at lines 24, 25, and 27 on both pages; as well as Schedule C, page 1 of 2, Column D, line 18.

The analyses in Table 6 and Exhibit AOBA (A)-7 indicate that when AOC Firm Service therms were removed from the Interruptible class in Exhibit WG (M)-3, they were removed from Interruptible Delivery Service volumes, not GSA or AOC Interruptible Service Volumes. In addition, noticeably missing in the presentation in Table 6 is any reference to annual therms for either Interruptible **Sales Service** or **Watergate Service**.

Table 6

Interruptible Volumes in Exhibit WG (M)-3[35]

	Including AOC Firm Therms	Excluding AOC Firm Therms	Implicit AOC Firm Therms
Interruptible Delivery Service			
First Block	36,920,676	36,020,676	900,000
Second Block	24,365,481	17,266,481	7,099,000
Total	61,286,157	53,287,157	**7,999,000**
GSA Interruptible			
AOC Interruptible[36]	3,782,933	3,782,933	
Other Interruptible	**21,182,084**	**21,182,084**	
Total GSA	24,965,017	24,965,017	
Total Interruptible	**86,251,174**	78,252,174	
AOC Firm Service		7,999,000	
Total with AOC Firm		**86,251,174**	

[35] Data presented, with the exception of AOC Interruptible therms are derived from the attachments to WG's Responses to AOBA Data Requests 16-1a.1 and 16-1a.2.

[36] The referenced AOC Interruptible therms represent the total Normal Weather AOC Therms (11,782,187) from Exhibit WG (2D)-4, page 1 of 2, Column F, less the total normal weather AOC Firm Service volumes shown in Column I (7,999,254).

Furthermore, only witness Tuoriniemi's Supplemental Direct Testimony (Exhibit WG (2D)-4 do we learn of the relative magnitude of AOC's firm and interruptible Special Contract volumes. However, the relationship between those volumes and the nearly **25 million** "GSA Interruptible Therms" reflected in WG's attachments to AOBA Data Requests 16-1a and 16-2a remains unexplained.

4. Treatment of Miscellaneous Service Revenue

Q. DO YOU HAVE ANY COMMENTS REGARDING WITNESS TUORINIEMI'S DISCUSSION OF "MISCELLANEOUS SERVICE REVENUE" AT PAGE 33, LINES 3-25 OF HIS DIRECT TESTIMONY?

A. I do. Witness Tuoriniemi's testimony reflects the Company's continued treatment of transportation service revenue as the unwanted "step child." Although the delivery of gas to customers is WG's core business function, the Company's presentation still suggests that its core business is the marketing of gas sales services, and its provision of transportation service is a secondary line of endeavor. In fact, for a fully unbundled utility such as Washington Gas, gas sales service is a secondary endeavor and one from which the Company provides on essentially a cost pass-through basis (i.e., the sale of gas to retail service customers is not intended to be primary a source of earnings for WG).

Q. AT PAGE 34, LINES 1-9, OF WITNESS TUORINIEMI'S DIRECT TESTIMONY, HE DISCUSSES THE COMMISSION'S DIRECTIVE IN FORMAL CASE NO. 1093 THAT THE COMPANY SHOULD INCLUDE DETAIL ABOUT ITS ACTUAL TEST YEAR TRANSPORTATION SERVICE REVENUE BY RATE CLASS PRIOR TO APPLYING ITS RATEMAKING ADJUSTMENTS FOR NORMAL WEATHER. WHAT IS YOUR ASSESSMENT OF THE COMPANY'S RESPONSE TO THAT DIRECTIVE?

