BOOK II

UGI UTILITIES, INC. – ELECTRIC DIVISION

BEFORE

THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Information Submitted Pursuant to

Section 53.51 et seg of the Commission's Regulations

III. RATE OF RETURN IV. RATE STRUCTURE & COST ALLOCATION V. PLANT & DEPRECIATION SUPPORTING DATA VI. UNADJUSTED COMPARATIVE BALANCE SHEETS & OPERATING INCOME STATEMENTS INDEX OF ATTACHMENTS ON CD **CD CONTAINING ATTACHMENTS**

ORIGINAL TARIFFS UGI UTILITIES, INC. – ELECTRIC DIVISION PA P.U.C. NOS. 6 & 2S

DOCKET NO. R-2017-2640058

Issued: January 26, 2018 Effective: March 27, 2018

III. RATE OF RETURN

<u>III-A-1</u>

Request:

Provide a schedule showing the major components of claimed capitalization, and the derivation of the weighted costs of capital for the rate case claim. This schedule shall include a descriptive statement concerning the major elements of changes in claimed capitalization, cost rates and overall return from comparable historical data.

Response:

Please refer to UGI Electric Exhibit B, Schedule 1 page 1, Schedule 5 page 1, and Schedule 6 pages 1, 2, 3 and 4, and the Direct Testimony of Paul R. Moul, UGI Electric Statement No. 5.

<u>III-A-2</u>

Request:

Provide a schedule in the same format as Schedule 1, except for the omission of the descriptive statement, for the most immediate comparable annual historical period prior to the test year and the two calendar years most immediately preceding the rate of return claim period. Irrespective of whether the capitalization claimed on Schedule 1 includes short-term debt, Schedule 2 should reflect capital ratios with and without short-term debt.

Response:

Please see Attachment III-A-2.

UGI UTILITIES, INC. - ELECTRIC DIVISION CAPITALIZATION SCHEDULE (Millions) FOR THE HISTORIC YEARS ENDED SEPTEMBER 30, 2015 THROUGH 2017

	Company Only - UGI Utilities, Inc With Short-Term Debt									
		<u>9/30/20</u>	<u>15</u>		<u>9/30/20</u>	16		<u>9/30/2017</u>		
	<u>/</u>	<u>Actual</u>	<u>%</u>		<u>Actual</u>	<u>%</u>		<u>Actual</u>	<u>%</u>	
Common Equity	\$	904.3	56.9	\$	956.4	55.8	\$	1,014.7	57.5	
Preferred Stock		0.0	0.0		0.0	0.0		0.0	0.0	
Short-Term Debt		63.6	4.0		85.2	5.0		0.0	0.0	
Long-Term Debt		622.0	39.1		671.4	39.2		751.1	42.5	
Total Capitalization	\$	1,589.9	100.0	\$	1,713.0	100.0	\$	1,765.8	100.0	

Company Only - UGI Utilities, Inc. - Without Short-Term Debt

	<u>9/30/2015</u> <u>Actual %</u>		<u>9/30/2016</u> <u>Actual %</u>			<u>9/30/2017</u> <u>Actual %</u>		
Common Equity Preferred Stock Long-Term Debt	\$	904.3 0.0 622.0	59.2 0.0 40.8	\$ 956.4 0.0 671.4	58.8 0.0 41.2	\$	1,014.7 0.0 751.1	57.5 0.0 42.5
Total Capitalization	\$	1,526.3	100.0	\$ 1,627.8	100.0	\$	1,765.8	100.0

<u>III-B-1</u>

Request:

Provide a schedule showing the calculation of embedded cost of long-term debt by issue, supporting the related rate case claim. The schedule shall contain the following information:

- a. Date of issue.
- b. Date of maturity.
- c. Amount issued.
- d. Amount outstanding.
- e. Amount retired.
- f. Amount reacquired.
- g. Gain or loss on reacquisition.
- h. Coupon rate.
- i. Discount or premium at issuance.
- j. Issuance expense.
- k. Net proceeds.
- 1. Sinking fund requirements.
- m. Effective cost rate.
- n. Total average weighted effective cost rate.

Projected new issues, retirements and other major changes from the comparable historic data should be clearly noted.

Response:

Please refer to UGI Electric Exhibit B, Schedule 6 pages 1, 2, 3 and 4, and the Direct Testimony of Paul R. Moul, UGI Electric Statement No. 5.

III-B-2

Request:

In the event that a claim made for a true or economic cost of debt exceeds that shown in the preceding nominal cost schedule because of convertible features, sale with warrants or for any other reason, a full statement of the basis for such a claim should be provided.

Response:

No claim is made for a cost of debt that differs from the embedded cost noted in the response to III-B-1.

<u>III-B-3</u>

Request:

Provide the following information concerning bank notes payable for test year and for latest comparable annual historical period prior to the test year:

- a. Line of credit at each bank.
- b. Average daily balances of notes to each bank, by name of bank.
- c. Interest rate charged on each bank note (Prime rate, formula rate, or other).
- d. Purpose of each bank note (for example, construction, fuel storage, working capital, debt retirement).
- e. Prospective future need for this type of financing.

Response:

- a. UGI Utilities, Inc. (the "Parent") has a five-year \$300 million revolving credit facility with a consortium of banks ("RCF") of which UGI Electric is included. The RCF matures in March, 2020. Please see Attachment III-B-3 for the commitment from each bank.
- b. The RCF is predominantly used to meet working capital needs and is more heavily utilized in the fall and winter months when inventory and receivable balances peak. The borrowings from each bank are pro rata as per their respective commitments. The average daily borrowing under the Parent's RCF was \$80,730,000 for fiscal year 2017.
- c. The interest rates for the majority of borrowings under the Parent's RCF are under the LIBOR + Applicable Margin formula. The Applicable Margin is based on public credit ratings as specified on Attachment III-B-3 The Parent has two public debt ratings (Moody's, Fitch). When there is a split rating, the Moody's rating applies unless such ratings differ by two or more levels. If ratings differ by two or more levels, the applicable level will be deemed to be one level below the higher of such levels. Based on current ratings of the Parent, the applicable margin is 0.875%.

III-B-3 (Continued)

- d. The borrowings under the \$300 million RCF are for working capital needs, CWIP and general corporate purposes.
- e. The RCF provides adequate liquidity for working capital and CWIP needs and does not mature until March 2020.

UGI Utilities, Inc. – Electric Division Line of Credit Bank Commitments and Applicable margin As of September 30, 2017

Lender Commitments of the UGI Utilities, Inc. five year, \$300 million revolving credit facility:

Lender	Commitment
PNC Bank, National Association	\$55,000,000
Citizens Bank of Pennsylvania	\$55,000,000
Citibank, N.A.	\$32,000,000
Credit Suisse AG, Cayman Islands Branch	\$32,000,000
JPMorgan Chase Bank, N.A.	\$32,000,000
Wells Fargo Bank, National Association	\$32,000,000
The Bank of New York Mellon	\$32,000,000
Bank of America, N.A.	\$30,000,000
	\$300,000,000

Applicable Margin of the UGI Utilities, Inc. five year, \$300 million revolving credit facility:

S&P/Moody's/Fitch	Margin
A/A2/A or above	0.875%
A-/A3/A-	1.00%
BBB+/Baa1/BBB+	1.125%
BBB/Baa2/BBB	1.25%
BBB-/Baa3/BBB-	1.50%
BB+/Ba1/BB+ or lower	1.75%

III-B-4

Request:

Provide detailed information concerning all other short-term debt outstanding.

Response:

The Company had no other short-term debt outstanding other than that identified in Question III-B-3.

<u>III-B-5</u>

Request:

Describe long-term debt reacquisition by issue by Company and Parent as follows:

- a. Reacquisition by issue by year.
- b. Total gain or loss on reacquisitions by issue by year.
- c. Accounting for gain or loss for income tax and book purposes.
- d. Proposed treatment of gain or loss on such reacquisition for ratemaking purposes.

Response:

UGI Electric has not reacquired debt since UGI Electric's last rate case.

III-C-1

Request:

Provide a schedule showing the calculation of the embedded cost of preferred stock equity by issue, supporting the related rate case claim. The schedule shall contain the following information:

- a. Date of issue.
- b. Date of maturity.
- c. Amount issued.
- d. Amount outstanding.
- e. Amount retired.
- f. Amount reacquired.
- g. Gain or loss on reacquistion.
- h. Dividend rate.
- i. Discount or premium at issuance.
- j. Issuance expenses.
- k. Net proceeds.
- l. Sinking fund requirements.
- m. Effective cost rate.
- n. Total average weighted effective cost rate.

Projected new issues, retirement and other major changes from the comparable historical data should be clearly noted.

Response:

The Company does not have preferred stock outstanding.

III-D-1

Request:

Provide complete support for claimed common equity rate of return.

Response:

Please refer to the Direct Testimony of Paul R. Moul, UGI Electric Statement No. 5.

III-D-2

Request:

Provide a summary statement of all stock dividends, splits or par value changes during the 2 calendar year period preceding the rate case filing.

Response:

No stock dividends, splits or par value changes have occurred during the past two calendar years preceding the rate case filing.

<u>III-D-3</u>

Request:

Provide a schedule of all issuances of common stock, whether or not underwriters are used, for the most immediately available annual historical period and the 2 calendar years most immediately preceding the test year.

Response:

There were no new issuances of common stock during the historical period or the two years preceding the test year.

III-D-4

Request:

Submit details on the utility and parent company stock offerings—past 5 years to present—as follows:

- a. Date of prospectus.
- b. Date of offering.
- c. Record date.
- d. Offering period—dates and numbers of days.
- e. Amount and number of shares offered.
- f. Offering ratio, if rights offering.
- g. Percent subscribed.
- h. Offering price.
- i. Gross proceeds per share.
- j. Expenses per share.
- k. Net proceeds per share (i j).
- 1. Market price per share.
 - 1. At record date.
 - 2. At offering date.
 - 3. One month after close of offering.
- m. Average market price during offering.
 - 1. Price per share.
 - 2. Rights per share average value of rights.
- n. Latest reported earnings per share at time of offering.
- o. Latest reported dividends at time of offering.

Response:

UGI Electric and UGI Utilities do not have publicly traded stock. UGI Corporation, the parent company of UGI Utilities, does have publicly traded stock and has not issued any publicly underwritten common stock in the last five years and has no plans to issue stock within the next year.

UGI Corporation does issue common stock annually in relation to Long Term Incentive Plans, but these are not publicly underwritten.

<u>III-E-1</u>

Request:

If a claim of the filing utility is based on utilization of the capital structure or capital costs of the parent company and system - consolidated - the reasons for this claim must be fully stated and supported.

Response:

The Company is claiming its own capital structure and capital cost rates in this case. No claim is being made for the parent company or system consolidated capital structure.

<u>III-E-2</u>

Request:

Regardless of the claim made, provide the capitalization data requested at Item III.A.2. for the parent company and for the system - consolidated.

Response:

Please see Attachment III-E-2 for the requested capitalization data.

UGI UTILITIES, INC. - ELECTRIC DIVISION CAPITALIZATION SCHEDULE (Millions) FOR THE HISTORIC YEAR ENDED SEPTEMBER 30, 2017 AND FOR THE FORECASTED YEARS ENDING SEPTEMBER 30, 2018 AND 2019

<u>9/30/2017</u> <u>9/30/2018</u> <u>9/30/2019</u>) <u>19</u>
	<u>Actua</u>	<u>%</u>		<u>Actual</u>	<u>%</u>		<u>Actual</u>	<u>%</u>
Common Equity	\$ 1,014	1.7 57.5	\$	1,085.9	56.4	\$	1,163.1	54.0
Preferred Stock	(0.0 0.0		0.0	0.0		0.0	0.0
Short-Term Debt	(0.0 0.0		0.0	0.0		0.0	0.0
Long-Term Debt	75	1.1 42.5		840.0	43.6		990.0	46.0
Total Capitalization	\$ 1,76	5.8 100.0	\$	1,925.9	100.0	\$	2,153.1	100.0

	<u>9/30/20</u>		<u>9/30/20</u>		<u>9/30/2019</u>		
	<u>Actual</u>	<u>%</u>	<u>Actual</u>	<u>%</u>	Actual	<u>%</u>	
Common Equity	\$ 1,014.7	57.5	\$ 1,085.9	56.4	\$ 1,163.1	54.0	
Preferred Stock	0.0	0.0	0.0	0.0	0.0	0.0	
Long-Term Debt	751.1	42.5	840.0	43.6	990.0	46.0	
Total Capitalization	\$ 1,765.8	100.0	\$ 1,925.9	100.0	\$ 2,153.1	100.0	

<u>III-E-3</u>

<u>Request</u>:

Provide the latest available balance sheet and income statement for the parent company and system - consolidated.

Response:

Please see the response to III-F-1.

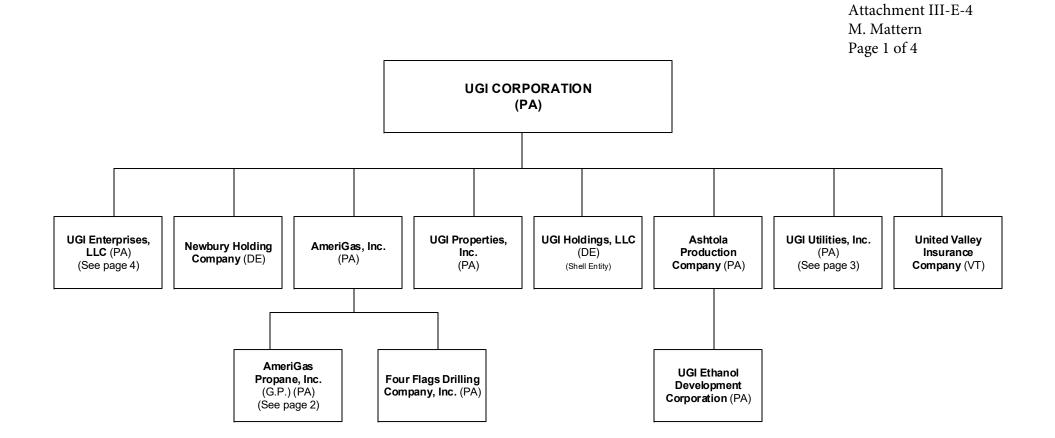
<u>III-E-4</u>

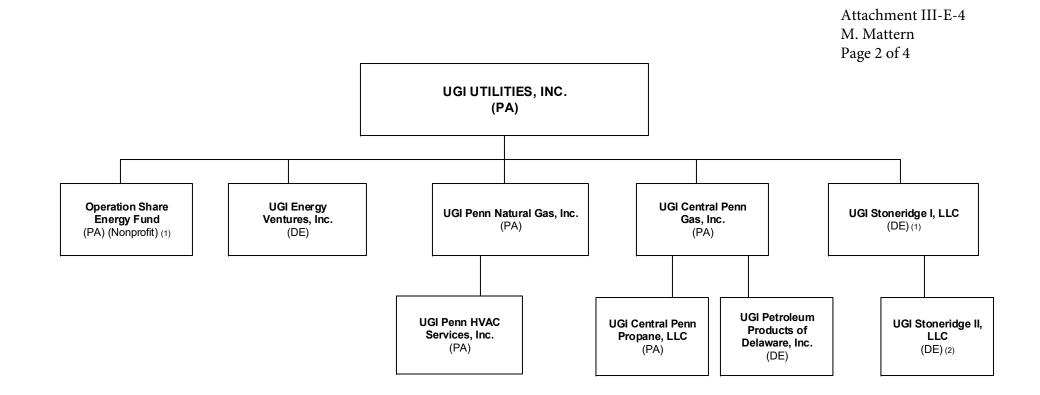
Request:

Provide an organizational chart explaining the filing utility's corporate relationship to its affiliates—system structure.

