BUTLER SNOW

Electronically Filed in TPUC Docket Room on April 1, 2019 at 3:17 p.m. April 1, 2019

VIA ELECTRONIC FILING

Hon. David Jones, Chairman c/o Tory Lawless Tennessee Public Utility Commission 502 Deaderick Street, 4th Floor Nashville, TN 37243

RE: Tennessee-American Water Company's Response to Commission's Investigation of Impacts of Federal Tax Reform on the Public Utility Revenue Requirements, TPUC Docket No. 18-00039

Dear Chairman Jones:

Attached for filing please find the *Direct Testimony of Elaine K. Chambers Adopting Testimony of Linda C. Bridwell* in the above-captioned matter.

As required, an original of this filing, along with four (4) hard copies, will follow. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

BUTLER/SNOW LLP

Melvin I/ Malone

clw

Attachment

cc: Elaine K. Chambers, Tennessee-American Water Company
Daniel Whitaker, Assistant Attorney General, Consumer Advocate Unit
Karen Stachowski, Assistant Attorney General, Consumer Advocate Unit

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION NASHVILLE, TENNESSEE

IN RE:)				
)				
TENNESSEE AMERICAN WATER)				
COMPANY'S RESPONSE TO)	DOCKET NO. 18-00039			
COMMISSION'S INVESTIGATION OF)	DOCIMET NO. 10 00035			
IMPACTS OF FEDERAL TAX REFORM)				
ON THE PUBLIC UTILITY REVENUE)				
REQUIREMENTS)				

DIRECT TESTIMONY OF ELAINE K. CHAMBERS ADOPTING TESTIMONY OF LINDA C. BRIDWELL

Q. PLEASE STATE YOUR NAME AND PLACE OF RESIDENCE.

A. My name is Elaine K. Chambers, and my business address is 2300 Richmond Road, Lexington, Kentucky 40502. I am employed by American Water Works Service Company, Inc. ("Service Company"). Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to Tennessee-American Water Company ("TAWC" or "Company") and its affiliates. My current role is Director, Rates and Regulatory for Tennessee and Kentucky.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?

A. The purpose of my testimony is to adopt the testimony previously filed in this matter by Linda C. Bridwell supporting the Response filed by TAWC to Commission's Investigation of Impacts of Federal Tax Reform on the Public Utility Revenue Requirements. A copy of Linda C. Bridwell's testimony is attached as Exhibit 1.

- Q. ARE YOU FAMILIAR WITH THE TESTIMONY OF LINDA C. BRIDWELL?
- A. Yes, I have reviewed the testimony of Linda C. Bridwell, including the exhibits, and I am familiar with its contents.
- Q. IF ASKED THE SAME QUESTIONS AS ARE IN THE DIRECT TESTIMONY OF LINDA C. BRIDWELL, WOULD YOU ANSWER EACH QUESTION THE SAME?
- A. Yes.
- Q. DO YOU WISH TO ADOPT THE TESTIMONY OF LINDA C. BRIDWELL WITHOUT CHANGES?
- A. Yes.

No further questions.

country of Fayette)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Elaine K. Chambers, being by me first duly sworn deposed and said that:

She is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Public Utility Commission, and if present before the Commission and duly sworn, her testimony would be as set forth in her pre-filed testimony in this matter.

Claime K. Chambers

Sworn to and subscribed before me

this 1st day of April, 20

Notary Public

My Commission Expires: 7/25/2020

Exhibit 1

PETITIONER'S EXHIBIT LCB-1

TENNESSEE-AMERICAN WATER COMPANY, INC.

DOCKET NO. 18-XXXXX

TESTIMONY

OF

LINDA C. BRIDWELL

ON

TENNESSEE-AMERICAN WATER COMPANY'S CALCULATION OF IMPACTS OF THE FEDERAL TAX CUTS AND JOBS ACT OF 2017 ON ITS COST OF SERVICE AND REVENUE REQUIREMENT AND PROPOSED RATEMAKING ADJUSTMENTS TO ACCOUNT FOR THE TAX BENEFITS OF THE ACT

SPONSORING PETITONER'S EXHIBIT:

<u>PETITIONER'S EXHIBIT – IMPACT OF TAX EXPENSE - LCB</u> <u>PETITIONER'S EXHIBIT – MOODY'S RATING ACTION -- LCB</u>

- 1 Q. PLEASE STATE YOUR NAME.
- 2 A. My name is Linda C. Bridwell.

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

- 4 A. I am employed by American Water Works Service Company, Inc. ("Service Company")
- as Senior Manager of Rates and Regulation for Tennessee and Kentucky. The Service
- 6 Company is a subsidiary of American Water Works Company, Inc. ("American Water")
- 7 that provides services to American Water's subsidiaries, including Tennessee-American
- 8 Water Company ("Tennessee-American," "TAWC" or the "Company").
- 9 Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL
- 10 BACKGROUND.