A. Witness Tuoriniemi asserts that the requisite detail can be found in the Company's per book jurisdictional cost of service study, Exhibit WG (D)-4, pages 21 of 67 and 22 of 67. However, an examination of the referenced pages of Exhibit WG (D)-4 finds **large numbers of unlabeled lines of data**. For each rate class multiple elements of Transportation Service revenue are assigned to the District of Columbia, but WG has intentionally withheld information necessary to understand what each element assigned to its DC jurisdictional service represents.[37]

WG's failure to provide a clearly articulated breakdown of $72.3 million of Transportation Service revenues by rate class within its initial filing places unnecessary and inappropriate burdens on the Commission and the parties to

[37] The attachment to WG's Response to AOBA Data Request 10-23 provides the missing line labels for pages 21 of 67 and 22 of 67 in Exhibit WG (D)-4. In those line labels no separate designation of Special Contract volumes is found. However, we do find **$1,2979,697** of "Interrupt-Cool-Cool & Heat-DC included under Group Metered Apartment customers, and that amount was **not included** in the Non-Firm (Interruptible) Revenues shown in Exhibit WG (M)-3, Replacement Pages, Attachment 2. How this finding affects the Company's assessment of Normal weather therms is not discernible from the information provided, but it suggests that actual therms for both Interruptible and GMA service may have been misrepresented in witness Gibson's analysis in Exhibit WG (E)-1.

this WG rate proceeding. Although the identification of Transportation Service revenue and therms by rate class is a basic element of efforts to verify the accuracy of key elements of the Company's revenue increase request, the structure of WG's presentation does not facilitate such verification efforts. WG still does not straightforwardly disclose its Transportation Service revenues and therms by rate classification. Nor does it segregate Special Contract revenues and therms from standard tariff revenues and therms. Thus, considerable effort is required to reconstruct and validate the manner in which the Company affects its transfer of Transportation Service Revenues and therms from "Miscellaneous Service Revenue" to "Delivery of Gas Revenues." This is particularly important in the context of the substantial volumes of both firm and interruptible Special Contract service that WG now serves that warrant separate consideration by the Commission in this proceeding since they are not billed at standard tariff rates.

C. REVENUE REQUIREMENTS

Commission Designated Issue 8:

Are WGL's test-year revenues, sales, and any proposed adjustments reasonable?

(a) Is the weather normalization adjustment reasonable?

Q. WHAT LEVEL OF TEST YEAR REVENUE DOES THE COMPANY INCLUDE IN ITS ADJUSTED TEST YEAR DATA?

A. Exhibit (D)-1, page 1 of 4, attached to witness Tuoriniemi's Direct Testimony reflects a Ratemaking Amount for Operating Revenues of $154,242,733. That amount of revenue is also reflected in the Company's CCOSS (Exhibit WG (M)-3, Replacement Pages filed May 11, 2016, Attachment 1, 1 of 44), and witness Wagner's rate design exhibit (Exhibit WG (M)-1, Schedule B, page 1 of 5).

Q. SHOULD THE COMMISSION ACCEPT WG'S RATEMAKING AMOUNT FOR TEST YEAR REVENUE AS PRESENTED IN THE COMPANY'S EXHIBITS?

A. No. As I explain herein, the $154,242,733 Ratemaking Amount for Operating Revenue that WG presents does not properly reflect the Company's normal weather test year revenue.

Q. WHAT ADJUSTMENT TO THE COMPANY'S TEST YEAR EXPENSES DO YOU ADDRESS IN THIS SECTION?

A. I address four elements of WG's revenue requirements request, as well as the Company's overall revenue requirement. Those expense items discussed herein include:

1) Costs for the Company's proposed Fee-Free Credit /Debit Card Bill Payment Program;

2) Allocation of Income Taxes to Company Retained (Below-the-Line) Revenue Sharing Amounts

3) WG's proposed adjustment to Late Payment Charges; and

4) Funding for GTI R&D Programs.

1. "Fee-Free" Credit/Debit Card Program Expense

Q. WHAT ADJUSTMENT DO YOU PROPOSE TO THE COMPANY'S TEST YEAR EXPENSES FOR ITS "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM?

A. As discussed in detail in **Section D** of this Discussion of Issues (below), WG's "Fee-Free" Credit/Debit Card Program is uneconomic and unjustified. Thus, it is recommended that the entire test year costs of that program be eliminated from the Company's test year expenses.