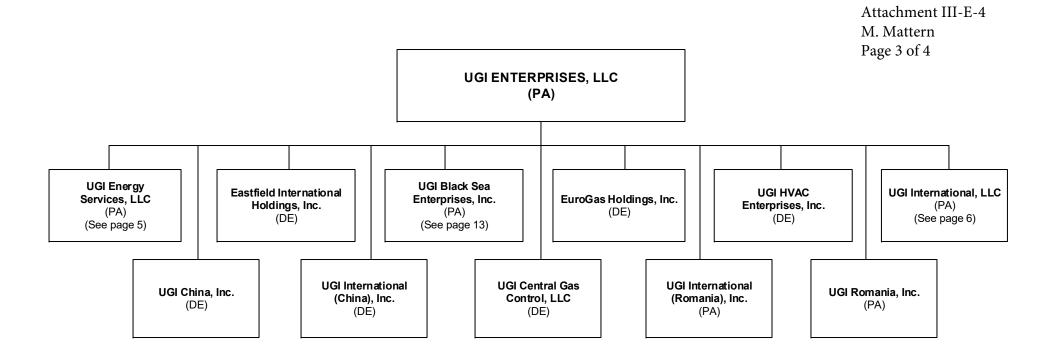
Response:

Please see Attachment III-E-4.

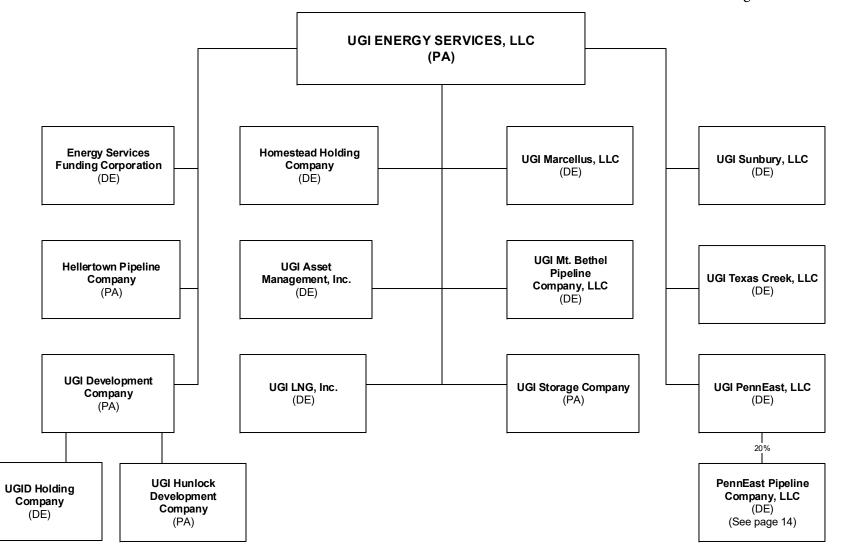




(2) UGI Stoneridge I, LLC is sole member



Attachment III-E-4 M. Mattern Page 4 of 4



<u>III-F-1</u>

Request:

The latest available quarterly operating and financial report, annual report to the stockholders and prospectus shall be supplied for the utility and for the utility's parent, if the relationship exists.

Response:

Please see the attached CD which contains the following:

Attachment III-F-1.1 - Report on Form 10-Q for UGI Corporation for the quarter ended June 30, 2017

Attachment III-F-1.2 - Report on Form 10-Q for UGI Utilities, Inc. for the quarter ended June 30, 2017

Attachment III-F-1.3 - Annual report for UGI Corporation for the year ended September 30, 2017

Attachment III-F-1.4 - Annual report for UGI Utilities, Inc. for the year ended September 30, 2017

Attachment III-F-1.5 - Prospectus supplement for issuance of UGI Corporation common stock dated March 18, 2004

Attachment III-F-1.6 - Prospectus supplement for issuance of UGI Utilities, Inc. \$108,000,000 6.375% Senior Notes due 2013 dated May 19, 2008

Attachment III-F-1.7 - Quarterly Financial Report for UGI Utilities, Inc. - Electric Division for the year ended September 30, 2017.

III-F-2

Request:

Supply projected capital requirements and sources of the filing utility, its parent and system - consolidated - for the test year and each of 3 comparable future years.

Response:

The projected capital requirements for UGI Utilities, Inc. are as follows:

FY 2017 = \$328,193,000 FY 2018 = \$327,345,000 FY 2019 = \$280,058,000

Projected information beyond the Fully Projected Future Test Year is not available.

The sources of funds will be from both internally generated funds and required external financing.

<u>III-F-3</u>

Request:

State what coverage requirements or capital structure ratios are required in the most restrictive of applicable indentures/charter tests and how these measures have been computed.

Response:

Certain of UGI Utilities Senior Notes contain the following restrictions:

- 1. Leverage Ratio The Company will maintain a ratio of Consolidated Indebtedness to Consolidated Total Capital of not greater than 0.65 to 1.00.
- 2. Priority Debt Ratio The Company will not at any time permit Consolidated Priority Debt to exceed 10% of Consolidated Total Assets.

Definitions:

Consolidated Indebtedness means at any time the Indebtedness (other than Non-Recourse Debt) of the Company and its Subsidiaries calculated on a consolidated basis as of such time

Consolidated Priority Debt means at any time the sum of:

- (a) Indebtedness of the Company or any Subsidiaries secured by Liens permitted by Section 10.5(m) of the agreement, plus (but without duplication)
- (b) Indebtedness of Subsidiaries other than:
 - Indebtedness of Subsidiaries existing as of the issuance date and described on Schedule 5.15 (and any renewals, extension, or replacement thereof without increase in the principal amount thereof);
 - (ii) Indebtedness of Subsidiaries owing to the Company or any Subsidiary;

III-F-3 (Continued)

- (iii) Acquired Subsidiary Indebtedness (and any renewal, extension or replacement thereof without increase in the principal amount thereof), provided that immediately after such acquired Subsidiary becomes a Subsidiary, no Default or Event of Default shall exist;
- (iv) Indebtedness arising under any derivatives transaction protecting against or benefiting from fluctuations in any rate or price entered into in the ordinary course of business and not for investment or speculative purposes;
- Indebtedness comprising a netting or set-off arrangement entered into by the Company or any Subsidiary in the ordinary course of its banking arrangements for the purpose of netting debit and credit balances;
- (vi) Indebtedness of Subsidiary Guarantors;
- (vii) Indebtedness of Subsidiaries secured by Liens permitted by Section 10.5(a) through (l), inclusive.

Consolidated Total Assets means the sum of the assets of the Company and its Subsidiaries determined on a consolidated basis in accordance with GAAP, as shown in the most recent consolidated financial statements published by the Company and its Subsidiaries.

Consolidated Total Capital means at any time with respect to the Company, the sum of (x) Consolidated Indebtedness plus (y) consolidated stockholders' equity of the Company and its consolidated Subsidiaries, in each case determined at such date; provided that any accumulated other comprehensive income and loss and, without duplication, any non-cash effects resulting from the application of Accounting Standards Codification 715 and any non-recurring non-cash charges and any non-recurring non-cash gains will be excluded.

Indebtedness with respect to any Person means, at any time, without duplication, (a) all indebtedness of such Person for borrowed money, (b) all obligations of such Person for the deferred purchase price of property or services (other than trade payables incurred in the ordinary course of such Person's business), (c) all obligations of such Person evidenced by notes, bonds, debentures or other similar instruments, (d) all obligations of such Person for such Person created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (even though the rights and

III-F-3 (Continued)

remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property), (e) all obligations of such Person as lessee under leases that have been or should be, in accordance with GAAP, recorded as capital leases, (f) all non-contingent obligations of such Person in respect of acceptances, letters of credit or similar extensions of credit, (g) all Indebtedness of others referred to in clauses (a) through (f) above or clause (h) below (collectively, "Guaranteed Debt") guaranteed directly or indirectly in any manner by such Person, or in effect guaranteed directly or indirectly by such Person through an agreement (1) to pay or purchase such Guaranteed Debt or to advance or supply funds for the payment or purchase of such Guaranteed Debt, (2) to purchase, sell or lease (as lessee or lessor) property, or to purchase or sell services, primarily for the purpose of enabling the debtor to make payment of such Guaranteed Debt or to assure the holder of such Guaranteed Debt against loss, (3) to supply funds to or in any other manner invest in the debtor (including any agreement to pay for property or services irrespective of whether such property is received or such services are rendered) or (4) otherwise to assure a creditor against loss, and (h) all Indebtedness referred to in clauses (a) through (g) above (including Guaranteed Debt) secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property (including, without limitation, accounts and contract rights) owned by such Person, even though such Person has not assumed or become liable for the payment of such Indebtedness.

The Company's \$300 million revolving credit agreement and \$100 million term loan also contain a covenant requiring the Company to maintain a leverage ratio of not greater than 0.65 to 1.00.

Please see Attachment III-F-3.1 for a copy of the covenant calculations for the period ended June 30, 2017.

UGI UTILITIES, INC. NOTE PURCHASE AGREEMENT Dated as of April 22, 2016 Computations pursuant to Section 10.6 as of June 30, 2017

(Dollar amounts in thousands)

Section

10.6(a): Leverage Ratio. The Company will maintain a ratio of Consolidated Indebtedness to Consolidated Total Capital of not greater than 0.65 to 1.00

Consolidated Debt		
Current maturities of long term debt	\$ 39,990	
Bank loans	50,000	
Long term debt	 711,116	\$ 801,106
Consolidated Total Capital		
Consolidated debt	801,106	
Consolidated stockholder's equity	1,007,018	
less: Accumulated other comprehensive income (loss)	 (29,424)	\$ 1,837,548
Consolidated Debt / Consolidated Total Capital	44%	
Maximum Allowable ratio of Consolidated Debt to Consolidated	65%	
Below Covenant Threshold		21%

Section

10.6(b): <u>Priority Debt Ratio</u>. The Company will not at any time permit Consolidated Priority Debt to exceed 10% of Consolidated Total Assets.

Consolidated Priority Debt Consolidated Total Assets	2,904,532
Consolidated Priority Debt / Consolidated Total Assets	0%
Maximum Allowable ratio of Consolidated Debt to Consolidated Total Capital	10%
Below Covenant Threshold	10%

III-F-4

Request:

A schedule of comparative financial data shall be supplied for the test year, the most immediately available annual historical period, prior to the test year, and the 2 calendar years most immediately preceding the test year. Changes in Moody's/S&P ratings, noted on this schedule, shall be accompanied by the Moody's/S&P writeup of such change, if available. The following financial data and ratios shall be supplied for the utility's parent, where applicable, if not available for the utility:

- a. Times interest earned ratio—pre-tax and post-tax basis.
- b. Preferred stock dividend coverage ratio—post-tax basis.
- c. Times fixed charges earned ratio—pre-tax basis.
- d. Earnings per share.
- e. Dividend per share.
- f. Average dividend yield (52-week high/low common stock price).
- g. Average book value per share.
- h. Average market price per share.
- i. Market price-book value ratio.
- j. Earnings-book value ratio (per share basis, average book value).
- k. Dividend payout ratio.
- 1. AFUDC as a % of earnings available for common equity.
- m. Construction work in progress as a % of net utility plant.
- n. Effective income tax rate.
- o. Internal cash generations as a % of total capital requirements.

Response:

Please see Attachment III-F-4.

Attachment III-F-4 M. Mattern Page 1 of 1

UGI Electric, Inc. Select Financial Data for UGI Utilities, Inc. - Consolidated For the Years Ended September 30,

	Description/Purpose	2015	2016	2017	2018	2019
a.	Times interest earned ratio - pre-tax	5.88	5.34	5.68	6.07	6.02
	Times interest earned ratio - post-tax	3.94	3.59	3.89	4.07	4.04
b.	Preferred stock dividend coverage ratio - post tax basis	N/A	N/A	N/A	N/A	N/A
с.	Times fixed charges earned ratio - pre-tax basis	5.52	4.99	5.22	5.59	5.60
d.	Earnings per share - diluted (a)	1.60	2.08	2.46	(b)	(b)
e.	Dividend per share (a)	0.890	0.930	0.975	(b)	(b)
f.	Average dividend yield (52 week high/low common stock price)	2.49%	2.33%	2.08%	(c)	(c)
g.	Average book value per share (a)	20.82	20.63	21.09	(c)	(c)
h.	Average market price per share (a)	35.59	39.73	47.71	(c)	(c)
i.	Market price-book value ratio (a)	1.71	1.93	2.26	(c)	(c)
j.	Earnings -book value ratio (per share basis, average book value) (a)	0.077	0.101	0.117	(c)	(c)
k.	Dividend payout ratio (a)	55.6%	44.7%	39.6%	(b)	(b)
I.	AFUDC as a % of earnings available for common equity	0.4%	0.8%	1.6%	1.1%	0.9%
m.	Construction work in progress as a % of net utility plant	2.3%	5.1%	4.9%	4.5%	4.2%
n.	Effective income tax rate	39.6%	40.4%	38.3%	39.5%	39.5%
о.	Internal cash generations as a % of total capital requirements	112.9%	81.8%	90.8%	88.9%	104.8%

(a) Information presented for UGI Corporation, as it is not applicable to UGI Utilities.

(b) Requested data for the Future Year Test is confidential since it deals with the release of projected financial information. This information will be made available upon request following the entry of an appropriate protective order and upon execution of a confidentiality or nondisclosure agreement to hold such information in strict confidence and not disclose it to any person, whether or not a party to the proceeding, who has not executed a similar confidentiality or nondisclosure agreement.

(c) Requested data for the Future Year Test is either unavailable or unpredictable

IV. RATE STRUCTURE & COST ALLOCATION

<u>IV-A-1</u>

Request:

Provide a summary schedule of the individual rate effects. For each state jurisdictional rate, show the following information for the test period elected:

- 1. Rate schedule designation.
- 2. For existing rates:
 - a. Customers served as of end of period.
 - b. Annual Kwh sales.
 - c. Base rate revenues adjusted for any changes in base rate application that may have occurred during the test period.
 - d. Tax surcharge revenues.
 - e. Energy Cost adjustment clause revenues.
 - f. Revenues received from other clauses or riders separately accounted for.
 - g. Total of all revenues.
- 3. For proposed rates:
 - a. Estimated number of customers whose charges for electric service will be increased or decreased as a result of this filing.
 - b. Base rate revenues:
 - 1. Annual dollar amount of increase or decrease.
 - 2. Percentage change.
 - c. Estimated tax surcharge revenues based on the assumption that the base rate changes proposed were in place.
 - d. Estimated Energy cost adjustment clause revenues.
 - e. Revenues received from other clauses or riders separately accounted for.
 - f. Total of all revenues:
 - 1. Amount of total annual dollar change.
 - 2. Percentage change.
- 4. Supplement the revenue summary to obtain a complete revenue statement of the electric business, that is, show delayed payments, other electric revenues, FERC jurisdictional sales and revenues and all other appropriate revenue items and adjustments.

IV-A-1 (Continued)

5. Develop the grand total showing total sales and revenues as adjusted and the various increases and decreases and percent effects as described above.

Response:

Please see UGI Electric Exhibit E and the Direct Testimony of David E. Lahoff, UGI Electric Statement No. 8.

<u>IV-B-1</u>

Request:

Provide a description of changes proposed for the new tariff:

- 1. For each rate schedule proposed to be modified.
- 2. For each rate schedule proposed to be deleted.
- 3. For each new rate schedule proposed to be added.

Response:

Please see UGI Electric Book XI, Exhibit F – Proposed Tariff, List of Changes, and the Direct Testimony of David E. Lahoff, UGI Electric Statement No. 8.

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - IV-C - Revenue Effects and Billing Analysis for Changed Rates Delivered on January 26, 2018

<u>IV-C-1</u>

Request:

The annual revenue effect of any proposed change to any rate must be supported by a billing analysis. This may consist of the use of bill frequency distributions or individual customer billing records for the most recent annual periods available. All billing determinants should be displayed. The blocking and corresponding prices of the existing rate and the proposed rate should be applied to the determinants to derive the base rate revenues under both present and proposed rates. The derived base rate revenues should form the basis for measuring the annual base rate effect of the rates in question for the test periods.

Response:

Please see Attachment IV-C-1 on CD for a calculation of the revenue effect of the rate change on Rate R and Rate GS1 customers. Bill frequency data for all other rate classes is not readily available; impacts for any specific consumption level (kWh and kW) may be calculated from the rate data shown on UGI Electric Exhibit E – Proof of Revenue.