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- 11 A. I received a B.S. degree in Civil Engineering from the University of Kentucky in 1988, and
- I received a M.S. degree in Civil Engineering from the University of Kentucky in 1992,
- with an emphasis in water resources. I completed a Masters of Business Administration
- from Xavier University in Cincinnati, Ohio in 2000. I am a registered Professional
- Engineer in the Commonwealth of Kentucky.

I have been employed by American Water ("AWW") since 1989. I began as a distribution supervisor for Kentucky American Water ("KAWC") until 1990 when I was promoted to Planning Engineer. Following that I was promoted to Engineering Manager, and later Director of Engineering in 1998. In July 2004, I accepted the position of Project Delivery and Developer Services Manager for the Southeast Region of AWW, responsible for Kentucky, Tennessee, and West Virginia. In 2008, I became the KAWC Project Delivery Manager for the construction of a new water treatment plant, booster station, and transmission main in Kentucky. This project was the largest project completed by

American Water, in any of its regulated businesses, at \$164 million. Upon completion of the project in October 2010, I became the Director of Environmental Compliance and Water Quality for KAWC and in February of 2012 I accepted my current position. I am an active member of the American Water Works Association (AWWA), served as president of the local chapter and state section of the American Society of Civil Engineering (ASCE), and served as an officer in the local chapter of the National Society of Professional Engineers (NSPE) and as a State officer. I have served periodically as an Adjunct Professor at the University of Kentucky in the Civil Engineering Department, teaching "Water Quality and Pollution Control" and the "Introduction to Environmental Engineering." I served as a member of the Civil Engineering Industrial Advisory Committee at the University of Kentucky from 2005 until 2012. I served as a Commissioner on the Kentucky Water Resources Development Commission established by Governor Patton and on the Kentucky State Board of Licensure for Professional Engineers and Land Surveyors. I currently serve as Vice Chairman of the Board of Directors for the Kentucky Infrastructure Authority.

A.

Q. WHAT ARE YOUR DUTIES AS SENIOR MANAGER OF RATES AND REGULATION?

My primary responsibilities encompass the coordination of regulatory issues in Tennessee and Kentucky. This includes coordinating all reports and filings, working with regulatory staff to make sure that all information produced addresses the requirements or requests, and overseeing the preparation and filing of rate cases and tariff changes. I work with the senior management in both states on planning. I am also responsible for keeping abreast of changes in regulation, or trends in regulatory oversight across the United States that may

impact our local operations. I report to the Presidents of TAWC and KAWC dually. I am located in Kentucky, but work closely with the TAWC staff in Tennessee as well.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A.

- On January 26, 2018, the Tennessee Public Utility Commission (the "TPUC" or the "Commission") the Commission established a Docket Opening an Investigation and Requiring Deferred Accounting Treatment (the "Order") in Docket No. 18-00001, *In re: Tennessee Public Utility Commission Investigation of Impacts of Federal Tax Reform on the Public Utility Revenue Requirements*. On February 6, 2018, the Commission entered an Order regarding the decision made on January 26. The Order noted the passage of the federal Tax Cuts and Jobs Act of 2017 (the "TCJA" or the "Act") and directed the five largest utilities under the Commission's jurisdiction, including Tennessee-American, to do the following:
 - a. Track and accumulate monthly in a deferred account the portion of its revenue representing the difference between the cost of service approved by the Commission in its most recent rate case and the cost of service that would have resulted had the provision for federal income taxes been based on 21 % rather than 35%; and
 - b. Calculate the excess deferred tax reserve caused by the reduction in the corporate federal income tax rate and recognize as a deferred liability the estimated reduction of the utilities' revenue requirement resulting from the 2017 Tax Act; and
 - c. Calculate and defer any other tax effects resulting from the 2017 Tax Act on revenue requirement that are not included in the preceding calculations.

The Order further directed TAWC and other utilities to submit these calculations together with proposals to reduce rates or make other ratemaking adjustments to account for the tax benefits resulting from the TCJA.