Q. HAS THE COMPANY QUANTIFIED ITS TEST YEAR COSTS FOR THE "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM?

A. The Supplemental Direct Testimony and WG witness Tuoriniemi and Exhibit WG (2D)-3 detail the test year amounts billed to the Company by the contractor, Official Payments, for processing credit/debit card payment. Those amounts total to **$161,343.16**. However, that does not appear to represent the full costs of operating WG's credit/debit card bill payment program. As I note in Section D of this testimony, at a minimum the costs of the program should include costs for in-house personnel, such as witness Sluder, who testifies that he serves as an interface between WG, its banking institution, its third party vendors (which is understood to include Official Payments), and Accenture. The Commission should require WG to document the time, travel, and other expenses incurred by in-house employees such as witness Sluder in support of this program and deduct those costs from WG's test year expenses. The Commission should also require WG to document and deduct from its test year expenses any test year costs relating to this program that were billed to the Company by Accenture.

2. Taxes on Company Revenue Sharing Retentions

Q. DO YOU FIND EVIDENCE THAT WG ATTRIBUTES INCOME TAXES TO BELOW-THE-LINE EARNINGS IT DERIVES FROM ITS RETENTION OF ASSET OPTIMIZATION AND INTERRUPTIBLE MARGIN REVENUE?

A. No, I do not. WG's jurisdictional cost of service study, Exhibit WG (D)-4, shows the Company's allocation of its entire federal and state income tax amounts among WG's four jurisdictions (i.e., DC, MD, VA, and FERC). No allocation is shown to below-the-line earnings such as the revenue sharing amounts referenced above. Furthermore, the full amounts allocated to the District of Columbia in WG's jurisdictional cost of service study are found in witness

Tuoriniemi's Exhibit WG (D)-1, page 1 of 4, column C, for "Per Books" amounts. Moreover, nowhere in the WG's workpapers do we find any portion of those taxes attributed to WG's DC earnings from revenue sharing retentions.

Q. HOW SHOULD THE INCOME TAXES AMOUNTS ASSOCIATED WITH WG'S BELOW-THE-LINE EARNINGS BE DETERMINED?

A. Since dollar amounts subject to sharing are "net" revenue amounts, the entire amount retained by the Company should be considered taxable income, and the taxes associated with those amounts should be computed at the full applicable state (DC) and federal tax rates show in the footnotes at the bottom of Exhibit WG (D)-1, page 3 of 4.

Q. WHAT WERE THE REVENUE SHARING AMOUNTS RETAINED BY WG AS BELOW-THE-LINE ADDITIONS TO EARNINGS FOR THE TEST YEAR?

A. As observed in Section G of this Discussion of Issues, the Company's interruptible service revenue margins for the test year total to approximately $12.2 million. The precise number is $12,202,473. This includes margins of $1,016,857 on Interruptible Sales Service, $10,960,737 on Interruptible Delivery Service, and $224,879 from Watergate Service. WG's 10% retention on those margin revenue amounts equals $1,220,247.[38] WG's response to AOBA Data Request 10-36 indicates that DC's share of Asset Optimization Revenue for the

[38] Also see the attachment to WG's Response to AOBA Data Request 13-27a.b.

test year was $5,633,883. Based on a 50/50 sharing of that revenue, WG would retain $2,816,942. Thus, in total WG's below-the-line revenue retention for the test year was at least **$4,037,189**.

Q. BASED ON WG'S TEST YEAR REVENUE SHARING AMOUNTS, HOW MUCH INCOME TAX SHOULD BE ASSOCIATED WITH THOSE BELOW-THE-LINE ADDITIONS TO EARNINGS?

A. Exhibit AOBA (A)-9 computes the Company's revenue retention amounts for Asset Optimization and for Sharing of Interruptible Margin Revenue for FY 2015. Based on those revenue retentions, applicable DC Income Tax and Federal Income Tax amounts are also determined. For FY 2015 the **DC Income Tax** on WG revenue retentions is calculated to be **$402,710**. The applicable **Federal Income Tax** amount is **$1,674,787**.