<u>IV-D-1</u>

Request:

The effects of the proposed rates on monthly billing conditions should be provided as follows:

1. Residential Bill Comparisons

For each rate applicable to residential service provide a chart or tabulation which shows the dollar and percentage effect of the proposed base rate on monthly bills ranging from the use of zero kWh to 5,000 kWh at appropriate intervals.

2. General Bill Comparisons

For each rate that requires both a billing demand (kW) and kWh's as the billing determinants, provide a tabulation or graphical comparison showing the percentage effect of the proposed base rate on monthly bills using several representative demand (kW) levels, the monthly kWh for each demand selected to be in load factor increments of 10% starting at 0% and ending at 100% (730H) or by hours' use increments that covers approximately 95% of the bills.

Response:

Please see Attachment IV-D-1.

	C	Current	Pr	oposed		\$	%
kWh	Mc	onthly Bill	Мо	nthly Bill	C	hange	Change
0	\$	5.57	\$	14.00	\$	8.43	151%
50	\$	11.03	\$	19.58	\$	8.55	77%
100	\$	16.49	\$	25.16	\$	8.67	53%
150	\$	21.95	\$	30.74	\$	8.79	40%
200	\$	27.40	\$	36.31	\$	8.91	33%
250	\$	32.86	\$	41.89	\$	9.03	27%
300	\$	38.32	\$	47.47	\$	9.15	24%
350	\$	43.78	\$	53.05	\$	9.27	21%
400	\$	49.23	\$	58.63	\$	9.40	19%
450	\$	54.69	\$	64.21	\$	9.52	17%
500	\$	60.15	\$	69.79	\$	9.64	16%
550	\$	65.36	\$	75.36	\$	10.00	15%
600	\$	70.57	\$	80.94	\$	10.37	15%
650	\$	75.79	\$	86.52	\$	10.73	14%
700	\$	81.00	\$	92.10	\$	11.10	14%
750	\$	86.21	\$	97.68	\$	11.46	13%
800	\$	91.43	\$	103.26	\$	11.83	13%
850	\$	96.64	\$	108.83	\$	12.19	13%
900	\$	101.85	\$	114.41	\$	12.56	12%
950	\$	107.07	\$	119.99	\$	12.92	12%
1000	\$	112.28	\$	125.57	\$	13.29	12%
1050	\$	117.13	\$	131.15	\$	14.01	12%
1100	\$	121.99	\$	136.73	\$	14.74	12%
1150	\$	126.84	\$	142.31	\$	15.47	12%
1200	\$	131.69	\$	147.88	\$	16.19	12%
1250	\$	136.54	\$	153.46	\$	16.92	12%
1300	\$	141.39	\$	159.04	\$	17.65	12%
1350	\$	146.25	\$	164.62	\$	18.37	13%
1400	\$	151.10	\$	170.20	\$	19.10	13%
1450	\$	155.95	\$	175.78	\$	19.83	13%
1500	\$	160.80	\$	181.36	\$	20.55	13%
1550	\$	165.65	\$	186.93	\$	21.28	13%
1600	\$	170.51	\$	192.51	\$	22.01	13%
1650	\$	175.36	\$	198.09	\$	22.73	13%
1700	\$	180.21	\$	203.67	\$	23.46	13%
1750	\$	185.06	\$	209.25	\$	24.18	13%
1800	\$	189.92	\$	214.83	\$	24.91	13%
1850	\$	194.77	\$	220.40	\$	25.64	13%
1900	\$	199.62	\$	225.98	\$	26.36	13%
1950	\$	204.47	\$	231.56	\$	27.09	13%
2000	\$	209.32	\$	237.14	\$	27.82	13%

	(Current	Pr	oposed		\$	%
kWh		onthly Bill		nthly Bill	С	hange	Change
2050	\$	214.18	\$	242.72	\$	28.54	13%
2100	\$	219.03	\$	248.30	\$	29.27	13%
2150	\$	223.88	\$	253.88	\$	30.00	13%
2200	\$	228.73	\$	259.45	\$	30.72	13%
2250	\$	233.58	\$	265.03	\$	31.45	13%
2300	\$	238.44	\$	270.61	\$	32.17	13%
2350	\$	243.29	\$	276.19	\$	32.90	14%
2400	\$	248.14	\$	281.77	\$	33.63	14%
2450	\$	252.99	\$	287.35	\$	34.35	14%
2500	\$	257.84	\$	292.93	\$	35.08	14%
2550	\$	262.70	\$	298.50	\$	35.81	14%
2600	\$	267.55	\$	304.08	\$	36.53	14%
2650	\$	272.40	\$	309.66	\$	37.26	14%
2700	\$	277.25	\$	315.24	\$	37.99	14%
2750	\$	282.11	\$	320.82	\$	38.71	14%
2800	\$	286.96	\$	326.40	\$	39.44	14%
2850	\$	291.81	\$	331.97	\$	40.17	14%
2900	\$	296.66	\$	337.55	\$	40.89	14%
2950	\$	301.51	\$	343.13	\$	41.62	14%
3000	\$	306.37	\$	348.71	\$	42.34	14%
3050	\$	311.22	\$	354.29	\$	43.07	14%
3100	\$	316.07	\$	359.87	\$	43.80	14%
3150	\$	320.92	\$	365.45	\$	44.52	14%
3200	\$	325.77	\$	371.02	\$	45.25	14%
3250	\$	330.63	\$	376.60	\$	45.98	14%
3300	\$	335.48	\$	382.18	\$	46.70	14%
3350	\$	340.33	\$	387.76	\$	47.43	14%
3400	\$	345.18	\$	393.34	\$	48.16	14%
3450	\$	350.03	\$	398.92	\$	48.88	14%
3500	\$	354.89	\$	404.50	\$	49.61	14%
3550	\$	359.74	\$	410.07	\$	50.33	14%
3600	\$	364.59	\$	415.65	\$	51.06	14%
3650	\$	369.44	\$	421.23	\$	51.79	14%
3700	\$	374.30	\$	426.81	\$	52.51	14%
3750	\$	379.15	\$	432.39	\$	53.24	14%
3800	\$	384.00	\$	437.97	\$	53.97	14%
3850	\$	388.85	\$	443.54	\$	54.69	14%
3900	\$	393.70	\$	449.12	\$	55.42	14%
3950	\$	398.56	\$	454.70	\$	56.15	14%
4000	\$	403.41	\$	460.28	\$	56.87	14%
4050	\$	408.26	\$	465.86	\$	57.60	14%

	C	Current	Pr	oposed		\$		%
kWh	Mc	onthly Bill	Mo	onthly Bill	С	hange		Change
4100	\$	413.11	\$	471.44	\$	58.33	-	14%
4150	\$	417.96	\$	477.02	\$	59.05		14%
4200	\$	422.82	\$	482.59	\$	59.78		14%
4250	\$	427.67	\$	488.17	\$	60.50		14%
4300	\$	432.52	\$	493.75	\$	61.23		14%
4350	\$	437.37	\$	499.33	\$	61.96		14%
4400	\$	442.22	\$	504.91	\$	62.68		14%
4450	\$	447.08	\$	510.49	\$	63.41		14%
4500	\$	451.93	\$	516.07	\$	64.14		14%
4550	\$	456.78	\$	521.64	\$	64.86		14%
4600	\$	461.63	\$	527.22	\$	65.59		14%
4650	\$	466.49	\$	532.80	\$	66.32		14%
4700	\$	471.34	\$	538.38	\$	67.04		14%
4750	\$	476.19	\$	543.96	\$	67.77		14%
4800	\$	481.04	\$	549.54	\$	68.49		14%
4850	\$	485.89	\$	555.11	\$	69.22		14%
4900	\$	490.75	\$	560.69	\$	69.95		14%
4950	\$	495.60	\$	566.27	\$	70.67		14%
5000	\$	500.45	\$	571.85	\$	71.40		14%

	C	Current	Pr	oposed		\$	%
kWh	Mc	onthly Bill	Мо	nthly Bill	 Ch	ange	Change
0	\$	6.84	\$	6.75	\$;	(0.09)	-1%
50	\$	12.54	\$	12.45	\$	(0.09)	-1%
100	\$	18.23	\$	18.15	\$	(0.08)	0%
150	\$	23.93	\$	23.85	\$	(0.08)	0%
200	\$	29.62	\$	29.55	\$	(0.07)	0%
250	\$	35.32	\$	35.25	\$	(0.07)	0%
300	\$	41.01	\$	40.95	\$	(0.06)	0%
350	\$	46.71	\$	46.65	\$	(0.06)	0%
400	\$	52.40	\$	52.35	\$	(0.05)	0%
450	\$	58.10	\$	58.05	\$	(0.05)	0%
500	\$	63.79	\$	63.75	\$	(0.04)	0%
550	\$	69.49	\$	69.45	\$	(0.04)	0%
600	\$	75.18	\$	75.15	\$	(0.04)	0%
650	\$	80.88	\$	80.85	\$	(0.03)	0%
700	\$	86.57	\$	86.54	\$	(0.03)	0%
750	\$	92.27	\$	92.24	\$	(0.02)	0%
800	\$	97.96	\$	97.94	\$	(0.02)	0%
850	\$	103.66	\$	103.64	\$;	(0.01)	0%
900	\$	109.35	\$	109.34	\$	(0.01)	0%
950	\$	115.05	\$	115.04	\$	(0.00)	0%
1000	\$	120.74	\$	120.74	\$	0.00	0%
1050	\$	126.43	\$	126.44	\$	0.01	0%
1100	\$	132.13	\$	132.14	\$	0.01	0%
1150	\$	137.82	\$	137.84	\$	0.02	0%
1200	\$	143.52	\$	143.54	\$	0.02	0%
1250	\$	149.21	\$	149.24	\$	0.03	0%
1300	\$	154.91	\$	154.94	\$	0.03	0%
1350	\$	160.60	\$	160.64	\$	0.04	0%
1400	\$	166.30	\$	166.34	\$,	0.04	0%
1450	\$	171.99	\$	172.04	\$	0.05	0%
1500	\$	177.69	\$	177.74	\$	0.05	0%
1550	\$	183.38	\$	183.44	\$	0.05	0%
1600	\$	189.08	\$	189.14	\$	0.06	0%
1650	\$	194.77	\$	194.84	\$	0.06	0%
1700	\$	200.47	\$	200.54	\$,	0.07	0%
1750	\$	206.16	\$	206.24	\$	0.07	0%
1800	\$	211.86	\$	211.94	\$	0.08	0%
1850	\$	217.55	\$	217.64	\$	0.08	0%
1900	\$	223.25	\$	223.34	\$	0.09	0%
1950	\$	228.94	\$	229.04	\$	0.09	0%
2000	\$	234.64	\$	234.74	\$,	0.10	0%

	(Current	Pr	oposed			\$	%
kWh	Mc	onthly Bill	Мо	nthly Bill	_	Ch	ange	Change
2050	\$	240.33	\$	240.44		\$	0.10	0%
2100	\$	246.03	\$	246.13		\$	0.11	0%
2150	\$	251.72	\$	251.83		\$	0.11	0%
2200	\$	257.42	\$	257.53		\$	0.12	0%
2250	\$	263.11	\$	263.23		\$	0.12	0%
2300	\$	268.81	\$	268.93		\$	0.13	0%
2350	\$	274.50	\$	274.63		\$	0.13	0%
2400	\$	280.20	\$	280.33		\$	0.14	0%
2450	\$	285.89	\$	286.03		\$	0.14	0%
2500	\$	291.59	\$	291.73		\$	0.14	0%
2550	\$	297.28	\$	297.43		\$	0.15	0%
2600	\$	302.98	\$	303.13		\$	0.15	0%
2650	\$	308.67	\$	308.83		\$	0.16	0%
2700	\$	314.37	\$	314.53		\$	0.16	0%
2750	\$	320.06	\$	320.23		\$	0.17	0%
2800	\$	325.76	\$	325.93		\$	0.17	0%
2850	\$	331.45	\$	331.63		\$	0.18	0%
2900	\$	337.15	\$	337.33		\$	0.18	0%
2950	\$	342.84	\$	343.03		\$	0.19	0%
3000	\$	348.54	\$	348.73		\$	0.19	0%
3050	\$	354.23	\$	354.43		\$	0.20	0%
3100	\$	359.93	\$	360.13		\$	0.20	0%
3150	\$	365.62	\$	365.83		\$	0.21	0%
3200	\$	371.32	\$	371.53		\$	0.21	0%
3250	\$	377.01	\$	377.23		\$	0.22	0%
3300	\$	382.71	\$	382.93		\$	0.22	0%
3350	\$	388.40	\$	388.63		\$	0.22	0%
3400	\$	394.10	\$	394.33		\$	0.23	0%
3450	\$	399.79	\$	400.03		\$	0.23	0%
3500	\$	405.49	\$	405.72		\$	0.24	0%
3550	\$	411.18	\$	411.42		\$	0.24	0%
3600	\$	416.88	\$	417.12		\$	0.25	0%
3650	\$	422.57	\$	422.82		\$	0.25	0%
3700	\$	428.27	\$	428.52		\$	0.26	0%
3750	\$	433.96	\$	434.22		\$	0.26	0%
3800	\$	439.66	\$	439.92		\$	0.27	0%
3850	\$	445.35	\$	445.62		\$	0.27	0%
3900	\$	451.04	\$	451.32		\$	0.28	0%
3950	\$	456.74	\$	457.02		\$	0.28	0%
4000	\$	462.43	\$	462.72		\$	0.29	0%
4050	\$	468.13	\$	468.42		\$	0.29	0%

	Current		P	Proposed		\$		%
kWh	Mc	onthly Bill	Μ	onthly Bill		Cł	nange	Change
4100	\$	473.82	\$	474.12		\$	0.30	0%
4150	\$	479.52	\$	479.82		\$	0.30	0%
4200	\$	485.21	\$	485.52		\$	0.31	0%
4250	\$	490.91	\$	491.22		\$	0.31	0%
4300	\$	496.60	\$	496.92		\$	0.31	0%
4350	\$	502.30	\$	502.62		\$	0.32	0%
4400	\$	507.99	\$	508.32		\$	0.32	0%
4450	\$	513.69	\$	514.02		\$	0.33	0%
4500	\$	519.38	\$	519.72		\$	0.33	0%
4550	\$	525.08	\$	525.42		\$	0.34	0%
4600	\$	530.77	\$	531.12		\$	0.34	0%
4650	\$	536.47	\$	536.82		\$	0.35	0%
4700	\$	542.16	\$	542.52		\$	0.35	0%
4750	\$	547.86	\$	548.22		\$	0.36	0%
4800	\$	553.55	\$	553.92		\$	0.36	0%
4850	\$	559.25	\$	559.61		\$	0.37	0%
4900	\$	564.94	\$	565.31		\$	0.37	0%
4950	\$	570.64	\$	571.01		\$	0.38	0%
5000	\$	576.33	\$	576.71		\$	0.38	0%