1		Company witness John R. Wilde submits and explains Tennessee-American's calculations				
2		of the tax effects of the Act. The purpose of my testimony is to present Tennessee-				
3		American's proposal for ratemaking adjustments to account for the Act's tax benefits.				
4	Q.	ARE YOU SPONSORING ANY EXHIBITS?				
5	A.	Yes I am. I am sponsoring the following exhibit:				
6		Petitioner's Exhibit – Impact of Tax Expense – LCB				
7 8		I will discuss this exhibit in further detail in my testimony below.				
9	Q.	WERE THE PETITIONER'S EXHIBIT LISTED ABOVE PREPARED BY YOU				
10		OR UNDER YOUR DIRECTION AND SUPERVISION?				
11	A.	Yes.				
12	Q.	WHAT WERE THE SOURCES OF THE DATA USED TO PREPARE THE				
13		PETITIONER'S EXHIBIT LISTED ABOVE?				
14	A.	The data used to prepare the exhibit was acquired from the books of account and business				
15		records of Tennessee American, the officers and associates of Tennessee American with				
16		knowledge of the facts based on their job responsibilities and activities, and other internal				
17		sources which I examined in the course of my investigation of the matters addressed in this				
18		testimony. The Company's filings in this TPUC Docket are complete and accurate to the				
19		best of my knowledge and belief.				
20	Q.	DO YOU CONSIDER THIS DATA TO BE RELIABLE AND OF A TYPE THAT IS				
21		NORMALLY USED AND RELIED ON IN YOUR BUSINESS FOR SUCH				
22		PURPOSES?				

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Yes.

1	Q.	DOES	THE	PETITIONER'S	EXHIBIT	LISTED	ABOVE	ACCURATELY
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- 2 SUMMARIZE SUCH DATA AND THE RESULTS OF ANALYSIS USING SUCH
- 3 DATA?
- 4 A. Yes, they do.
- 5 Q. HAS THE COMPANY TRACKED AND ACCUMULATED MONTHLY IN A
- 6 DEFERRED ACCOUNT THE PORTION OF ITS REVENUE REPRESENTING
- 7 THE DIFFERENCE BETWEEN THE COST OF SERVICE APPROVED BY THE
- 8 COMMISSION IN ITS MOST RECENT RATE CASE AND THE COST OF
- 9 SERVICE THAT WOULD HAVE RESULTED HAD THE PROVISION FOR
- 10 FEDERAL INCOME TAXES BEEN BASED ON 21 % RATHER THAN 35%, AS
- 11 **REQUIRED BY THE ORDER?**
- 12 A. Yes, it has, and it will continue to do so until its next general rate case, when the new
- income tax rate will be incorporated into rates.
- 14 Q. WHAT IMPACT WILL THE TCJA TAX CHANGES HAVE ON THE
- 15 **COMPANY'S FEDERAL TAX EXPENSE?**
- 16 A. As Company Witness John R. Wilde testifies, the TAWC has calculated that the reduction
- of the corporate federal income tax rate from 35% to 21% has reduced TAWC's annualized
- federal income tax expense in base rates by \$2,035,031. Please refer to **Petitioner's**
- 19 Exhibit Impact of Tax Expense—LCB attached to my testimony. In addition, the
- 20 change in tax rate has reduced the revenue requirement for the Company's Qualified
- 21 Infrastructure Investment Program Rider, the Economic Development Investment Rider
- and the Safety and Environmental Compliance Rider (together, "Capital Recovery Riders")

- by \$632,460.¹ This reduction was proposed by the Company in TPUC Docket No. 17-00124.
- 3 Q. HAS THE COMPANY ESTIMATED THE ACT'S EFFECT ON ITS ADIT
 4 BALANCE?
- A. Yes. As Mr. Wilde explains, TAWC's initial estimate of the net excess ADIT balances is 5 \$17,487,688 total (protected/plant-related and unprotected/non-plant-related). Assuming 6 a 50-year normalization period based on the estimated average remaining service life of 7 the assets, this balance would be normalized and returned to customers in the amount of 8 \$349,754 per year for 50 years. Mr. Wilde cautions, however, that these estimates are not 9 10 suitable for ratemaking purposes and will be revised as more information becomes available. As Mr. Wilde explains, the Company expects to have a more reliable estimate 11 of its excess ADIT balance and the applicable amortization periods by the end of the first 12 quarter of 2019. 13
- 14 Q. WILL THE TCJA'S IMPACT BE DIFFERENT FOR THE VARIOUS
 15 REGULATED UTILITIES?
- 16 A. Yes. There are significant differences among utility sectors, and between utilities within
 17 each sector, that should be considered in determining the manner in which changes in
 18 revenue requirement resulting from the reduction in the federal corporate income tax rate
 19 made by the TCJA should be implemented to benefit customers. In determining how to
 20 respond, a "one-size-fits-all" solution on flowing the benefits back to customers will likely
 21 not be the best approach. As the Commission is aware, utilities in general are highly capital
 22 intensive, and water utilities are the most capital-intensive because of their high rate of

¹ Refer to "Final Version of Exhibits" filed by TAWC in Docket No. 17-00124 on March 15, 2018.