3. WG's Adjustment to Late Payment Charge Revenue

Q. DOES WG PROPOSE AN ADJUSTMENT TO ITS TEST YEAR LATE PAYMENT CHARGE REVENUE?

A. Yes, it does. The Direct Testimony of WG witness Tuoriniemi proposes a **$216,000** reduction in test year Late Payment Charge revenue to reflect the estimated effects of normal weather on the Company's test year sales and delivery service revenue.[39]

Q. WHAT SUPPORT DOES THE COMPANY OFFER FOR ITS PROPOSED ADJUSTMENT TO LATE PAYMENT CHARGE REVENUE?

A. WG's rationale for this adjustment is found in witness Tuoriniemi's Direct Testimony at page 32, lines 17-18, which states, "*Generally, late payment charges increase or decrease in proportion to the Company's gross revenue.*"

Q. DO YOU FIND REASONABLE SUPPORT FOR THIS COMPANY'S ASSUMED RELATIONSHIP BETWEEN GROSS REVENUE AND LATE PAYMENT CHARGE REVENUE THAT WITNESS TUORINIEMI PROFERS?

A. No. Although there are expenses that increase or decrease directly with the gross amount of revenue that the Company bills, Late Payment charges do not exhibit such characteristics. Late Payment revenue is a function of a number of factors. Billed revenue (or gross revenue) is just one of those factors, and it is not necessarily the most important determinant of actual Late Payment revenue amounts. Other factors that influence the actual amount of Late Payment Charge revenue include:

[39] Exhibit WG (D) at pages 32-33.

1. The mix of customers by rate classification for whom late payments are billed;

2. The frequency that customers in each rate classification are billed late payment charges;

3. The number of customers in each rate class who are billed multiple late payment charges on a single monthly bill; and

4. The extent to which customers make partial payments on amounts billed before late payment charges are applied.

It is also my experience that late payment charges are frequently waived by utilities when a customer has a legitimate billing dispute and/or the customer makes a good faith effort to pay a portion of the charges billed.

Q. HOW DOES THE MIX OF CUSTOMERS BY RATE CLASSIFICATION INFLUENCE THE AMOUNT OF LATE PAYMENT CHARGE REVENUE BILLED BY THE COMPANY?

A. As demonstrated by the bill comparisons presented in Witness Wagner's Exhibit WG (M)-2, the average amount of billed charges per customer varies significantly across WG's rate classification. As the mix of customers by rate class for whom late payment charges are billed varies from Company's overall mix of customers the likelihood that Late Payment Charge Revenue will be proportional to total Gross Revenue declines.

Q. HAVE YOU DEVELOPED INFORMATION REGARDING THE FREQUENCY OF LATE PAYMENT CHARGES BY RATE CLASS?

A. Yes, I have. Starting with the Late Payment by rate class data obtained from WG's attachment to AOBA Data Request 10-20ab, I have assessed a number of late payment characteristics by rate class. The results of that assessment are presented in Exhibit AOBA (A)-8. Column (H) reflects the ratio of the number of Late Payment Charges assessed to each class divided by the average number of test year customers for the class. This ratio represents the average number of times during the test year that a customer in each class was billed a late payment charge. The frequency is greatest for Residential Heating customers and Interruptible Service customers. C&I customers have the lowest frequency of Late Payment Charge assessments. At an average of 0.48 Late Payment Charges per customer the average frequency for the C&I class is less than half the average frequency for the residential class.

Q. WHAT IS KNOWN REGARDING THE INFLUENCE OF MULTIPLE LATE PAYMENT CHARGES ON THE RELATIONSHIP ON WG'S ASSUMED RELATIONSHIP BETWEEN GROSS REVENUES AND LATE PAYMENT CHARGE REVENUES?

A. Witness Tuoriniemi's Direct Testimony indicates that customers are assessed an initial 1.0% late payment charge when a bill is in arrears for more than 20 days. A customer may also be assessed a second 1.5% late payment charge on any remaining unpaid balance if the original arrearage continues an additional 30 days.[40] Since the percentage assessed is not uniform for all customers billed late payment charges (i.e., some are billed 1.0% while others are billed a total of 2.5%), WG's late payment charge structure further reduces the potential that a strong positive correlation could be established between Late Payment Charge Revenues and Gross Revenues. Thus, in the absence of sound analytic support for the relationship that WG assumes, the Company's proposed adjustment to late payment charge revenue must be rejected. All of the information I have reviewed argues strongly against WG's assumed relationship.