		С	urrent	Pr	oposed	\$	%
kWh	<u> </u>	Мо	nthly Bill	Мо	nthly Bill	 Change	Change
	0	\$	5.57	\$	14.00	\$ 8.43	151%
	50	\$	10.85	\$	19.31	\$ 8.46	78%
-	100	\$	16.13	\$	24.63	\$ 8.50	53%
	150	\$	21.41	\$	29.94	\$ 8.53	40%
	200	\$	26.69	\$	35.25	\$ 8.57	32%
	250	\$	31.96	\$	40.57	\$ 8.60	27%
	300	\$	37.24	\$	45.88	\$ 8.64	23%
ŝ	350	\$	42.52	\$	51.19	\$ 8.67	20%
4	400	\$	47.80	\$	56.50	\$ 8.71	18%
4	450	\$	53.08	\$	61.82	\$ 8.74	16%
!	500	\$	58.35	\$	67.13	\$ 8.78	15%
!	550	\$	62.03	\$	70.79	\$ 8.76	14%
(600	\$	65.70	\$	74.45	\$ 8.75	13%
(650	\$	69.37	\$	78.10	\$ 8.73	13%
-	700	\$	73.05	\$	81.76	\$ 8.71	12%
-	750	\$	76.72	\$	85.42	\$ 8.70	11%
5	800	\$	80.40	\$	89.07	\$ 8.68	11%
5	850	\$	84.07	\$	92.73	\$ 8.66	10%
9	900	\$	87.74	\$	96.39	\$ 8.65	10%
9	950	\$	91.42	\$	100.05	\$ 8.63	9%
10	000	\$	95.09	\$	103.70	\$ 8.61	9%
10	050	\$	113.37	\$	125.58	\$ 12.21	11%
11	100	\$	118.04	\$	130.89	\$ 12.85	11%
11	150	\$	122.71	\$	136.20	\$ 13.49	11%
12	200	\$	127.38	\$	141.51	\$ 14.13	11%
12	250	\$	132.06	\$	146.83	\$ 14.77	11%
13	300	\$	136.73	\$	152.14	\$ 15.41	11%
13	350	\$	141.40	\$	157.45	\$ 16.05	11%
14	400	\$	146.07	\$	162.77	\$ 16.69	11%
14	450	\$	150.75	\$	168.08	\$ 17.33	11%
1	500	\$	155.42	\$	173.39	\$ 17.97	12%
1	550	\$	160.09	\$	178.71	\$ 18.61	12%
10	600	\$	164.77	\$	184.02	\$ 19.25	12%
10	650	\$	169.44	\$	189.33	\$ 19.89	12%
17	700	\$	174.11	\$	194.65	\$ 20.53	12%
17	750	\$	178.78	\$	199.96	\$ 21.17	12%
18	800	\$	183.46	\$	205.27	\$ 21.81	12%
	850	\$	188.13	\$	210.58	\$ 22.46	12%
19	900	\$	192.80	\$	215.90	\$ 23.10	12%
19	950	\$	197.47	\$	221.21	\$ 23.74	12%
20	000	\$	202.15	\$	226.52	\$ 24.38	12%

	C	Current	Pro	oposed		\$		%
kWh	Mc	onthly Bill	Mo	nthly Bill	 Cł	ange	_	Change
2050	\$	206.82	\$	231.84	\$;	25.02		12%
2100	\$	211.49	\$	237.15	\$	25.66		12%
2150	\$	216.17	\$	242.46	\$	26.30		12%
2200	\$	220.84	\$	247.78	\$	26.94		12%
2250	\$	225.51	\$	253.09	\$	27.58		12%
2300	\$	230.18	\$	258.40	\$	28.22		12%
2350	\$	234.86	\$	263.72	\$	28.86		12%
2400	\$	239.53	\$	269.03	\$	29.50		12%
2450	\$	244.20	\$	274.34	\$	30.14		12%
2500	\$	248.87	\$	279.65	\$	30.78		12%
2550	\$	253.55	\$	284.97	\$	31.42		12%
2600	\$	258.22	\$	290.28	\$	32.06		12%
2650	\$	262.89	\$	295.59	\$	32.70		12%
2700	\$	267.57	\$	300.91	\$	33.34		12%
2750	\$	272.24	\$	306.22	\$	33.98		12%
2800	\$	276.91	\$	311.53	\$	34.62		13%
2850	\$	281.58	\$	316.85	\$	35.26		13%
2900	\$	286.26	\$	322.16	\$	35.90		13%
2950	\$	290.93	\$	327.47	\$	36.54		13%
3000	\$	295.60	\$	332.79	\$;	37.18		13%
3050	\$	300.27	\$	338.10	\$	37.82		13%
3100	\$	304.95	\$	343.41	\$	38.47		13%
3150	\$	309.62	\$	348.73	\$	39.11		13%
3200	\$	314.29	\$	354.04	\$	39.75		13%
3250	\$	318.96	\$	359.35	\$	40.39		13%
3300	\$	323.64	\$	364.66	\$	41.03		13%
3350	\$	328.31	\$	369.98	\$	41.67		13%
3400	\$	332.98	\$	375.29	\$	42.31		13%
3450	\$	337.66	\$	380.60	\$ 5	42.95		13%
3500	\$	342.33	\$	385.92	\$ 5	43.59		13%
3550	\$	347.00	\$	391.23	\$;	44.23		13%
3600	\$	351.67	\$	396.54	\$;	44.87		13%
3650	\$	356.35	\$	401.86	\$	45.51		13%
3700	\$	361.02	\$	407.17	\$;	46.15		13%
3750	\$	365.69	\$	412.48	\$;	46.79		13%
3800	\$	370.36	\$	417.80	\$	47.43		13%
3850	\$	375.04	\$	423.11	\$	48.07		13%
3900	\$	379.71	\$	428.42	\$	48.71		13%
3950	\$	384.38	\$	433.73	\$	49.35		13%
4000	\$	389.06	\$	439.05	\$	49.99		13%
4050	\$	393.73	\$	444.36	\$ 5	50.63		13%

kWhMonthly BillMonthly BillChange4100\$ 398.40\$ 449.67\$ 51.27	Change 13% 13%
4100 \$ 398.40 \$ 449.67 \$ 51.27	13%
4150 \$ 403.07 \$ 454.99 \$ 51.91	1.001
4200 \$ 407.75 \$ 460.30 \$ 52.55	13%
4250 \$ 412.42 \$ 465.61 \$ 53.19	13%
4300 \$ 417.09 \$ 470.93 \$ 53.84	13%
4350 \$ 421.76 \$ 476.24 \$ 54.48	13%
4400 \$ 426.44 \$ 481.55 \$ 55.12	13%
4450 \$ 431.11 \$ 486.87 \$ 55.76	13%
4500 \$ 435.78 \$ 492.18 \$ 56.40	13%
4550 \$ 440.45 \$ 497.49 \$ 57.04	13%
4600 \$ 445.13 \$ 502.80 \$ 57.68	13%
4650 \$ 449.80 \$ 508.12 \$ 58.32	13%
4700 \$ 454.47 \$ 513.43 \$ 58.96	13%
4750 \$ 459.15 \$ 518.74 \$ 59.60	13%
4800 \$ 463.82 \$ 524.06 \$ 60.24	13%
4850 \$ 468.49 \$ 529.37 \$ 60.88	13%
4900 \$ 473.16 \$ 534.68 \$ 61.52	13%
4950 \$ 477.84 \$ 540.00 \$ 62.16	13%
5000 \$ 482.51 \$ 545.31 \$ 62.80	13%

Average Demand of 5 kW

Hours	Load		(Current	Pr	roposed		\$	%
Use	Factor	kWh	Mo	onthly Bill	Мо	onthly Bill	С	hange	Change
0	0.0%	0	\$	19.16	\$	17.95	\$	(1.21)	-6%
73	10.0%	365	\$	57.12	\$	56.21	\$	(0.90)	-2%
146	20.0%	730	\$	95.08	\$	94.48	\$	(0.60)	-1%
219	30.0%	1095	\$	132.33	\$	132.09	\$	(0.24)	0%
292	40.0%	1460	\$	167.59	\$	167.88	\$	0.29	0%
365	50.0%	1825	\$	202.85	\$	203.66	\$	0.81	0%
438	60.0%	2190	\$	238.11	\$	239.45	\$	1.34	1%
511	70.0%	2555	\$	273.21	\$	275.08	\$	1.87	1%
584	80.0%	2920	\$	307.47	\$	309.87	\$	2.41	1%
657	90.0%	3285	\$	341.72	\$	344.66	\$	2.95	1%
730	100.0%	3650	\$	375.97	\$	379.46	\$	3.49	1%

Average Demand of 15 kW

Hours	Load		Current	Proposed	\$	%
Use	Factor	kWh	Monthly Bill	Monthly Bill	Change	Change
0	0.0%	-	\$ 57.47	\$ 53.85	\$ (3.62)	-6%
73	10.0%	1,095	\$ 171.35	\$ 168.64	\$ (2.71)	-2%
146	20.0%	2,190	\$ 285.23	\$ 283.43	\$ (1.80)	-1%
219	30.0%	3,285	\$ 396.99	\$ 396.28	\$ (0.72)	0%
292	40.0%	4,380	\$ 502.77	\$ 503.63	\$ 0.86	0%
365	50.0%	5,475	\$ 608.54	\$ 610.99	\$ 2.44	0%
438	60.0%	6,570	\$ 714.32	\$ 718.34	\$ 4.02	1%
511	70.0%	7,665	\$ 819.64	\$ 825.24	\$ 5.61	1%
584	80.0%	8,760	\$ 922.40	\$ 929.62	\$ 7.22	1%
657	90.0%	9,855	\$ 1,025.15	\$ 1,033.99	\$ 8.84	1%
730	100.0%	10,950	\$ 1,127.91	\$ 1,138.37	\$ 10.46	1%

Average Demand of 25 kW

Hours	Load		Current	Proposed	\$	%
Use	Factor	kWh	Monthly Bill	Monthly Bill	Change	Change
0	0.0%	-	\$ 84.18	\$ 78.30	\$ (5.88)	-7%
73	10.0%	1,825	\$ 273.97	\$ 269.61	\$ (4.36)	-2%
146	20.0%	3,650	\$ 463.77	\$ 460.93	\$ (2.84)	-1%
219	30.0%	5,475	\$ 650.05	\$ 649.01	\$ (1.04)	0%
292	40.0%	7,300	\$ 826.34	\$ 827.94	\$ 1.59	0%
365	50.0%	9,125	\$ 1,002.63	\$ 1,006.86	\$ 4.23	0%
438	60.0%	10,950	\$ 1,178.93	\$ 1,185.78	\$ 6.86	1%
511	70.0%	12,775	\$ 1,354.46	\$ 1,363.96	\$ 9.50	1%
584	80.0%	14,600	\$ 1,525.72	\$ 1,537.92	\$ 12.20	1%
657	90.0%	16,425	\$ 1,696.98	\$ 1,711.87	\$ 14.90	1%
730	100.0%	18,250	\$ 1,868.24	\$ 1,885.83	\$ 17.59	1%

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - IV-E - Cost of Service Study, Allocations to Each Tariff Rate Schedule Delivered on January 26, 2018

<u>IV-E-1</u>

Request:

Provide a cost study which allocates the total cost of service to each proposed tariff rate schedule. Tariff rates schedules may be combined for this purpose provided that they are of a similar supply or end use nature. A statement describing which rates were combined and the reasons therefor should be submitted.

The rates of return for each tariff rate schedule as defined above should be determined at both the present and proposed rate levels. Base rate revenues should be used for this purpose unless there are good and sufficient reasons to include revenues derived from other sources. Should the latter be the case, an explanation of other revenue sources included and reasons therefor should accompany the cost allocation study.

The methods selected for use in allocating costs to rate classes should include cost analyses based on:

a. Peak responsibility.

b. Average and excess, on a non-coincident demand basis.

c. Company preferred method if different from the above-referenced methods, with rationale behind the selection.

This study should include a statement of the source and age of the load data used in the determination of demand responsibilities, a description of any special studies used to prepare the cost study, and the most recent overall system line loss study.

The cost data used in the allocation study may be based on the test year.

Response:

Please see UGI Electric Book IX, Exhibit D – Cost of Service Study and the Direct Testimony of John D. Taylor, UGI Electric Statement No. 6. Also, for further clarification of rate classes, please see the Direct Testimony of David E. Lahoff, UGI Electric Statement No. 8.

Prepared by or under the supervision of: John D. Taylor

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - IV-E - Cost of Service Study, Allocations to Each Tariff Rate Schedule Delivered on January 26, 2018

<u>IV-E-2</u>

Request:

Provide comparisons in either graphical or tabular form showing cost, as defined in the cost of service study, and proposed base rate revenues and usage for all residential and demand/energy rate schedules. Demand shall be for representative loads for each demand/energy rate schedule.

Response:

Please see the Direct Testimony of John D. Taylor, UGI Electric Statement No. 6, for the requested information.

Prepared by or under the supervision of: John D. Taylor

V. PLANT & DEPRECIATION SUPPORTING DATA

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-A - Adjusted Original Cost Plant with Accum Book & Calc Depn at Test Year-End Delivered on January 26, 2018

<u>V-A-1</u>

Request:

Provide schedules supporting claimed amounts for Electric Plant in Service by function and by account if available.

Response:

Supporting schedules for Electric Plant in Service at September 30, 2017 are contained on pages II-3 through II-4 and pages III-4 through III-60 of UGI Electric Exhibit C (Historic).

Supporting schedules for Electric Plant in Service at September 30, 2018 are contained on pages V-4 through V-5 and pages VII-4 through V-58 of UGI Electric Exhibit C (Future).

Supporting schedules for Electric Plant in Service at September 30, 2019 are contained on pages II-3 through II-4 and pages III-4 through III-56 of UGI Electric Exhibit C (Fully Projected).

Prepared by or under the supervision of: John F. Wiedmayer

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-A - Adjusted Original Cost Plant with Accum Book & Calc Depn at Test Year-End Delivered on January 26, 2018

<u>V-A-2</u>

Request:

Provide a comparison of calculated depreciation reserve versus book reserve at the end of the test year. Provide this comparison by functional group and by account if available.

Response:

The comparisons are set forth on the pages which follow. Attachment V-A-2 presents the comparison of calculated and book reserves as of the end of the respective test year-end periods.

Prepared by or under the supervision of: John F. Wiedmayer

COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK RESERVE AS OF SEPTEMBER 30, 2017

	ACCOUNT	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
ELECTRIC	<u>PLANT</u>		
DISTRI	BUTION PLANT		
361	STRUCTURES AND IMPROVEMENTS	8,172	7,361
362	STATION EQUIPMENT	386,449	136,836
364	POLES, TOWERS AND FIXTURES	12,159,213	12,500,003
365	OVERHEAD CONDUCTORS AND DEVICES	9,031,231	9,696,167
366	UNDERGROUND CONDUIT	1,364,985	1,811,798
367	UNDERGROUND CONDUCTORS AND DEVICES	3,037,777	2,696,846
368.1	TRANSFORMERS	6,001,351	7,113,929
368.2	TRANSFORMER INSTALLATIONS	4,261,292	4,977,211
369	SERVICES	5,142,589	6,251,682
370.1	METERS	1,749,624	1,904,272
370.2	METER INSTALLATIONS	633,164	683,500
370.3	ELECTRONIC METERS	2,717,523	3,316,563
371	INSTALLATIONS ON CUSTOMER PREMISES	774,079	730,370
371.5	INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS	274,547	311,695
373	STREET LIGHTING AND SIGNAL SYSTEMS	775,909	826,763
	DISTRIBUTION PLANT	48,317,905	52,964,996
			02,001,000
			754 000
390.1	STRUCTURES AND IMPROVEMENTS	556,551	751,929
390.2	IMPROVEMENTS TO LEASED PROPERTY	53,383	63,803
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	11,657	11,472
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	6,624	10,623
391.92	OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWARE	546,924	517,036
392.2	TRANSPORTATION EQUIPMENT - TRUCKS	0	100
393	STORES EQUIPMENT	12,621	12,827
394	TOOLS, SHOP AND GARAGE EQUIPMENT	320,700	322,714
395	LABORATORY EQUIPMENT	83,095	83,567
396	POWER OPERATED EQUIPMENT	126,084	143,170
397	COMMUNICATION EQUIPMENT	861,472	864,570
398	MISCELLANEOUS EQUIPMENT	69,150	68,903
TOTAL	GENERAL PLANT	2,648,261	2,850,714
TOTAL	DEPRECIABLE PLANT	50,966,166	55,815,710
OTHER UT	ILITY PLANT*		
COMM0 390.2	ON PLANT STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY	137,574	77,496
390.2 391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	343,551	173,431
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	137,944	96.429
392.1	TRANSPORTATION EQUIPMENT - CARS	56,187	63,262
	COMMON PLANT	675,256	410,618
INFORM	IATION SERVICES (IS)		
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	59,227	59,091
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	2,990,930	2,776,901
391.3	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 10 YEARS	13,904,244	14,295,647
391.4	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 15 YEARS	9,048,623	7,227,155
	INFORMATION SERVICES	26,003,024	24,358,794
READIN	IG SERVICE CENTER		
390	STRUCTURES AND IMPROVEMENTS	1,127,043	1,196,596
TOTAL OT	HER UTILITY PLANT	27,805,323	25,966,008

COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK RESERVE AS OF SEPTEMBER 30, 2018

	ACCOUNT	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
ELECTRIC			
361	STRUCTURES AND IMPROVEMENTS	8,309	7,647
362		289,795	65,347
364	POLES, TOWERS AND FIXTURES	12,693,093	12,836,360
365	OVERHEAD CONDUCTORS AND DEVICES	9,611,220	10,349,964
366		1,436,702	1,849,398
367	UNDERGROUND CONDUCTORS AND DEVICES	3,113,711	2,751,761
368.1		6,130,356	7,213,446
368.2	TRANSFORMER INSTALLATIONS	4,438,424	5,106,927
369	SERVICES	5,372,756	6,505,019
370.1	METERS	1,783,648	1,949,884
370.2	METER INSTALLATIONS	659,077	711,001
370.3	ELECTRONIC METERS	2,912,619	3,468,920
371	INSTALLATIONS ON CUSTOMER PREMISES	820,656	820,517
371.5	INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS	281,032	317,118
373	STREET LIGHTING AND SIGNAL SYSTEMS	749,947	768,258
TOTAL	DISTRIBUTION PLANT	50,301,345	54,721,567
390.1	STRUCTURES AND IMPROVEMENTS	601,260	813,557
390.2	IMPROVEMENTS TO LEASED PROPERTY	0	0
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	16,339	16,219
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	19,608	20,263
391.92	OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWARE	75,000	10,627
392.2	TRANSPORTATION EQUIPMENT - TRUCKS	0	0
393	STORES EQUIPMENT	1,126	839
394	TOOLS, SHOP AND GARAGE EQUIPMENT	364,942	366,605
395	LABORATORY EQUIPMENT	100,024	100,361
396	POWER OPERATED EQUIPMENT	128,488	143,476
397	COMMUNICATION EQUIPMENT	745,943	736,111
398	MISCELLANEOUS EQUIPMENT	59,181	58,229
TOTAL	GENERAL PLANT	2,111,911	2,266,287
TOTAL	DEPRECIABLE PLANT	52,413,256	56,987,854
OTHER UT	LITY PLANT*		
COMMC 390.2	IN PLANT STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY	154.739	134.707
390.2 391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	385,572	232,426
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	36,370	11,462
392.1	TRANSPORTATION EQUIPMENT - CARS	59,445	65,970
	COMMON PLANT	<u> </u>	444,565
TOTAL		030,120	444,505
	ATION SERVICES (IS)		
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	37,549	36,966
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	4,223,569	4,061,171
391.3	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 10 YEARS	4,154,438	4,420,391
391.4	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 15 YEARS	14,744,054	13,284,023
TOTAL	NFORMATION SERVICES	23,159,610	21,802,551
READIN	G SERVICE CENTER		
390	STRUCTURES AND IMPROVEMENTS	1,192,701	1,259,462
TOTAL OT	IER UTILITY PLANT	24,988,437	23,506,578

COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK RESERVE AS OF SEPTEMBER 30, 2019

	ACCOUNT	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
ELECTRIC	PLANT		
וסדפות	BUTION PLANT		
361	STRUCTURES AND IMPROVEMENTS	8,445	7,925
362	STATION EQUIPMENT	315,989	(97,494)
364	POLES, TOWERS AND FIXTURES	13,256,309	13,198,673
365	OVERHEAD CONDUCTORS AND DEVICES	10,235,292	11,039,807
366	UNDERGROUND CONDUCTORS AND DEVICES	1,520,436	1,897,136
367	UNDERGROUND CONDUCTORS AND DEVICES		
	TRANSFORMERS	3,219,591	2,840,097
368.1		6,270,881	7,316,624
368.2	TRANSFORMER INSTALLATIONS	4,630,235	5,258,717
369	SERVICES	5,618,862	6,759,780
370.1	METERS	1,816,032	1,991,811
370.2	METER INSTALLATIONS	685,056	737,710
370.3	ELECTRONIC METERS	3,095,918	3,619,025
371	INSTALLATIONS ON CUSTOMER PREMISES	864,509	899,167
371.5	INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS	287,013	321,950
373	STREET LIGHTING AND SIGNAL SYSTEMS	726,603	715,138
TOTAL	DISTRIBUTION PLANT	52,551,171	56,506,066
390.1	AL PLANT STRUCTURES AND IMPROVEMENTS	27.847	(270 560)
		7 -	(378,568)
390.2	IMPROVEMENTS TO LEASED PROPERTY	0	0
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	24,449	24,319
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	41,729	41,942
391.92	OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWARE	225,000	174,952
392.2	TRANSPORTATION EQUIPMENT - TRUCKS	0	0
393	STORES EQUIPMENT	1,448	1,205
394	TOOLS, SHOP AND GARAGE EQUIPMENT	396,787	396,578
395	LABORATORY EQUIPMENT	105,800	105,454
396	POWER OPERATED EQUIPMENT	130,536	143,753
397	COMMUNICATION EQUIPMENT	492,765	473,101
398	MISCELLANEOUS EQUIPMENT	27,180	25,243
TOTAL	GENERAL PLANT	1,473,541	1,007,979
TOTAL	DEPRECIABLE PLANT	54,024,712	57,514,045
OTHER UT	ILITY PLANT*		
COMM	ON PLANT		
390.1	STRUCTURES AND IMPROVEMENTS	763,518	803.197
390.1			, -
	STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY OFFICE FURNITURE AND EQUIPMENT - FURNITURE	0	0 388.464
391		491,750	/ -
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	298,493	666,190
392.1	TRANSPORTATION EQUIPMENT - CARS	61,915	68,155
TOTAL	COMMON PLANT	1,615,676	1,926,006
INFOR	MATION SERVICES (IS)		
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	33,574	33,035
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	5,348,860	5,133,432
391.3	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 10 YEARS	4,450,137	4,603,370
391.3	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 10 YEARS	22,299,405	21,063,492
	INFORMATION SERVICES	32,131,976	30,833,329
IOTAL		52,151,575	00,000,029
READI	NG SERVICE CENTER		
390	STRUCTURES AND IMPROVEMENTS	1,258,184	1,321,933
TOTAL OT	HER UTILITY PLANT	35,005,836	34,081,268

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-A - Adjusted Original Cost Plant with Accum Book & Calc Depn at Test Year-End Delivered on January 26, 2018

<u>V-A-3</u>

Request:

Provide supporting schedules which indicate the procedures and calculations employed to develop the original cost plant and applicable reserves to the test year end as submitted in the current proceeding.

Response:

Supporting schedules developing original cost plant are listed on Table 3 of UGI Electric Exhibit C (Future) and UGI Electric Exhibit C (Fully Projected).

The development of book reserve is set forth on Table 2 of UGI Electric Exhibit C (Future) and Table 2 UGI Electric Exhibit C (Fully Projected).

Prepared by or under the supervision of: John F. Wiedmayer

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-A - Adjusted Original Cost Plant with Accum Book & Calc Depn at Test Year-End Delivered on January 26, 2018

<u>V-A-4</u>

Request:

Provide a schedule showing details of rate case adjustments.

Response:

Please see Schedule D of UGI Electric Exhibit A (Fully Projected), UGI Electric Exhibit A (Future), and UGI Electric Exhibit A (Historic).

Prepared by or under the supervision of: Megan Mattern

UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-B - Adjusted Original Cost Annual Book & Calculated Depreciation Accruals Delivered on January 26, 2018

<u>V-B-1</u>

Request:

Provide a comparison of calculated depreciation accruals versus book accruals by function and by account if available.

Response:

The comparison of the calculated depreciation accruals versus book accruals by function and by account are presented on the following pages as Attachment V-B-1. Attachment V-B-1 presents the comparison of the calculated depreciation accruals versus book accruals by function and by account as of September 30, 2018 and September 30, 2019, respectively.

The book accruals for the future test year period were determined using the calculated annual accrual rates as of September 30, 2017 and the average annual plant balances for the future test year period. The calculated annual accrual rates as of September 30, 2018, and average monthly plant balances are the bases for book accruals during the period October 1, 2018 through September 30, 2019.

Prepared by or under the supervision of: John F. Wiedmayer

COMPARISON OF CALCULATED AND BOOK DEPRECIATION ACCRUALS AS OF SEPTEMBER 30, 2018

	ACCOUNT	CALCULATED DEPRECIATION ACCRUALS	BOOK DEPRECIATION ACCRUALS
. <u> </u>	(1)	(2)	(3)
ELECTRIC	PLANT_		
DISTRIE	BUTION PLANT		
361	STRUCTURES AND IMPROVEMENTS	278	286
362	STATION EQUIPMENT	167,555	169,042
364	POLES, TOWERS AND FIXTURES	805,462	770,738
365	OVERHEAD CONDUCTORS AND DEVICES	797,822	767,907
366	UNDERGROUND CONDUIT	96,969	91,468
367	UNDERGROUND CONDUCTORS AND DEVICES	275,335	258,781
368.1	TRANSFORMERS	282,821	270,829
368.2	TRANSFORMER INSTALLATIONS	243,175	226,097
369	SERVICES	261,407	251,268
370.1	METERS	61,972	65,612
370.2	METER INSTALLATIONS	25,215	25,174
370.3	ELECTRONIC METERS	161,828	164,357
371	INSTALLATIONS ON CUSTOMER PREMISES	72,696	81,636
371.5	INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS	4,838	5,423
373	STREET LIGHTING AND SIGNAL SYSTEMS	49,877	44,200
TOTAL	DISTRIBUTION PLANT	3,307,250	3,192,818
390.1	AL PLANT STRUCTURES AND IMPROVEMENTS	29,538	32.214
390.1	IMPROVEMENTS TO LEASED PROPERTY	29,558	52,214 0
390.2 391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	7,749	4,747
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	20,894	9,640
391.1	OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWARE	164,305	101.284
392.2	TRANSPORTATION EQUIPMENT - TRUCKS	104,303	01,204
393	STORES EQUIPMENT	366	451
394	TOOLS, SHOP AND GARAGE EQUIPMENT	46,892	43,891
395	LABORATORY EQUIPMENT	16,274	16,794
396	POWER OPERATED EQUIPMENT	282	306
397	COMMUNICATION EQUIPMENT	99,956	101,504
398	MISCELLANEOUS EQUIPMENT	6,763	8,120
	GENERAL PLANT	393,019	318,951
TOTAL	DEPRECIABLE PLANT	3,700,269	3,511,769
		<u> </u>	<u> </u>
OTHER UT	LITY PLANT*		
		~ ~ ~ ~ ~	
390.2		28,614	57,211
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	59,480	58,995
391.1		27,586	41,338
392.1	TRANSPORTATION EQUIPMENT - CARS COMMON PLANT	2,188 117,868	2,708 160,252
IOTAL	COMMON FLANT	117,000	100,252
INFORM	IATION SERVICES (IS)		
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	2,397	2,505
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	1,865,274	1,895,635
391.3	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 10 YEARS	714,196	716,513
391.4	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 15 YEARS	6,335,868	6,056,868
TOTAL	INFORMATION SERVICES	8,917,735	8,671,521
	G SERVICE CENTER		
390	STRUCTURES AND IMPROVEMENTS	62,433	62,866
050		02,433	02,000
TOTAL OT	HER UTILITY PLANT	9,098,036	8,894,639