replacement and rehabilitation of aging infrastructure and the high levels of capital investment needed to enhance reliability, and assure high-quality customer service (given that water utilities provide a commodity for human consumption). Financing such high levels of annual plant additions has been an ongoing challenge for water utilities, including TAWC. Some stakeholders may advocate a direct and immediate pass-through of the TCJA's federal income tax rate reduction. However, an immediate pass-through would reduce Tennessee-American's cash flow, decrease internally-generated funds available for new investments, and stress various financial metrics that directly bear on credit ratings (and interest rates) for new and refunding debt issuances. Moreover, in addition to reducing the Federal corporate income tax rate, the TCJA eliminated "bonus" depreciation for public utility property, thus further reducing cash available for investment. Moody's Investors Services recognized the adverse effects of the TCJA on public utilities in its Rating Action report issued on January 19, 2018, where it expressed the general view of credit rating agencies that "tax reform is credit negative for US regulated utilities." Please refer to a copy of the Moody's Investors Service Rating Action attached to my testimony as Petitioner's Exhibit - Moody's Rating Action - LCB. TAWC believes that the TCJA's benefits should, and, under the Company's proposals, will, be passed on fully to its customers. However, an immediate rate reduction is not in

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customers' long-term best interests.

Q. WHAT IS THE COMPANY'S PROPOSAL WITH RESPECT TO THE 1 REDUCTION ITS **CAPITAL** RECOVERY 2 IN RIDERS' REVENUE **REQUIREMENTS?** 3 As I explain in my Supplemental Testimony in Docket No. 17-000124, TAWC proposed 4 A. to adjust the 2018 Capital Recovery Riders for a reduced federal income tax expense as 5 well as an adjustment of the calculation of the 2018 Capital Recovery Riders ADIT 6 calculation only for the calendar year 2018. TAWC has recalculated the 2018 Capital 7 Recovery Riders to account for those changes. The recalculation was filed as an attachment 8 to my Supplemental Testimony and again with Supplemental Rebuttal Testimony in 9 Docket No. 17-00124. Future Capital Recovery Riders will reflect the new rate. 10 Q. WHAT IS THE COMPANY'S PROPOSAL WITH RESPECT TO THE 11 12 REDUCTION IN INCOME TAX EXPENSE IN BASE RATES AND EXCESS ADIT **BALANCE?** 13 A. Tennessee-American proposes to defer both the reduction in the Company's federal 14 income tax expense in base rates and the ADIT normalization amounts as regulatory 15 16 liabilities and use them to offset the Company's Capital Recovery Riders and Capital Recovery Rider reconciliations, thus reducing our customers' Capital Recovery Rider 17 18 charges while, at the same time, funding accelerated infrastructure replacement

PLEASE EXPLAIN HOW THE REDUCED INCOME TAX EXPENSE IN BASE

RATES AND EXCESS ADIT NORMALIZATION WOULD BE USED TO OFFSET

Q.

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² Tennessee-American Water Company's Supplemental Testimony of Linda C. Bridwell filed Feb. 8, 2018, Petition of Tennessee-American Water Company Regarding the 2018 Investment and Related Expenses Under the Qualified Infrastructure Investment Program Rider, the Economic Development Investment Rider and the Safety and Environmental Compliance Rider, TPUC Docket No. 17-00124.

1 TENNESSEE-AMERICAN'S CAPITAL RECOVERY RIDERS AND 2 RECONCILIATIONS.

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The Company would continue to track and accumulate monthly in a deferred account the portion of its revenue representing the difference between the cost of service approved by the Commission in its most recent rate case and the cost of service that would have resulted had the provision for federal income taxes been based on 21 % rather than 35%. The accumulated savings in 2018 would be applied to reduce the 2018 Capital Recovery Rider reconciliation amounts. Going forward, Capital Recovery Rider charges for 2019 and future years would be offset by the projected base rate income tax savings for that year. Similarly, the Company would track and accumulate in a deferred account the normalization of its excess ADIT balances once those balances and the amortization periods required for normalization are reliably determined. The 2018 deferred normalization amounts would be applied to reduce the 2018 Capital Recovery Riders reconciliation, and the deferred normalization payments for 2019 and future years would be used to offset the Capital Recovery Rider charges for those years. The deferrals and Capital Recovery Rider offsets would continue until the Company's next rate case, when the new tax rate and excess ADIT normalization are rolled into new rates.

Q. DOES TENNESSEE-AMERICAN'S PROPOSAL BENEFIT CUSTOMERS?

Yes. Our proposal benefits our customers in four principal ways. First, the revenue requirement for the Company's Capital Recovery Riders has been reduced by the amount of the tax savings. This produces an immediate and ongoing benefit for customers for the calculated tax expense reduction of \$2,035,031 in each year and can be supplemented with