Q. DO YOU TAKE THE SAME POSITION WITH RESPECT TO ADJUSTING UNCOLLECTIBLE ACCOUNTS EXPENSES TO REFLECT CHANGES IN GROSS REVENUES?

[40] Exhibit WG (D), page 32, lines 9-16.

A. No, I do not. A key difference is that uncollectible expenses are assessed against all revenue on a uniform percentage basis. That contrasts with Late Payment Charges that are only assessed in specific situations, and when assessed Late Payment charges may reflect different rates for an initial arrearage and for an arrearage of greater than 50 days. Moreover, Late Payment Charges may at times be assessed on only a portion of the full amount initially billed to a customer. All of these considerations that apply to Late Payment Charges, but not to uncollectible expenses, undermine the basis for WG's proposed Late Payment Charge adjustment.

Q. HOW SHOULD THE COMMISSION RESPOND TO WG'S PROPOSED ADJUSTMENT TO LATE PAYMENT CHARGE REVENUE?

A. The Commission should reject the Company's proposed $216,000 adjustment.

4. Funding for GTI R&D Programs

Q. DOES AOBA RECOMMEND AN ADJUSTMENT TO WG'S REQUEST FOR RECOVERY GTI COSTS?

A. Yes. As explained in the Testimony of Timothy Oliver, AOBA (B), the Commission has previously rejected WG's requests for recovery of GTI costs from District of Columbia ratepayers, and nothing in the Company's presentation in this case substantively changes the nature of request that WG presents in this proceeding. Thus, AOBA recommends that the Commission also reject WG's request in this case for recovery of GTI payments totaling $179,000.

5. WG's Overall Revenue Requirement

Q. WHAT IS THE OVERALL IMPACT OF YOUR REVENUE REQUIREMENT RECOMMENDATIONS IN THIS PROCEEDING?

A. A composite summary of the revenue requirements impacts of the rate of return, capital structure, rate base, and expense adjustments presented herein is set forth in Exhibit AOBA (A)-10. The data in Exhibit AOBA (A)-10 indicates that the combined effects of my recommended adjustments to the Company's revenue request in this proceeding yield a reduction in WG's requested revenue increase from $17.4 million to **$8.5 million**.

Q. DOES THE FOREGOING RECOMMENDATON REFLECT THE ENTIRETY OF AOBA'S POSITION ON REVENUE REQUIREMENTS ISSUES IN THIS PROCEEDING?

A. No. AOBA has limited resources and has not been able to undertake a complete review of all of WG's test year expenses, rate base additions, and revenue adjustments in this proceeding. Thus, AOBA will rely on the Office of Peoples'

Counsel and other parties (excluding the Company) to develop issues not explicitly addressed herein.

<u>D. "Fee-Free" Credit/Debit Card Bill Payment Program</u>

Q. HAS THE COMMISSION DESIGNATED A SPECIFIC ISSUE RELATING TO THE COMPANY'S "FEE FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM?

A. Yes. Issue No. 14 Order No. 18172 asks:

> *What has been the Company's actual cost experience under its fee free credit/debit card payment program? Has that program served to lower WGL's overall costs of collections and payment processing and should the Company's fee free credit/debit card payment processing be continued in its present form, modified, or discontinued?*

Q. HAVE YOU REVIEWED WG'S ACTUAL EXPERIENCE UNDER ITS "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM?

A. Yes. I have reviewed portions of the Supplemental Direct Testimonies of WG witnesses Tuoriniemi and Sluder that respond to Issue No. 14, as well as the Company's responses to data requests relating to that program. I have also reviewed the data and information relating to this program that was obtained from WG in Formal Case No. 1093.