COMPARISON OF CALCULATED AND BOOK DEPRECIATION ACCRUALS AS OF SEPTEMBER 30, 2019

	ACCOUNT	CALCULATED DEPRECIATION ACCRUALS	BOOK DEPRECIATION ACCRUALS
	(1)	(2)	(3)
ELECTRIC	PLANT		
DISTOU			
361	BUTION PLANT STRUCTURES AND IMPROVEMENTS	269	278
362	STATION EQUIPMENT	209 276,863	278 202,602
364	POLES, TOWERS AND FIXTURES	868,526	831,252
365	OVERHEAD CONDUCTORS AND DEVICES	863,094	828,776
366	UNDERGROUND CONDUCTORS AND DEVICES	105.283	99,872
367	UNDERGROUND CONDUCTORS AND DEVICES	302,432	290.121
368.1	TRANSFORMERS	302,432)
368.2	TRANSFORMERS TRANSFORMER INSTALLATIONS	267,598	288,655
369	SERVICES		251,411
		280,653	268,613
370.1	METERS	58,659	61,927
370.2	METER INSTALLATIONS	25,270	25,269
370.3		158,314	162,105
371	INSTALLATIONS ON CUSTOMER PREMISES	67,143	73,062
371.5	INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS	4,280	4,832
373	STREET LIGHTING AND SIGNAL SYSTEMS	55,277	50,428
IOTAL	DISTRIBUTION PLANT	3,637,698	3,439,203
		044.000	00 554
390.1		311,993	29,551
390.2	IMPROVEMENTS TO LEASED PROPERTY	0	0
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	8,502	8,100
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	22,649	21,679
391.92	OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWARE	164,299	164,325
392.2	TRANSPORTATION EQUIPMENT - TRUCKS	0	0
393	STORES EQUIPMENT	366	366
394	TOOLS, SHOP AND GARAGE EQUIPMENT	51,183	47,525
395		16,023	15,716
396	POWER OPERATED EQUIPMENT	259	277
397	COMMUNICATION EQUIPMENT	74,891	83,765
398	MISCELLANEOUS EQUIPMENT	4,539	5,001
TOTAL	GENERAL PLANT	654,704	376,305
TOTAL	DEPRECIABLE PLANT	4,292,402	3,815,508
OTHER UT	ILITY PLANT*		
~~~~~			
	DN PLANT STRUCTURES AND IMPROVEMENTS	1 4 40 005	047 504
390.1		1,142,385	817,504
390.2		0	14,307
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	151,393	156,038
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	318,519	669,853
392.1	TRANSPORTATION EQUIPMENT - CARS	1,548	2,185
TOTAL	COMMON PLANT	1,613,845	1,659,887
INFORM	IATION SERVICES (IS)		
391	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	2,208	2,228
391.1	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	2,417,523	2,092,784
391.3	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 10 YEARS	707,758	690,875
391.4	OFFICE FURNITURE AND EQUIPMENT - SYSTEM DEV. COSTS - 15 YEARS	9,288,398	7,779,469
	INFORMATION SERVICES	12,415,887	10,565,356
	IG SERVICE CENTER		
390	STRUCTURES AND IMPROVEMENTS	61,986	62,471
TOTAL OT	HER UTILITY PLANT	14,091,718	12,287,714

### UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-B - Adjusted Original Cost Annual Book & Calculated Depreciation Accruals Delivered on January 26, 2018

# <u>V-B-2</u>

### Request:

Supply a schedule by account or by depreciable group showing the survivor curve or interim survivor curve and annual accrual rate estimated to be appropriate:

- a. For the purpose of this filing.
- b. For the purpose of the most recent rate filing prior to the current proceeding.
- c. Supply an explanation for any major change in annual accrual rate by account or by depreciable group.
- d. Supply a comprehensive statement of major changes made in depreciation methods, procedures and techniques and the effect of the changes upon accumulated and annual depreciation, if any.

### Response:

- a. The survivor curves and associated accrual rates calculated as of September 30, 2019 are set forth on Table 1 of UGI Electric Exhibit C (Fully Projected). The survivor curves and associated accrual rates calculated as of September 30, 2018 are set forth on Table 1 of UGI Electric Exhibit C (Future). The survivor curves and associated accrual rates calculated as of September 30, 2017 are set forth on Table 1 of UGI Electric Exhibit C (Historic).
- b. The survivor curves and associated accrual rates calculated as of September 30, 1996 are presented on the following pages as Attachment V-B-2.
- c. The Company prepares and submits service life studies to the Pennsylvania Public Utility Commission (Commission) every five years pursuant to the regulations set forth in 52 Pa. Code Chapter 73.5. Since the prior electric rate filing was submitted over 20 years ago on January 26, 1996 (Docket No. R-00953534), the Company has submitted five updated service life studies to the Commission for their review and approval. The changes are identified and described in each of those five service life study reports in connection with the changes presented in the annual depreciation reports prepared by UGI Electric and submitted to the Commission. In general, the service lives for the major distribution plant

### UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-B - Adjusted Original Cost Annual Book & Calculated Depreciation Accruals Delivered on January 26, 2018

# V-B-2 (Continued)

accounts have trended longer since the prior electric rate filing. This is due to improvements in materials used and improved maintenance practices. The service lives are longer, in part, due to capital budget constraints which requires some plant to remain in service longer. Also, the composite annual depreciation rate for distribution plant in the prior rate filing based on plant in service as of September 30, 1996 was 3.25 percent. The composite depreciation rate for distribution plant in the current filing based on plant in service as of September 30, 2019 is 2.28 percent. This is an indication that the service lives are trending longer.

d. The annual depreciation accrual rates used in the filing for most plant accounts are based on the straight line method using the average service life procedure for plant installed prior to 1982 and the equal life group procedure for 1982 and subsequent installations. These are the same methods and procedures as were used in the most recent filing.

Prepared by or under the supervision of: John F. Wiedmayer

(1)         (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           Depreciable Plant           Production Plant - Steam Hunlock Production Plant 311         Structures and Improvements         6-2004         125 - S2         6,512,838.80         5,822,965         689,874         89,124         7.7         1.37           312         Boiler Plant Equipment         6-2004         50 - R2.5         11,014,656.31         8,683,574         2,331,082         310,735         7.5         2.82           314         Turbogenerator Units         6-2004         120 - R2         3,887,624.30         3,237,391         650,233         84,532         7.7         2.17	Probable Retiremen Year
Hunlock Production Plant - Steam           311         Structures and Improvements         6-2004         125 - S2         6,512,838.80         5,822,965         689,874         89,124         7.7         1.37           312         Boiler Plant Equipment         6-2004         50 - R2.5         11,014,656.31         8,683,574         2,331,082         310,735         7.5         2.82           314         Turbogenerator Units         6-2004         120 - R2         3,887,624.30         3,237,391         650,233         84,532         7.7         2.17	(2)
Hunlock Production Plant         311       Structures and Improvements       6-2004       125 -S2       6,512,838.80       5,822,965       689,874       89,124       7.7       1.37         312       Boiler Plant Equipment       6-2004       50 -R2.5       11,014,656.31       8,683,574       2,331,082       310,735       7.5       2.82         314       Turbogenerator Units       6-2004       120 -R2       3,887,624.30       3,237,391       650,233       84,532       7.7       2.17	
311Structures and Improvements6-2004125 -S26,512,838.805,822,965689,87489,1247.71.37312Boiler Plant Equipment6-200450 -R2.511,014,656.318,683,5742,331,082310,7357.52.82314Turbogenerator Units6-2004120 -R23,887,624.303,237,391650,23384,5327.72.17	
312         Boiler Plant Equipment         6-2004         50 -R2.5         11,014,656.31         8,683,574         2,331,082         310,735         7.5         2.82           314         Turbogenerator Units         6-2004         120 -R2         3,887,624.30         3,237,391         650,233         84,532         7.7         2.17	
314         Turbogenerator Units         6-2004         120 - R2         3,887,624.30         3,237,391         650,233         84,532         7.7         2.17	ovements 6-2004
<b>5</b>	ent 6-2004
	s 6-2004
315         Accessory Electric Equipment         6-2004         70 - R3         1,468,698.00         1,345,391         123,307         16,158         7.6         1.10	quipment 6-2004
316         Miscellaneous Power Plant Equipment         6-2004         28         -L1         1,027,582.96         647,139         380,444         54,865         6.9         5.34	r Plant Equipment 6-2004
Total Hunlock Steam Production Plant         23,911,400.37         19,736,460         4,174,940         555,414         2.32	ion Plant
Conemaugh Production Plant	
311 Structures and Improvements 6-2005 125 -S2 963,883.23 482,195 481,688 55,076 8.7 5.71	
312 Boiler Plant Equipment 6-2005 50 -R2.5 6,987,365.82 1,858,587 5,128,779 599,581 8.6 8.58	
314         Turbogenerator Units         6-2005         120         R2         1,183,468.32         729,622         453,846         52,299         8.7         4.42	
315 Accessory Electric Equipment 6-2005 70 -R3 347,777.05 178,935 168,842 19,432 8.7 5.59	
316         Miscellaneous Power Plant Equipment         6-2005         28         -L1         152,234.00         34,714         117,520         14,865         7.9         9.76	
Total Conemaugh Steam Production Plant         0-2003         20 - 11         102,204,00         0-4,114         117,220         144,003         1.9         9.76	
Total Production Plant - Steam         33,546,128.79         23,020,513         10,525,616         1,296,667         3.87	
Other Production Plant	
344         Generators and Devices         6-2005         Square         10,562.53         8,517         2,046         234         8.7         2.22	ices 6-2005
Transmission Plant	
352 Structures and Improvements	ovements
Hunlock 6-2004 Square 33,358.93 31,540 1,819 235 7.7 0.70	6-2004
Plymouth 9-1997 Square 20,728.16 20,172 556 557 1.0 2.69	9-1997
Swoyersville 6-2004 Square 32,148.00 30,947 1,201 437 2.7 1.36	6-2004
Conemaugh 6-2005 Square 5,276.06 4,036 1,240 142 8.7 2.69	
Glenview 40 -SQ 2,983.00 1,060 1,923 75 25.6 2.51	
Mountain 6-2012 Square 48,031.16 22,878 25,153 2,340 10.7 4.87	6-2012
Subtotal Account 352 142,525.31 110,633 31,892 3,786 2.66	2

		Probable					Annual	Composite	Annual
		Retirement	Survivor		Book	Future	Accrual	Remaining	Accrual Rate
	Account	Year	Curve	Original Cost	Reserve	Accruals	Amount	Life	Percent
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
353	Station Equipment								
	Pre 1958 Equipment		42 -R2.5	499,497.36	404,274	95,223	9,735	9.8	1.95
	Post 1957 Equipment		50 -R3	8,377,858.34	4,175,391	4,202,467	206,514	20.3	2.46
	SCADA Equipment		10 -S2	902,215.22	141,527	760,688	184,339	4.1	20.43
	Subtotal Account 353			9,779,570.92	4,721,192	5,058,379	400,588		4.10
354	Towers and Fixtures		65 -R4	2,548,949.54	1,281,216	1,267,734	36,061	35.2	1.41
355	Poles and Fixtures		40 -R2	1,842,612.64	644,874	1,197,739	54,690	21.9	2.97
356	Overhead Conductors and Devices								
	Primarily Copper		41 -R2	210,254.46	177,579	32,675	8,586	3.8	4.08
	Primarily Aluminum		41 -R2	3,214,550.64	1,336,672	1,877,879	83,351	22.5	2.59
	Subtotal Account 356			3,424,805.10	1,514,251	1,910,554	91,937	20.8	2.68
357	Underground Conduit		50 -L3	2,092.45	1,123	969	39	24.9	1.86
358	Underground Conductors and Devices		40 -R4	12,485.91	8,454	4,032	279	14.5	2.23
tal Tran	smission Plant			17,753,041.87	8,281,743	9,471,299	587,380		3.31
stributic	on Plant								
361	Structures and Improvements								
	1								
	Plymouth		Fully Accrued	24,673.36	24,849	-176			
	Plymouth Kingston	6-2005	Fully Accrued Square	24,673.36 32,102.70	24,849 30,687	-176 1,416	378	3.7	1.18
	-	6-2005 6-2000		,			378 869	3.7 3.8	1.18 3.47
	Kingston		Square	32,102.70	30,687 21,781	1,416			3.47
	Kingston Nanticoke		Square Square	32,102.70 25,040.46	30,687	1,416 3,259	869	3.8	
362	Kingston Nanticoke Miscellaneous		Square Square	32,102.70 25,040.46 43,841.77	30,687 21,781 33,765	1,416 3,259 10,077	869 546	3.8	3.47 1.25
362 364	Kingston Nanticoke Miscellaneous Subtotal Account 361		Square Square 40 -S3	32,102.70 25,040.46 <u>43,841.77</u> 125,658.29	30,687 21,781 <u>33,765</u> <i>111,08</i> 2	1,416 3,259 <u>10,077</u> 14,576	869 <u>546</u> 1,793	3.8 18.5	3.47 1.25 <i>1.43</i>
	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment		Square Square 40 -S3 38 -R2	32,102.70 25,040.46 <u>43,841.77</u> 125,658.29 638,379.12	30,687 21,781 <u>33,765</u> 111,082 431,240	1,416 3,259 <u>10,077</u> 14,576 207,139	869 <u>546</u> <i>1,793</i> 18,218	3.8 18.5 11.4	3.47 1.25 <i>1.43</i> 2.85
364	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices		Square Square 40 -S3 38 -R2	32,102.70 25,040.46 <u>43,841.77</u> 125,658.29 638,379.12	30,687 21,781 <u>33,765</u> 111,082 431,240	1,416 3,259 <u>10,077</u> 14,576 207,139	869 546 1,793 18,218 423,351	3.8 18.5 11.4	3.47 1.25 <i>1.43</i> 2.85
364	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures		Square Square 40 -S3 38 -R2 50 -R2	32,102.70 25,040.46 <u>43,841.77</u> 125,658.29 638,379.12 15,631,135.72 1,036,454.85	30,687 21,781 <u>33,765</u> 111,082 431,240 3,589,463 765,907	1,416 3,259 <u>10,077</u> 14,576 207,139 12,041,673 270,548	869 <u>546</u> <i>1,793</i> 18,218	3.8 18.5 11.4 28.4 9.9	3.47 1.25 1.43 2.85 2.71 2.64
364	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices Primarily Copper		Square Square 40 -S3 38 -R2 50 -R2 50 -R2	32,102.70 25,040.46 43,841.77 125,658.29 638,379.12 15,631,135.72 1,036,454.85 10,367,058.52	30,687 21,781 33,765 111,082 431,240 3,589,463 765,907 3,419,998	1,416 3,259 10,077 14,576 207,139 12,041,673 270,548 6,947,061	869 546 1,793 18,218 423,351 27,361 363,188	3.8 18.5 11.4 28.4	3.47 1.25 1.43 2.85 2.71
364	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices Primarily Copper Primarily Aluminum		Square Square 40 -S3 38 -R2 50 -R2 50 -R2	32,102.70 25,040.46 <u>43,841.77</u> 125,658.29 638,379.12 15,631,135.72 1,036,454.85	30,687 21,781 <u>33,765</u> 111,082 431,240 3,589,463 765,907	1,416 3,259 <u>10,077</u> 14,576 207,139 12,041,673 270,548	869 546 1,793 18,218 423,351 27,361	3.8 18.5 11.4 28.4 9.9	3.47 1.25 1.43 2.85 2.71 2.64 3.50