1 any other tax changes as they become more accurately calculated including the excess ADIT. 2 Second, the Company's proposal uses the base rates tax savings and excess ADIT 3 normalization to reduce or eliminate the Company's Capital Recovery Rider charges and 4 reconciliations. Customers will thus receive the full benefit of the TCJA's tax reductions 5 in the form of actual rate reductions while the Company continues to invest in necessary 6 7 replacement of infrastructure at a higher rate than before the Capital Recovery Riders were 8 approved. Third, the Company's proposal passes the base rates savings and excess ADIT 9 normalization through in a manner that maintains cash flow and financial stability, keeping 10 lower costs for capital for our customers. The proposal allows the Company to continue 11 12 to support the maintenance and improvement of essential infrastructure, support opportunities for successful economic development, growth and job creation, and ensure 13 safety and reliability. 14 Fourth, customers will not see a whipsaw effect from rate changes. Customers should 15 receive the benefit of an offset to most, if not all of a rate increase for the Capital Recovery 16 Riders in 2019, and possibly beyond. 17 18 In addition, the deferral of the return of excess ADIT balances until reliable estimates and appropriate amortization periods can be determined reduces the risk of violating the 19 normalization rules and losing the benefits of accelerated depreciation, as explained by 20 Company witness John Wilde. 21

- 1 Q. HOW DOES TENNESSEE-AMERICAN INTEND TO ADDRESS THE ACT'S
- 2 TREATMENT OF CONTRIBUTIONS IN AID OF CONSTRUCTION ("CIAC")
- 3 AND CUSTOMER ADVANCE CONTRIBUTIONS ("CAC")?
- 4 A. Until recently, water utilities like TAWC were exempt from taxation for revenues received
- for main extensions. Pursuant to the TCJA, CIAC and CAC are now 100% taxable to the
- 6 Company for contributions to construct utility plant received from outside parties. TAWC
- 7 intends to pass this new tax expense through to the developers responsible for the cost of
- the main extensions funded by the CIAC/CAC. CIACs and CACs will be "grossed up" to
- 9 cover the Company's tax obligation associated with the CIAC/CAC beginning in 2018. In
- this manner, the additional tax cost will be paid by the customers for whom it is incurred,
- as opposed to seeking recovery from other ratepayers.
- 12 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 13 A. Yes.

Tennessee American Water Docket No. 18-XXXXX

Operating Income Statement Per Docket No. 12-00049 at 35% Federal Tax with Adjustment for Estimated TCJA Change to Tax Expense

Tax Expense Impact Exhibit

	A Per Docket No. 12-00049		B Estimated		C = A + B	
	Rate Case I	e Case Update as of 11-30-2013 TCJA Change		CJA Change		
	at	35% Federal Tax	For 21% Tax Expense		Adjusted	
Revenues	\$	48,890,079	\$	(2,035,031)	\$	46,855,048
O&M	\$	23,696,337	\$	(3,886)	\$	23,692,451
General Tax	\$	4,510,468			\$	4,510,468
Depreciation and Amortization	\$	6,120,168			\$	6,120,168
State Income Tax Expense	\$	645,214	\$	(132,024)	\$	513,190
Federal Income Tax Expense	\$	4,367,246	\$	(1,899,121)	\$	2,468,125
Operating Income	\$	9,550,647			\$	9,550,647



Rating Action: Moody's changes outlooks on 25 US regulated utilities primarily impacted by tax reform

Global Credit Research - 19 Jan 2018

New York, January 19, 2018 -- Moody's Investors Service, ("Moody's") has changed the rating outlooks to negative from stable for 24 regulated utilities and utility holding companies; and to stable from positive for one utility holding company in the United States. The short-term and long-term ratings for all 25 companies were affirmed.

RATINGS RATIONALE

"Today's action primarily applies to companies that already had limited cushion in their rating for deterioration in financial performance, will be incrementally impacted by changes in the tax law and where we now expect key credit metrics to be lower for longer," said Jim Hempstead, a Managing Director at Moody's. "Utilities will work closely with state regulators to try to mitigate the negative impact of tax reform and in some cases they may seek to refine their corporate financial policies. Where successful, their rating outlooks could revert to stable."

Tax reform is credit negative for US regulated utilities because the lower 21% statutory tax rate reduces cash collected from customers, while the loss of bonus depreciation reduces tax deferrals, all else being equal. Moody's calculates that the recent changes in tax laws will dilute a utility's ratio of cash flow before changes in working capital to debt by approximately 150 - 250 basis points on average, depending to some degree on the size of the company's capital expenditure programs. From a leverage perspective, Moody's estimates that debt to total capitalization ratios will increase, based on the lower value of deferred tax liabilities.

The change in outlook to negative from stable for the 24 companies affected in this rating action primarily reflects the incremental cash flow shortfall caused by tax reform on projected financial metrics that were already weak, or were expected to become weak, given the existing rating for those companies. The negative outlook also considers the uncertainty over the timing of any regulatory actions or other changes to corporate finance polices made to offset the financial impact.

The change in outlook to stable from positive for American Electric Power Company, Inc. (AEP, Baa1 stable) reflects Moody's calculations that the projected ratio of cash flow before changes in working capital to debt, incorporating the effects of tax reform, will remain in the mid-teens range. At this level, Moody's believes AEP's Baa1 rating is appropriate.