Q. WITNESS SLUDER FOR WG ASSERTS THAT THE COMPANY'S "FEE-FREE" CREDIT/DEBIT CARD BILL PAYMENT PROGRAM IS "BENEFICIAL TO CUSTOMERS IN THE DISTRICT OF COLUMBIA." DO YOU AGREE?

A. No. A small minority of customers have utilized the program to avoid paying credit/debit card processing fees on the payments they make to WG using credit or debit cards and have benefitted in that manner. However, the vast majority of customers has not utilized that program and receives no documented benefits from the program. Yet, as part of the Company's requested revenue requirement in this proceeding, WG's costs of payment processing will increase to reflect the increased payment processing costs the Company has incurred during the test year as a result of the costs WG incurs to support this program. Thus, although a limited number of customers may benefit, the majority of WG's customers in the District of Columbia will see higher bills.

Q. HAS WG OFFERED ANY QUANTITATIVE ESTIMATES OF OTHER BENEFITS THAT CUSTOMERS MAY DERIVE THROUGH THEIR USE OF CREDIT/DEBIT CARD PAYMENTS FOR THEIR WASHINGTON GAS BILLS?

A. No, it has not.

Q. ARE THERE BILL PAYMENT ALTERNATIVES AVAILABLE TO CUSTOMERS THAT IMPOSE LOWER PAYMENT PROCESSING COST ON WG?

A. Yes. Witness Sluder's testimony identifies four other payment options, and three of the four have much lower costs per transaction than WG's credit/debit card bill payment program. Witness Sluder indicates that its cost for processing a credit/debit card payment under the purportedly "fee-free" program is $1.52 per transaction. However, as documented in Formal Case No. 1093, WG's average cost for processing Automated Clearing House ("ACH") payments is only about **$0.01 per transaction**, and WG's average costs of processing traditional check payments mailed to the Company's lockbox location is only about $0.16. Both of these options have costs that are substantially lower cost than WG's costs for processing credit/debit card payments under its "Fee-Free" Credit/Debit Card Bill Payment Program. Moreover, these two forms of payment account for roughly 90% of bill payments processed for WG on an annual basis. Only in-person payments at the Company's walk-in locations, have higher average costs per transaction than WG's credit/debit card payment processing. According to witness Sluder the Company's costs for processing walk-in payments is about $3.25 per transaction. The comparatively high cost for processing walk-in payments is a function of the low volume for those payments and the costs of personnel and facilities that must be maintained to provide a walk-in payment option.

In other words, WG can process about more than **150 ACH transactions** for the cost of processing one credit/debit card payment. Likewise, WG can process about **9.5 check payments** for the cost of processing one credit/debit card payment. But, walk-in payments have average processing costs that are more than two times the Company's average cost for credit/debit card payments.

Q. TO WHAT EXTENT IS EACH OF THESE BILL PAYMENT OPTIONS UTILIZED BY WG'S CUSTOMERS IN THE DISTRICT?

A. Attachment 3 to WG's response to AOBA Data Request 15-1 provides information regarding bill payments by type for WG on a system wide basis for FY 2012 through FY 2015 and for FY 2016 through the month of April. However, WG provides no data regarding the actual mix of payments used by DC customers.

On a system wide basis, approximately 93% of bills payments in FY 2015 were paid using either checks mailed to the Company's lockbox location or ACH payments.[41] Credits/Debit Card payments have been growing, but for FY 2015 such payments still only accounted for about 5.6% of total bill payments processed for WG. Walk-in payments during FY 2015 accounted for less than 1% of total payments.

Q. BASED ON THE FOREGOING WOULD YOU AGREE THAT, IF THE "FEE-FREE CREDIT/DEBIT CARD BILL PAYMENT PROGRAM CAN REDUCE THE NUMBER OF WALK-IN PAYMENTS ACCOMPLISHED WITH THE ASSIST-

[41] Based on the FY 2015 data in Attachment 3 to AOBA Data Request 15-1, ACH transactions were used for over 63% of total payments received by WG, and Check Payments accounted for just under 30% of payments.

ANCE OF A WG CUSTOMER SERVICE REPRESENTATIVE, WG'S OVERALL COSTS OF PROCESSING WILL BE REDUCED?