364 365	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices Primarily Copper Primarily Aluminum Subtotal Account 365		Square Square 40 -S3 38 -R2 50 -R2 50 -R2 50 -R2	32,102.70 25,040.46 43,841.77 125,658.29 638,379.12 15,631,135.72 1,036,454.85 10,367,058.52 11,403,513.37	30,687 21,781 <u>33,765</u> 111,082 431,240 3,589,463 765,907 <u>3,419,998</u> 4,185,905	1,416 3,259 10,077 14,576 207,139 12,041,673 270,548 <u>6,947,061</u> 7,217,608	869 546 1,793 18,218 423,351 27,361 363,188 390,549	3.8 18.5 11.4 28.4 9.9 19.1	3.47 1.25 1.43 2.85 2.71 2.64 3.50 3.42
364 365 366	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices Primarily Copper Primarily Aluminum Subtotal Account 365 Underground Conduit		Square Square 40 -S3 38 -R2 50 -R2 50 -R2 50 -R2 50 -L3	32,102.70 25,040.46 43,841.77 125,658.29 638,379.12 15,631,135.72 1,036,454.85 10,367,058.52 11,403,513.37 1,148,760.91	30,687 21,781 <u>33,765</u> <u>111,082</u> 431,240 3,589,463 <u>765,907</u> <u>3,419,998</u> <u>4,185,905</u> 192,584 907,732	1,416 3,259 10,077 14,576 207,139 12,041,673 270,548 <u>6,947,061</u> 7,217,608 956,177 1,619,425	869 546 1,793 18,218 423,351 27,361 363,188 390,549 25,543 110,909	3.8 18.5 11.4 28.4 9.9 19.1 37.4	3.47 1.25 1.43 2.85 2.71 2.64 3.50 3.42 2.22 4.39
364 365 366 367	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices Primarily Copper Primarily Aluminum Subtotal Account 365 Underground Conduit Underground Conductors and Devices		Square Square 40 -S3 38 -R2 50 -R2 50 -R2 50 -R2 50 -L3 28 -R3	32,102.70 25,040.46 43,841.77 125,658.29 638,379.12 15,631,135.72 1,036,454.85 10,367,058.52 11,403,513.37 1,148,760.91 2,527,156.87	30,687 21,781 <u>33,765</u> <u>111,082</u> 431,240 3,589,463 <u>765,907</u> <u>3,419,998</u> <u>4,185,905</u> 192,584	1,416 3,259 10,077 14,576 207,139 12,041,673 270,548 <u>6,947,061</u> 7,217,608 956,177	869 546 1,793 18,218 423,351 27,361 363,188 390,549 25,543	3.8 18.5 11.4 28.4 9.9 19.1 37.4 14.6	3.47 1.25 1.43 2.85 2.71 2.64 3.50 3.42 2.22
364 365 366 367 368.1	Kingston Nanticoke Miscellaneous Subtotal Account 361 Station Equipment Poles, Towers and Fixtures Overhead Conductors and Devices Primarily Copper Primarily Aluminum Subtotal Account 365 Underground Conduit Underground Conductors and Devices Transformers		Square Square 40 -S3 38 -R2 50 -R2 50 -R2 50 -R2 50 -L3 28 -R3 34 -S1	32,102.70 25,040.46 43,841.77 125,658.29 638,379.12 15,631,135.72 1,036,454.85 10,367,058.52 11,403,513.37 1,148,760.91 2,527,156.87 7,976,840.81	30,687 21,781 <u>33,765</u> <u>111,082</u> 431,240 3,589,463 <u>765,907</u> <u>3,419,998</u> <u>4,185,905</u> 192,584 907,732 2,866,163	1,416 3,259 10,077 14,576 207,139 12,041,673 270,548 6,947,061 7,217,608 956,177 1,619,425 5,110,678	869 <u>546</u> 1,793 18,218 423,351 27,361 <u>363,188</u> <u>390,549</u> 25,543 110,909 262,605	3.8 18.5 11.4 28.4 9.9 19.1 37.4 14.6 19.5	3.47 1.25 1.43 2.85 2.71 2.64 3.50 3.42 2.22 4.39 3.29

	Account	Probable Retirement Year	Survivor Curve	Original Cost	Book Reserve	Future Accruals	Annual Accrual Amount	Composite Remaining Life	Annual Accrual Rate Percent
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
370.2	Meter Installations		60 -R4	912,456.53	304,151	608,306	14,183	42.9	1.55
371	Installations on Customer Premises			,	,	,	,		
	Dusk to Dawn Lights		13 -R1.5	93,026.98	57,002	36,025	8,835	4.1	9.50
	All Other Installations		25 -O2	786,235.93	216,168	570,068	46,705	12.2	5.94
	Subtotal Account 371			879,262.91	273,170	606,093	55,540		6.32
373	Street Lighting and Signal Systems		26 -L1	1,042,340.70	618,052	424,289	32,964	12.9	3.16
Total Distr	ibution Plant			56,349,396.93	19,134,480	37,214,917	1,833,943		3.25
General Pl	ant								
390.1	Structures and Improvements								
	Kingston	9-1996	75 -L0.5	0.00	0	0	0	0.0	0.00
	Forty Fort	6-2002	125 -S2	594,324.08	345,676	248,648	43,253	5.7	7.28
	Plymouth	6-1997	Square	9,595.20	9,377	218	219	1.0	2.28
	Idetown		Fully Accrued	14,541.18	14,877	-336	0		0.00
	Nanticoke	6-2005	Square	51,126.71	23,111	28,016	2,038	13.7	3.99
	Subtotal Account 390.1			669,587.17	393,041	276,546	45,510		6.80
390.2	Improvements to Leased Property			0.00	0	0	0		0.00
391	Office Furniture and Equipment								
	Furniture		20 -SQ	431,482.06	87,153	344,329	22,535	15.3	5.22
	Electronic Equipment		5 -SQ	416,133.82	249,439	166,695	55,101	3.0	13.24
	Subtotal Account 391			847,615.88	336,592	511,024	77,636		9.16
393	Stores Equipment		10 -SQ	50,115.75	25,705	24,411	5,338	4.6	10.65
394	Tools, Shop and Garage Equipment		20 -SQ	295,075.33	92,437	202,638	16,115	12.6	5.46
395	Laboratory Equipment		10 -SQ	297,309.03	150,824	146,485	36,525	4.0	12.29
397	Communication Equipment		10 -SQ	137,974.37	76,027	61,947	15,658	4.0	11.35
398	Miscellaneous Equipment		10 -SQ	51,322.61	15,159	36,164	6,715	5.4	13.08
Total Gene	eral Plant			2,349,000.14	1,089,785	1,259,215	203,497		8.66

	Account (1)	Probable Retirement Year (2)	Survivor Curve (3)	Original Cost (4)	Book <u>Reserve</u> (5)	Future Accruals (6)	Annual Accrual Amount (7)	Composite Remaining Life (8)	Annual Accrual Rate Percent (9)
SPECIAL I	DEPRECIABLE PLANT								
392	Transportation Equipment								
	Cars		7 -L4	111,871.72	106,916	4,955	4,619	1.1	4.13
	Trucks		11 -L4	376,993.63	256,277	120,718	37,178	3.2	9.86
	Heavy Trucks		11 -L4	229,064.12	188,821	40,243	10,855	3.7	4.74
	Subtotal Account 392			717,929.47	552,014	165,916	52,652		7.33
396	Power Operated Equipment		11 -L4	129,876.72	101,753	28,123	5,681	5.0	4.37
TOTAL SP	ECIAL DEPRECIABLE PLANT			847,806.19	653,767	194,039	58,333		6.88
TOTAL DE	PRECIABLE PLANT - ELECTRIC PLANT			110,855,936.45	52,188,805	58,667,131	3,980,054		3.59
Nondepred	iable Plant								
302.1	Franchises and Consents - Perpetual			6,435.84					
310.1	Land and Land Rights - Land			47,043.53					
350.1	Land and Land Rights - Land			934,612.72					
350.2	Land and Land Rights - Land Rights			888,330.06					
360.1	Land and Land Rights - Land			77,415.26					
360.2	Land and Land Rights - Land Rights			16,986.44					
389.1	Land and Land Rights - Land			350,317.09					
TOTAL NO	NDEPRECIABLE PLANT			2,321,140.94					
TOTAL EL	ECTRIC PLANT			113,177,077.39	52,188,805	58,667,131	3,980,054		

	Account	Probable Retirement Year	Survivor Curve	Original Cost	Book Reserve	Future Accruals	Annual Accrual Amount	Composite Remaining Life	Annual Accrual Rate Percent
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OTHER UT	ILITY PLANT ALLOCATED TO ELECT	RIC DIVISION							
COMMON	PLANT								
301	Organization			138,963.52					
390.2	Structures and Improvements			,					
	Expenditures to Leased Property			1,448,677.43	1,448,679	-2			
391	Office Furniture and Equipmenrt			1,925,560.35	850,170	1,075,390	91,331	11.8	4.74
391.1	Office Furniture and Equipment - Elec	tronic		863,007.23	260,988	602,019	173,928	3.5	20.15
392	Transportation Equipment - Cars			316,683.98	217,746	98,938	51,140	1.9	16.15
397	Communication Equipment			123,920.04	60,522	63,398	13,944	4.5	11.25
398	Miscellaneous Equipment			12,714.03	11,980	734	141	5.2	1.11
TOTAL	COMMON PLANT			4,829,526.58	2,850,085	1,840,478	330,484		
TOTAL	COMMON PLANT ALLOCATED TO E	D 8.0%		386,362.13	228,007	147,238	26,439		
INFORMA	TION SERVICES (is)								
391	Office Furniture and Equipment			176,037.62	66,395	109,643	13,171	8.3	7.48
391.1	Office Furniture and Equipment - Elec	tronic		973,371.45	365,137	608,234	157,149	3.9	16.14
391.2	Office Furniture and Equipment - Softw	ware		4,188,449.64	2,301,979	1,886,471	728,728	2.6	17.40
TOTAL	INFORMATION SERVICES (IS)			5,337,858.71	2,733,511	2,604,348	899,048		
TOTAL	IS ALLOCATED TO ELECTRIC DIVISI	ION 16%		854,057.39	437,362	416,696	143,848		
READING	SERVICE BLDG - IS								
390.1	Structures and Improvements			1,097,000.00	283,815	813,185	27,943	29.1	2.55
TOTAL	READING SERVICE BLDG - IS			1,097,000.00	283,815	813,185	27,943		
TOTAL	READING SERVICE BLDG - IS ALLO	CATED TO ELECTRIC	DIVISION 16%	175,520.00	45,410	130,110	4,471		
TOTAL	OTHER UTILITY PLANT ALLOCATED	TO ELECTRIC DIVISI	ON	1,415,939.52	710,779	694,044	174,758		
AMOR	TIZATION OF NEGATIVE NET SALVAC	GE					386,031		
GRAN	D TOTAL ELECTRIC DIVISION			114,593,016.91	52,899,584	59,361,175	4,540,843		

#### <u>V-C-1</u>

#### Request:

Where the retirement rate actuarial method of mortality analysis is utilized, set forth representative examples including charts depicting the observed and estimated survivor curves and a tabular presentation of the observed and estimated life tables plotted on the chart. Other analysis results shall be subject to request.

#### Response:

The charts and life tables for the accounts analyzed by the retirement rate method are set forth in Part VI of UGI Electric Exhibit C (Future).

#### UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-D - Example Tabulations of Original Cost Claimed Estimates of Accrued Depreciation Delivered on January 26, 2018

#### <u>V-D-1</u>

#### Request:

Provide the surviving original cost plant at the appropriate test year date or dates by account or functional property group and include claimed depreciation reserves. Provide annual depreciation accruals where appropriate. These calculations should be provided for plant in service as well as other categories of plant, including but not limited to, contributions in aid of construction, customers' advances for construction, and anticipated retirements associated with construction work in progress claims, if applicable.

#### Response:

A summary of the original cost, depreciation reserve and annual depreciation accrual as of September 30, 2019, is presented on Table 1, pages II-3 through II-4 of UGI Electric Exhibit C (Fully Projected).

A summary of the original cost, depreciation reserve and annual depreciation accrual as of September 30, 2018, is presented on Table 1, pages V-4 through V-5 of UGI Electric Exhibit C (Future).

A summary of the original cost, depreciation reserve and annual depreciation accrual as of September 30, 2017, is presented on Table 1, pages II-3 through II-4 of UGI Electric Exhibit C (Historic).

#### UGI Utilities, Inc. - Electric Division Docket No. R-2017-2640058 2018 Base Rate Case Responses to Section 53.53 - V-D - Example Tabulations of Original Cost Claimed Estimates of Accrued Depreciation Delivered on January 26, 2018

## <u>V-D-2</u>

#### Request:

Provide representative examples of detail calculations by vintage at account or at a more detailed level, as performed for these purposes. Other vintage detail calculations shall be subject to request.

#### Response:

The detailed calculations of depreciation by installation year as of September 30, 2019 are set forth in Part III of UGI Electric Exhibit C (Fully Projected).

The detailed calculations of depreciation by installation year as of September 30, 2018 are set forth in Part VII of UGI Electric Exhibit C (Future).

The detailed calculations of depreciation by installation year as of September 30, 2017 are set forth in Part III of UGI Electric Exhibit C (Historic).

#### <u>V-E-1</u>

#### Request:

Provide a description of the depreciation methods utilized in calculating annual depreciation amounts and depreciation reserves, together with a discussion of the significant factors which were considered in arriving at estimates of service life and forecast retirements by facilities, accounts or sub-accounts, as applicable.

#### Response:

A description of the depreciation methods used in the calculation of annual and accrued depreciation and the factors considered in the service life estimation are discussed in UGI Electric Exhibit C (Future) in Parts II and III under the sections titled "Part II. Estimation of Survivor Curves" and "Part III. Service Life Considerations".

## VI. UNADJUSTED COMPARATIVE BALANCE SHEETS & OPERATING INCOME STATEMENTS

## <u>VI-A-1</u>

#### Request:

Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:

A. Balance sheet, in the form available.

#### Response:

Please see Attachment VI-A-1.

#### UGI UTILITIES, INC. - ELECTRIC DIVISION UNADJUSTED COMPARATIVE BALANCE SHEETS FOR THE YEARS ENDING SEPTEMBER 30, 2015-2019

		2019		2018		2017		2016
UTILITY PLANT (101 - 106, 108)								
Utility Plant	\$	217,535	\$	205,372	\$	187,498	\$	176,429
Other Utility Plant								
TOTAL PLANT IN SERVICE	\$	217,535	\$	205,372	\$	187,498	\$	176,429
Construction Work In Progress (107)	\$	4,476	\$	4,476	\$	5,261	\$	6,768
TOTAL UTILITY PLANT	\$	222,011	\$	209,848	\$	192,760	\$	183,197
Accumulated Provision for Depreciation - Gas (108)	\$	(85,368)	\$	(80,006)	\$	(72,031)	\$	(70,090)
Accumulated Prov. For Amortization & Depletion of Gas Utility Pl. (111.0)	\$	-	\$	-	\$	(590)	\$	(559)
Utility Acquisition Adjustment (114)	\$	-	\$	-	\$	-	\$	-
Accumulated Provision for Depreciation - Other (119)	\$	-	\$	-	\$	-	\$	-
NET UTILITY PLANT	\$	136,643	\$	129,842	\$	120,138	\$	112,549
OTHER PROPERTY INVESTMENTS								
Non-utility Property (121)	\$	15	\$	15	\$	15	\$	15
Accumulated Depreciation on NUP (122)								
Investment in Associated & Subsidiary Companies (123.1)								
Other Investments (124)								
TOTAL OTHER PROPERTY AND INVESTMENTS	\$	15	\$	15	\$	15	\$	15
CURRENT AND ACCRUED ASSETS								
Cash & Other Temporary Investments(131-136)	\$	3,992		(1,322)	\$	(4,571)	\$	1,214
Unbilled Revenues	Ŧ	-,		(.,===)	+	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	+	-,
Customer Accounts Receivable (142)	\$	15,351	\$	14,253	\$	13.409	\$	9,379
Other Accounts Receivable (143)	\$	2,135	\$	2,135	\$	2,135	\$	1,985
Accum Provision for Uncollectible (144)	\$	(1,699)		(1,578)		(1,484)		(1,733)
Receivables from Associated Companies (145)	\$	-	\$	-	\$	-	\$	-
Accounts Receivable Assoc. Comp. (146)	\$	-	\$	-	\$	(58)		2
Plant Materials & Operating Supplies (154)	\$	1.440	\$	1.440	\$	. ,	\$	1.149
Allowance Inventory (158.1)	\$	224	\$	217	\$	211	\$	61
Stores Expense - Undistributed (163)	\$	154	\$	149	\$	145	\$	180
Gas Stored - Current (164.1	•		•		•		•	
Liquefied Natural Gas stored (164.2)								
Prepayments (165)	\$	1,553	\$	1,553	\$	1,553	\$	1,877
Accrued Utility Revenues (173)	\$	4,114	\$	3,994	\$	3,878	\$	3,674
Miscellaneous Current & Accrued Assets (174)	\$	1,568	\$	1,522	\$	1,478	\$	1,647