The vast majority of US regulated utilities, however, continue to maintain stable rating outlooks. We do not expect the cash flow reduction associated with tax reform to materially impact their credit profiles because sufficient cushion exists within projected financial metrics for their current ratings. Nonetheless, further actions could occur on a company specific basis.

Over the next 12 to 18 months, Moody's will continue to monitor the financial impact of tax reform on each company, including its regulatory approach to rate treatment and any changes to corporate finance strategies. This will include balance sheet changes due to the reclassification of excess deferred tax liabilities as a regulatory liability and the magnitude of any amounts to be refunded to customers. If the financial impact of tax reform is more severe than Moody's initial estimates or the companies fail to materially mitigate any weaknesses in their financial profiles, the ratings could be downgraded.

That said, Moody's expects that most utilities will attempt to manage any negative financial implications of tax reform through regulatory channels. Corporate financial policies could also change. The actions taken by utilities will be incorporated into the credit analysis on a prospective basis. As a result, it is conceivable that some companies will sufficiently defend their credit profiles. For these companies, it is possible for the outlook to return to stable.

Potential regulatory offsets to tax-related cash leakage could include: accelerated cost recovery of certain regulatory assets or future investment; changes to the equity layer or allowed ROEs in rates, and other actions. Changes to corporate financial policies could include changes to capitalization, the financing of future

investments, dividend growth, or others. Some of these corporate measures could have a more immediate boost to projected metrics than certain regulatory provisions, which may take time to approve and implement.

Outlook Actions:

- .. Issuer: American Electric Power Company, Inc.
-Outlook, Changed To Stable From Positive
- .. Issuer: Avista Corp.
-Outlook, Changed To Negative From Stable
- .. Issuer: Avista Corp. Capital II
-Outlook, Changed To Negative From Stable
- .. Issuer: Duke Energy Corporation
-Outlook, Changed To Negative From Stable
- .. Issuer: Entergy Corporation
-Outlook, Changed To Negative From Stable
- .. Issuer: New Jersey Natural Gas Company
-Outlook, Changed To Negative From Stable
- .. Issuer: Northwest Natural Gas Company
-Outlook, Changed To Negative From Stable
- .. Issuer: ONE Gas, Inc
-Outlook, Changed To Negative From Stable
- .. Issuer: Piedmont Natural Gas Company, Inc.
-Outlook, Changed To Negative From Stable
- .. Issuer: Public Service Company of Oklahoma
-Outlook, Changed To Negative From Stable
- .. Issuer: Questar Gas Company
-Outlook, Changed To Negative From Stable
- .. Issuer: South Jersey Gas Company
-Outlook, Changed To Negative From Stable
- .. Issuer: Alabama Power Capital Trust V
-Outlook, Changed To Negative From Stable
- .. Issuer: Alabama Power Company
-Outlook, Changed To Negative From Stable
- .. Issuer: Southern Company (The)
-Outlook, Changed To Negative From Stable
- .. Issuer: Southern Elect Generating Co

-Outlook, Changed To Negative From Stable
- .. Issuer: Southwestern Public Service Company
-Outlook, Changed To Negative From Stable
- .. Issuer: Wisconsin Gas LLC
-Outlook, Changed To Negative From Stable
- .. Issuer: American Water Capital Corp.
-Outlook, Changed To Negative From Stable

Issuer: American Water Works Company, Inc.

....Outlook, Changed To Negative From Stable

Outlook Actions:

- .. Issuer: Consolidated Edison Company of New York, Inc.
-Outlook, Changed To Negative From Stable
- .. Issuer: Consolidated Edison, Inc.
-Outlook, Changed To Negative From Stable
- .. Issuer: Orange and Rockland Utilities, Inc.
-Outlook, Changed To Negative From Stable
- .. Issuer: Brooklyn Union Gas Company, The
-Outlook, Changed To Negative From Stable
- .. Issuer: KeySpan Gas East Corporation
-Outlook, Changed To Negative From Stable

Affirmations:

- .. Issuer: American Electric Power Company, Inc.
- Commercial Paper, Affirmed P-2
-Senior Unsecured Shelf, Affirmed (P)Baa1
-Junior Subordinated Shelf, Affirmed (P)Baa2
-Senior Unsecured Regular Bond/Debenture, Affirmed Baa1
- .. Issuer: Avista Corp.
- Issuer Rating, Affirmed Baa1
-Senior Secured First Mortgage Bonds, Affirmed A2
- Underlying Senior Secured First Mortgage Bonds, Affirmed A2
-Senior Secured Medium-Term Note Program, Affirmed (P)A2
-Senior Secured Regular Bond/Debenture, Affirmed A2
-Senior Unsecured Medium-Term Note Program, Affirmed (P)Baa1
- .. Issuer: Avista Corp. Capital II