A. No. Due to the comparatively high cost of staffing walk-in facilities, significant cost savings would only be achievable if WG can greatly reduce or eliminate operations at the current walk-in locations. Once a commitment is made to operate a walk-in location for a specified time schedule each week or each month, large elements of the costs of operating the walk-in location become fixed, and fewer walk-in payments simply reduces the number of transactions over which those fixed costs can be distributed. Thus, without reduction or elimination of walk-in operations, replacement of a portion of WG's current walk-in payment volume with "Fee-Free" Credit/Debit Card Payments can be expected to cause the average cost per transaction for the remaining walk-in payments to increase.

However, it appears that the Company's offering of "Fee-Free" Credit/Debit Card Transactions has not lowered the number of Walk-in Payments recorded by WG. Rather, between FY 2012 and FY 2015 Walk-in Payments increased both in terms of the total number of annual transactions and as a percent of total transactions processed. For FY 2015 WG reports 113,653 Walk-in payments compared to 82,398 Walk-in Payment transactions in FY 2012. That represents an increase of more than 30,000 transactions per year.

Q. HOW HAS THE FEE-FREE PROGRAM IMPACTED THE COMPANY'S OVERALL COSTS OF PAYMENT PROCESSING?

A. The data provided in Attachment 3 to AOBA Data Request 15-1 the number of Late Payments and Late Payment Revenue by rate class for WG's four most recent fiscal years. Using that data, I find that the number of Credit/Debit Card transactions increased **248%** between FY 2012 and FY 2015, but that growth was achieved primarily through reductions in the number of Check Payments processed. (See Exhibit AOBA (A)-11). Check Payments to WG's Lockbox declined from over 4.2 million transactions in FY 2012 to only about 1.9 million transactions in FY 2015. However, as previously noted, WG's costs for processing Credit/Debit card payments are 9.5 times greater than its costs of processing Check Payments. Thus, for each payment shifted from Check Payment to Credit/Debit Card Payment, WG's annual payment processing costs increase by approximately **$1.36** per transaction (i.e., $1.52 - $0.16 = $1.36 per transaction).

For the entire WG system, Credit/Debit Card transactions increased from 207,610 in FY 2012 to 722,428 in FY 2015. That is an increase of nearly 515,000 Credit/Debit Card transactions. Assuming that increase was the result of customers shifting from Check Payments, the observed growth in Credit/Debit Card Payments would account for more than a **$700,000** increase in WG's total annual payment processing costs.[42] Or viewed from another perspective, I estimate that WG's average payment processing costs increased from about **$0.126** per transaction for FY 2012 to **$0.168** per transaction for FY 2015. That represents a 33.9% increase in WG's average processing costs per transaction in just three years. Further, for the first seven months of FY 2016, the same calculations render an average cost per transaction for WG of **$0.191**. That is **52%** higher than the Company's average cost per transaction for 2012.[43]

Q. DO YOU HAVE ANY CONCERNS REGARDING THE INFORMATION THAT WG HAS PROVIDED TO SUPPORT ITS COSTS FOR THE "FEE-FREE" CREDIT/DEBIT CARD PROGRAM?

A. Yes, I do. First, in the Company's **CONFIDENTIAL** response to AOBA Data Request 13-9, WG has provided invoices that reflect charges it has been billed by the payment processing company it utilizes for the "Fee-Free" Credit/Debit Card Bill Payment Program. However, the information provided is incomplete, and inconsistent with representations regarding the costs of the program that WG has offered in witness Sluder's Supplemental Direct Testimony. Second, WG's **CONFIDENTIAL** response to AOBA Data Request 13-9 suggests that, during

[42] If this computed $700,000 increase in the Company's annual payment processing costs between FY 2012 and FY 2015 is allocated among jurisdictions using WG's average meters allocation factor. The increase in WG's payment processing costs for DC is approximately $98,000 annually.

[43] The foregoing average cost per transaction estimates assume no changes in costs by type of transaction over the period analyzed. Thus, all of the computed increase in each case is attributable to changes in the mix of transaction types processed.