Derivative Instrument Assets (175)	\$	-	\$	-	\$	6	\$	-
TOTAL CURRENT AND ACCRUED ASSETS	\$	28,831	\$	22,364	\$	17,913	\$	19,436
DEFERRED DEBITS				,		,		,
Unamortized Debt Expense (181)	\$	229	\$	229	\$	229	\$	208
Other Regulatory Assets (182.3)	\$	22,474	\$	22,968	\$	21,430	\$	28,070
Other Preliminary Survey & Investigation Charges (183.2)	\$	,	\$	-	\$	(0)	\$	_
Clearing Accounts (184)	\$	-	\$	-	\$	1	\$	12
Miscellaneous Deferred Debits (186)	\$	1,049	\$	1,049	\$	1,049	\$	800
Deferred Losses from the Disposition of Utility Plant (187.0)	\$	-	\$		\$	15	\$	51
Unamortized Loss on Reacquired Debt (189)	\$	-	\$	-	\$	(0)	\$	0
Accumulated Deferred Income Taxes (190)	\$	800	\$	800	\$	800	\$	12,754
O/U Collected Gas (191.4, 191.41)	Ŧ		•		ŕ		•	,
TOTAL DEFERRED DEBITS	\$	24,552	\$	25,046	\$	23,523	\$	41,896
	Ŧ	,	Ŧ		Ŧ	,0	Ŧ	,
TOTAL ASSETS AND OTHER DEBITS	\$	190,041	\$	177,267	\$	161,588	\$	173,895
	Ŧ	,	Ŧ	,_0/	-	2.,200	Ŧ	. 2,229

#### UGI UTILITIES, INC. - ELECTRIC DIVISION UNADJUSTED COMPARATIVE BALANCE SHEETS FOR THE YEARS ENDING SEPTEMBER 30, 2015-2019

		2019		2018		2017	2	016
PROPRIETARY CAPITAL								
Common Stock Issued (201) Preferred Stock Issued (204)	\$	6,056	\$	6,056	\$	6,056	\$ 5,8	87
Premium on Capital Stock (207)	\$	47,595	\$	47,595	\$	47,595	\$ 46,2	63
Miscellaneous Paid-in-Capital (211)	Ψ	47,000	Ψ	47,000	Ψ	47,000	φ 10,2	00
Capital Stock Expense (214)								
Retained Earnings (215, 215.2, 216)	\$	(19,207)	\$	(19,539)	\$	(20,474)	\$ (14,4	-65)
Accum Other Comprehensive Income (219)								
TOTAL PROPRIETARY CAPITAL	\$	34,444	\$	34,112	\$	33,176	\$ 37,6	84
LONG TERM DEBT								
Bonds (221)								
Advances from Associated Companies (223) Other Long-Term Debt (224)		59,400		50,400	¢	38,539	\$ 32,9	17
Unamortized Premium on LTD (225)		59,400		50,400	φ	30,559	φ 32,9	47
Unamortized Discount on LTD (226)								
TOTAL LONG-TERM DEBT	\$	59,400	\$	50,400	\$	38,539	\$ 32,9	47
OTHER NON-CURRENT LIABILITIES								
Obligations under Capital Leases (227)								
Advances from Associated Companies (223)								
Other Long-Term Debt (224)								
Unamortized Premium on LTD (225)								
Unamortized Discount on LTD (226) Accumulated Provision for Pensions and Benefits (228.3)	\$	14,684	¢	14,684	¢	14,684	\$ 19,9	00
TOTAL NON-CURRENT LIABILITIES	э \$	14,684		14,684		14,684		
CURRENT & ACCRUED LIABILITIES	Ψ	14,004	Ψ	14,004	Ψ	14,004	φ 10,0	00
Notes Payable (231)	\$	2.156	\$	2.156	\$	2,156	\$ 1.0	06
Accounts Payable (232)	\$	15,100	\$	14,660	\$	14,233	\$ 11,6	
Notes Payable to Assoc. Companies (233)	\$	-	\$	-	\$	-	\$ -	
Accounts Payable to Assoc. Cos (234)	\$	-	\$	-	\$	541	\$ 6	654
Customer Deposits (235)	\$	1,505	\$	1,462	\$	1,419	\$ 1,6	
Taxes Accrued (236)	\$	6,540	\$	6,540	\$	6,540	\$ 9,6	
Interest Accrued (237)	\$	2,495	\$	2,495	\$	2,495	\$8	850
Tax Collections Payable (241)								
Accrued Interest on Other Liabilities (237) Tax Collections Payable (241)	\$		\$		\$	(48)	¢ (	(14)
Misc Current & Accrued Liabilities (242)	э \$	- 5,087	Դ Տ	4,939	ъ \$	(46) 4,795		` '
Derivative Instrument Liabilities (244)	Ψ	-	Ψ	-,505	φ \$	-,733		291
Derivative Instrument Liabilities - Hedges (245)					+		• -	
TOTAL CURRENT AND ACCRUED LIABILITIES	\$	32,883	\$	32,251	\$	32,132	\$ 29,2	:38
OTHER DEFERRED CREDITS								
Customer Advances for Construction (252)								
Other Deferred Credits (253)	\$	1,150	\$	1,150	\$	1,150	•	94
Other Regulatory Liabilities (254)	\$	9,969	\$	9,485	\$	9,405	\$ 11,1	44
Deferred ITC (255)	\$	-	\$	-				
Accumulated Deferred Income Taxes (282)	\$	37,511	\$	35,185	\$	38,397	\$ 36,5	
Accumulated Deferred Income Taxes (283)	\$	40.000	\$ ¢	-	\$ ¢	(5,895)	. ,	
TOTAL OTHER DEFERRED CREDITS	\$	48,630	\$	45,820	\$	43,056	\$ 54,0	40
TOTAL LIABILITIES & OTHER CREDITS	\$	190,041	\$	177,267	\$	161,588	\$ 173,8	95

## <u>VI-B-1</u>

#### Request:

Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:

B. Statement of income.

Response:

Please see Attachment VI-B-1.

#### UGI UTILITIES, INC. - ELECTRIC DIVISION INCOME STATEMENT SUPPORTING SCHEDULES FOR THE YEARS ENDING SEPTEMBER 30, 2016 - 2019 (Thousands)

(Thou	isands)			
	2019	2018	2017	2016
OPERATING REVENUES	92,325	92,206	88,534	91,097
OPERATING EXPENSE				
401-402 Total Operation & Maint. Expense	72,753	72,417	69,375	68,837
403-405 Depreciation Expense and Amortization	6,484	5,963	4,975	4,852
408.1 Taxes Other Than Income Taxes	7,706	7,681	5,576	5,945
Total Operating Expenses Prior to	86,943	86,061	79,926	79,634
Federal & State Income Taxes				
Operating Income Prior to	5,382	6,145	8,608	11,463
Federal & State Income Taxes				
FEDERAL AND STATE INCOME TAXES				
409.1-411.4 Total Federal & State Income Taxes	217	615	1,098	2,555
Operating Income After Federal & State Income Taxes	5,165	5,530	7,510	8,908
OTHER INCOME AND DEDUCTIONS				
418.0 Non-Utility Operating Income (Loss)	29	29	29	45
419.0 Interest & Dividend Income	51	51	(40)	(20)
419.1 Allowance for Other Funds Used During Construction	53	53	288	140
421 Other Misc Non-Operating Income	(0)	(0)	(29)	12
Total Other Income	133	133	248	177
Other Income Deductions				
421.2 Loss on Disposition of Preperty	-	-	9	-
426 Miscellaneous	80	79	101	99
Total Other Income Deductions	80	79	110	99
Taxes Applicable to Other Income Deductions				
408.2 Taxes Other Than Income Taxes				
409.2 Federal Income Tax	-	-	(308)	(415)
State Income Tax	-	-	56	(84)
410.2 & 411.2				
Deferred Federal Income Taxes - Net	-	-	-	52
Deferred State Income Taxes - Net			N	
Total Taxes Applicable to Other Income Deduction	-	-	(252)	(447)
Income Before Interest Charges	5,218	5,584	7,900	9,432
INTEREST CHARGES				
427 Interest on Long-term Debt	4,744	4,507	1,930	1,673
428 Amortization of Debt Discount & Expense	44	44	19	17
431 Other Interest Expense	384	384	97	181
432 Allowance for Borrowed Funds Used During Construction	(286)	(286)	(51)	(27)
Net Interest Charges	4,886	4,649	1,995	1,844
			_	

332

935

5,905

7,589

Net Income

## <u>VI-C-1</u>

#### Request:

Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:

C. Plant in service.

Response:

Please see Attachment VI-C-1.

#### UGI UTILITIES, INC. - ELECTRIC DIVISION UNADJUSTED PLANT IN SERVICE FOR THE YEARS ENDED SEPTEMBER 30, 2016, 2017, 2018 AND 2019

ACCOUNT		2016	2017			2018		2019
ECTRIC PLANT								
DISTRIBUTION PLANT								
361 STRUCTURES AND IMPROVEMENTS	\$	11,459	\$	11,459	\$	11,459	\$	11,459
362 STATION EQUIPMENT		534,131		1,742,908		4,771,246		6,173,972
364 POLES, TOWERS AND FIXTURES		36,541,500		38,358,069		40,691,964		43,072,419
365 OVERHEAD CONDUCTORS AND DEVICES		30,089,690		32,811,071		35,145,285		37,550,859
366 UNDERGROUND CONDUIT		5,219,720		5,879,660		6,316,070		6,752,480
367 UNDERGROUND CONDUCTORS AND DEVICES		7,551,100		8,158,147		8,979,682		9,801,217
368.1 TRANSFORMERS		13,061,780		13,202,282		13,880,645		14,573,955
368.2 TRANSFORMER INSTALLATIONS		8,807,386		9,153,171		9,767,058		10,402,248
369 SERVICES		12,847,730		13,336,764		14,124,193		14,941,903
370.1 METERS		2,711,899		2,802,014		2,782,014		2,762,014
370.2 METER INSTALLATIONS		1,865,286		1,888,053		1,897,531		1,907,009
370.3 ELECTRONIC METERS		4,855,823		4,892,183		4,920,183		4,948,183
371 INSTALLATIONS ON CUSTOMER PREMISES		1,847,780		1,916,922		1,933,832		1,951,306
371.5 INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS		346,555		347,656		347,656	347,65	
373 STREET LIGHTING AND SIGNAL SYSTEMS		1,567,629		1,567,588		1,600,853		1,635,228
TOTAL DISTRIBUTION PLANT	\$	127,859,468	\$ 136,067,948		\$ 147,169,671		\$ 156,831,90	
GENERAL PLANT								
390.1 STRUCTURES AND IMPROVEMENTS								
FORTY FORT	\$	1,069,373	\$	1,074,596	\$	1,074,596	\$	1,074,59
PLYMOUTH	Ŷ	15,111	Ŧ	15,111	Ŧ	15,111	Ŧ	15,11
IDETOWN		14,541		14,541		14,541		14,54
NANTICOKE		76,179		76,179		76,179		76,179
EMPIRE YARD		19,895		19.895		19.895		19,89
SUBTOTAL ACCOUNT 390.1	\$	1,195,099	\$	1,200,322	\$	1,200,322	\$	1,200,322
390.2 IMPROVEMENTS TO LEASED PROPERTY	\$	62,778	\$	53,383	\$		\$	
391 OFFICE FURNITURE AND EQUIPMENT - FURNITURE	Ψ	33,626	Ψ	32,577	Ψ	154.677	Ψ	169,67
391.1 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT		16,868		24,214		105,614		115,614
391.92 OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWAR	<b>_</b>	781,940		607,693		750,000		750.00
393 STORES EQUIPMENT	L	15,656		15,656		3,217		3,217
394 TOOLS, SHOP AND GARAGE EQUIPMENT		743,543		816,881		952,931		1,022,878
395 LABORATORY EQUIPMENT		166,904		169,293		169,293		158,670
397 COMMUNICATION EQUIPMENT		1,219,317		1,188,107		1,100,594		771,319
398 MISCELLANEOUS EQUIPMENT		85,615		97,653		78,859		40,872
		05,015		37,000		70,009		40,072
TOTAL GENERAL PLANT	\$	4,321,346	\$	4,205,779	\$	4,515,507	\$	4,232,569

SPECIAL DEPRECIABLE PLANT

#### **UGI UTILITIES, INC. - ELECTRIC DIVISION** UNADJUSTED PLANT IN SERVICE FOR THE YEARS ENDED SEPTEMBER 30, 2016, 2017, 2018 AND 2019

ACCOUNT	2016	2017	2018	2019
<ul><li>392.4 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS</li><li>396 POWER OPERATED EQUIPMENT</li></ul>	\$- 167,867	\$- 145,839	\$- 145,839	\$- 145,839
TOTAL SPECIAL DEPRECIABLE PLANT	\$ 167,867	\$ 145,839	\$ 145,839	\$ 145,839
TOTAL DEPRECIABLE PLANT	\$ 132,348,681	\$ 140,419,566	\$ 151,831,017	\$ 161,210,316
NONDEPRECIABLE PLANT301.1ORGANIZATION302.1FRANCHISES AND CONSENTS - PERPETUAL360.1LAND AND LAND RIGHTS - LAND360.2LAND AND LAND RIGHTS - LAND RIGHTS389.1LAND AND LAND RIGHTS - LANDTOTAL NONDEPRECIABLE PLANTLESS GENERAL AND INTANGIBLE PLANT ALLOCATED TO TRANSMISSION - 22.572%	<pre>\$ 1,602 6,436 83,832 14,336 89,222 \$ 195,428 \$ (1,034,580)</pre>	\$ 1,602 6,436 83,832 14,336 89,222 \$ 195,429 \$ (1,003,543)	\$ 1,602 6,436 83,832 14,336 89,222 \$ 195,428 \$ (1,073,408)	\$ 1,602 6,436 83,832 14,336 89,222 \$ 195,428 \$ (1,009,585)
TOTAL ELECTRIC PLANT	\$ 131,509,529	\$ 139,611,452	\$ 150,953,037	\$ 160,396,159
SUMMARY DISTRIBUTION GENERAL PLANT	127,859,468 3,650,061	136,067,948 3,543,504	147,169,671 3,783,366	156,831,908 3,564,251
TOTAL PLANT	\$ 131,509,529	\$ 139,611,452	\$ 150,953,037	\$ 160,396,159

Note: Common asset allocations are excluded from these plant in service amounts. Please refer to the UGI Electric Exibit A (Fully Projected), UGI Electric Exhibit A (Future) and UGI Electric Exhibit A (Historic) for the common asset allocations.

## <u>VI-D-1</u>

#### Request:

Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:

D. Accumulated depreciation.

Response:

Please see Attachment VI-D-1.

#### UGI UTILITIES, INC. - ELECTRIC DIVISION UNADJUSTED ACCUMULATED DEPRECIATION EXPENSE FOR THE YEARS ENDED SEPTEMBER 30, 2016, 2017, 2018 AND 2019

LECTRIC PLANT DISTRIBUTION PLANT 361 STRUCTURES AND IMPROVEMENTS								
361 STRUCTURES AND IMPROVEMENTS								
361 STRUCTURES AND IMPROVEMENTS								
	\$	7,063	\$	7,361	\$	7.647	\$	7,925
362 STATION EQUIPMENT	Ŷ	407,028	Ŷ	136,836	Ŷ	65,347	Ŷ	(97,494
364 POLES. TOWERS AND FIXTURES		12.023.882		12.500.003		12,836,360		13.198.673
365 OVERHEAD CONDUCTORS AND DEVICES		9,047,664		9,696,167		10,349,964		11,039,807
366 UNDERGROUND CONDUIT		1,739,150		1,811,798		1,849,398		1,897,136
367 UNDERGROUND CONDUCTORS AND DEVICES		2,688,801		2,696,846		2,751,761		2,840,097
368.1 TBANSFORMERS		7,162,567		7,113,929		7,213,446		7,316,624
368.2 TRANSFORMER INSTALLATIONS		4,782,077		4,977,211		5,106,927		5,258,717
369 SERVICES		5,988,806		6,251,682		6,505,019		6,759,780
370.1 METERS		1,847,322		1,904,272		1,949,884		1,991,811
370.2 METER INSTALLATIONS		, ,				, ,		737,710
		661,710		683,500		711,001		,
370.3 ELECTRONIC METERS		3,042,265		3,316,563		3,468,920		3,619,025
371 INSTALLATIONS ON CUSTOMER PREMISES		697,474		730,370		820,517		899,167
371.5 INSTALLATIONS ON CUSTOMER PREMISES - DUSK TO DAWN LIGHTS		304,814		311,695		317,118		321,950
373 STREET LIGHTING AND SIGNAL SYSTEMS		892,423		826,763		768,258		715,138
TOTAL DISTRIBUTION PLANT	\$	51,293,046	\$	52,964,996	\$	54,721,567	\$	56,506,066
GENERAL PLANT								
390.1 STRUCTURES AND IMPROVEMENTS								
FORTY FORT	\$	500 004	۴	<u></u>	\$	687,831	\$	717,369
PLYMOUTH	φ	586,604 14,059	\$	628,390	φ	15.111	φ	15.111
IDETOWN		14,059		15,111 14,541		14.541		14,541
		,		,		<i>j</i> -		,
NANTICOKE		61,147		76,179		76,179		76,179
EMPIRE YARD		1,678		17,708		19,895		19,895
SUBTOTAL ACCOUNT 390.1	\$	678,029	\$	751,929	\$	813,557	\$	434,875
390.2 IMPROVEMENTS TO LEASED PROPERTY	\$	67,354	\$	63,803	\$	-	\$	-
391 OFFICE FURNITURE AND EQUIPMENT - FURNITURE		10,884		11,472		16,219		24,319
391.1 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT		9,438		10,623		20,263		41,942
391.92 OFFICE FURNITURE AND EQUIPMENT - OUTAGE MANAGEMENT SOFTWARE		491,436		517,036		10,627		174,952
393 STORES EQUIPMENT		11,733		12,827		839		1,205
394 TOOLS, SHOP AND GARAGE EQUIPMENT		303,924		322,714		366,605		396,578
395 LABORATORY EQUIPMENT		69,154		83,567		100,361		105,454
397 COMMUNICATION EQUIPMENT		805,638		864,570		736,111		473,101
398 MISCELLANEOUS EQUIPMENT		59,215		68,903		58,229		25,243
TOTAL GENERAL PLANT	\$	2,506,805	\$	2,707,444	\$	2,122,811	\$	1,677,669
SPECIAL DEPRECIABLE PLANT								
392.4 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS	\$	201	\$	100	\$	-	\$	-
396 POWER OPERATED EQUIPMENT	Ψ	164,811	Ψ	143,170	Ψ	143,476	Ψ	143,753
		104,011		140,170		140,470		140,700

#### UGI UTILITIES, INC. - ELECTRIC DIVISION UNADJUSTED ACCUMULATED DEPRECIATION EXPENSE FOR THE YEARS ENDED SEPTEMBER 30, 2016, 2017, 2018 AND 2019

ACCOUNT	2016	2017	2018	2019
TOTAL DEPRECIABLE PLANT	\$ 53,964,863	\$ 55,815,710	\$ 56,987,854	\$ 58,327,488
LESS GENERAL AND INTANGIBLE PLANT ALLOCATED TO TRANSMISSION - 22.572%	\$ (602,687)	\$ (643,041)	\$ (511,211)	\$ (410,862)
TOTAL ELECTRIC PLANT	\$ 53,362,176	\$ 55,172,669	\$ 56,476,643	\$ 57,916,626
SUMMARY DISTRIBUTION GENERAL PLANT	51,293,046 2,069,130	52,964,996 2,207,673	54,721,567 1,755,076	56,506,066 1,410,560
TOTAL PLANT	\$ 53,362,176	\$ 55,172,669	\$ 56,476,643	\$ 57,916,626

Note: Common asset allocations are excluded from these accumulated depreciation amounts. Please refer to the UGI Electric Exibit A (Fully Projected), UGI Electric Exhibit A (Future) and UGI Electric Exhibit A (Historic) for the common asset allocations.

# INDEX OF ATTACHMENTS ON CD

#### UGI UTILITIES, INC. – ELECTRIC DIVISION 2018 BASE RATE CASE DOCKET NO. R-2017-2640058

## **BOOK II**

## **INDEX OF ATTACHMENTS ON CD**

Attachments III-F-1.1 through III-F-1.7

Attachment IV-C-1

# **CD CONTAINING ATTACHMENTS**