-Pref. Stock Preferred Stock, Affirmed Baa2
- .. Issuer: Duke Energy Corporation
- Issuer Rating, Affirmed Baa1
-Junior Subordinated Regular Bond/Debenture, Affirmed Baa2
-Senior Unsecured Shelf, Affirmed (P)Baa1
-Senior Unsecured Bank Credit Facility, Affirmed Baa1
-Senior Unsecured Commercial Paper, Affirmed P-2
-Senior Unsecured Regular Bond/Debenture, Affirmed Baa1
- .. Issuer: Entergy Corporation
- Issuer Rating, Affirmed Baa2
-Senior Unsecured Commercial Paper, Affirmed P-2
-Senior Unsecured Regular Bond/Debenture, Affirmed Baa2
-Senior Unsecured Shelf, Affirmed (P)Baa2
- .. Issuer: New Jersey Natural Gas Company
- Commercial Paper, Affirmed P-1
- .. Issuer: Northwest Natural Gas Company
- Commercial Paper, Affirmed P-2
-Senior Secured Medium-Term Note Program, Affirmed (P)A1
-Senior Unsecured Medium-Term Note Program, Affirmed (P)A3
-Senior Secured Shelf, Affirmed (P)A1
-Senior Unsecured Shelf, Affirmed (P)A3
-Preferred Shelf, Affirmed (P)Baa2
-Senior Secured First Mortgage Bonds, Affirmed A1
-Senior Secured Regular Bond/Debenture, Affirmed A1
- .. Issuer: ONE Gas, Inc
-Senior Unsecured Commercial Paper, Affirmed P-1
-Senior Unsecured Regular Bond/Debenture, Affirmed A2
- .. Issuer: Piedmont Natural Gas Company, Inc.
-Senior Unsecured Commercial Paper, Affirmed P-1
-Senior Unsecured Regular Bond/Debenture, Affirmed A2
- .. Issuer: Public Service Company of Oklahoma
- Issuer Rating, Affirmed A3
-Senior Unsecured Regular Bond/Debenture, Affirmed A3

- .. Issuer: Questar Gas Company
-Senior Unsecured Commercial Paper, Affirmed P-1
-Senior Unsecured Medium-Term Note Program, Affirmed (P)A2
-Senior Unsecured Regular Bond/Debenture, Affirmed A2
- .. Issuer: Alabama Power Capital Trust V
-Pref. Stock Preferred Stock, Affirmed A2
- .. Issuer: Alabama Power Company
- Commercial Paper, Affirmed P-1
- Issuer Rating, Affirmed A1
-Senior Unsecured Shelf, Affirmed (P)A1
-Preferred Shelf, Affirmed (P)A3
-Preference Shelf, Affirmed (P)A3
-Pref. Stock Preferred Stock, Affirmed A3
-Senior Unsecured Bank Credit Facility, Affirmed A1
-Senior Unsecured Commercial Paper, Affirmed P-1
-Senior Unsecured Regular Bond/Debenture, Affirmed A1
- .. Issuer: Columbia (Town of) AL, Industrial Dev. Board
-Senior Unsecured Revenue Bonds, Affirmed A1
-Senior Unsecured Revenue Bonds, Affirmed VMIG 1
- .. Issuer: Eutaw (City of) AL, Industrial Dev. Board
-Senior Unsecured Revenue Bonds, Affirmed A1
-Senior Unsecured Revenue Bonds, Affirmed VMIG 1
- .. Issuer: Mobile (City of) AL, I.D.B.
-Senior Unsecured Revenue Bonds, Affirmed A1
-Senior Unsecured Revenue Bonds, Affirmed VMIG 1
- .. Issuer: Walker County Econ & Ind Dev Authority
-Senior Unsecured Revenue Bonds, Affirmed A1
-Senior Unsecured Revenue Bonds, Affirmed VMIG 1
- ..Issuer: West Jefferson (Town of) AL, Ind. Devel. Bd.
-Senior Unsecured Revenue Bonds, Affirmed A1
-Senior Unsecured Revenue Bonds, Affirmed VMIG 1
- ..Issuer: Wilsonville (Town of) AL, I.D.B.
-Senior Unsecured Revenue Bonds, Affirmed A1
-Senior Unsecured Revenue Bonds, Affirmed VMIG 1

-Underlying Senior Unsecured Revenue Bonds, Affirmed A1
- .. Issuer: South Jersey Gas Company
- Issuer Rating, Affirmed A2
-Senior Secured First Mortgage Bonds, Affirmed Aa3
-Senior Secured Medium-Term Note Program, Affirmed (P)Aa3
-Senior Secured Regular Bond/Debenture, Affirmed Aa3
-Senior Unsecured Commercial Paper, Affirmed P-1
- .. Issuer: New Jersey Economic Development Authority
-Senior Secured Revenue Bonds, Affirmed Aa3
-Underlying Senior Secured Revenue Bonds, Affirmed Aa3
-Senior Secured Revenue Bonds, Affirmed Aa2
-Underlying Senior Secured Revenue Bonds, Affirmed Aa2
- .. Issuer: Southern Company (The)
- Commercial Paper, Affirmed P-2
-Junior Subordinated Regular Bond/Debenture, Affirmed Baa3
-Senior Unsecured Shelf, Affirmed (P)Baa2
-Junior Subordinated Shelf, Affirmed (P)Baa3
-Senior Unsecured Bank Credit Facility, Affirmed Baa2
-Senior Unsecured Regular Bond/Debenture, Affirmed Baa2
- .. Issuer: Southern Elect Generating Co
- Issuer Rating, Affirmed A2
-Senior Unsecured Regular Bond/Debenture, Affirmed A1
- .. Issuer: Southwestern Public Service Company
- Issuer Rating, Affirmed Baa1
-Senior Secured Shelf, Affirmed (P)A2
-Senior Unsecured Shelf, Affirmed (P)Baa1
-Senior Secured First Mortgage Bonds, Affirmed A2
-Senior Unsecured Bank Credit Facility, Affirmed Baa1
-Senior Unsecured Commercial Paper, Affirmed P-2
-Senior Unsecured Regular Bond/Debenture, Affirmed Baa1
- .. Issuer: Wisconsin Gas LLC
- Commercial Paper, Affirmed P-1
-Senior Unsecured Regular Bond/Debenture, Affirmed A2

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.. Issuer: American Water Capital Corp.
.... Issuer Rating, Affirmed A3
....Senior Unsecured Shelf, Affirmed (P)A3
....Senior Unsecured Commercial Paper, Affirmed P-2
....Senior Unsecured Regular Bond/Debenture, Affirmed A3
.. Issuer: American Water Works Company, Inc.
.... Issuer Rating, Affirmed A3
.. Issuer: Berks County Industrial Development Auth., PA
....Senior Unsecured Revenue Bonds, Affirmed A3
.. Issuer: California Pollution Control Financing Auth.
....Senior Unsecured Revenue Bonds, Affirmed A3
...Issuer: Illinois Development Finance Authority
....Senior Unsecured Revenue Bonds, Affirmed A3
.. Issuer: Illinois Finance Authority
....Senior Unsecured Revenue Bonds, Affirmed A3
.. Issuer: Indiana Finance Authority
....Senior Unsecured Revenue Bonds, Affirmed A3
.. Issuer: MARICOPA COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY, AZ
....Senior Unsecured Revenue Bonds, Affirmed A3
.. Issuer: Northampton County I.D.A., PA
....Senior Unsecured Revenue Bonds, Affirmed A3
.. Issuer: Owen (County of) KY
....Senior Unsecured Revenue Bonds, Affirmed A3
.Issuer: Consolidated Edison Company of New York, Inc.
.... Issuer Rating, Affirmed A2
....Senior Unsecured Shelf, Affirmed (P)A2
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....Subordinate Shelf, Affirmed (P)A3Preferred Shelf, Affirmed (P)Baa1

....Senior Unsecured Commercial Paper, Affirmed P-1

....Senior Unsecured Regular Bond/Debenture, Affirmed A2

.. Issuer: New York State Energy Research & Dev. Auth.

.... Underlying Senior Unsecured Revenue Bonds, Affirmed A2

....Senior Unsecured Revenue Bonds, Affirmed A2

.... Underlying Senior Unsecured Regular Bond/Debenture, Affirmed A2

- .. Issuer: New York State Research & Development Auth.
-Senior Unsecured Revenue Bonds, Affirmed A2
-Underlying Senior Unsecured Revenue Bonds, Affirmed A2
- .. Issuer: Consolidated Edison, Inc.
- Issuer Rating, Affirmed A3
-Senior Unsecured Shelf, Affirmed (P)A3
-Senior Unsecured Commercial Paper, Affirmed P-2
-Senior Unsecured Regular Bond/Debenture, Affirmed A3
- .. Issuer: Orange and Rockland Utilities, Inc.
- Issuer Rating, Affirmed A3
-Senior Unsecured Commercial Paper, Affirmed P-2
-Senior Unsecured Regular Bond/Debenture, Affirmed A3
- .. Issuer: Brooklyn Union Gas Company, The
-LT Issuer Rating, Affirmed A2
-Senior Unsecured Regular Bond/Debenture, Affirmed A2
- .. Issuer: New York State Energy Research & Dev. Auth.
-Backed LT IRB/PC Insured, Affirmed A2
- ... Underlying LT IRB/PC, Affirmed A2

Issuer: KeySpan Gas East Corporation

-LT Issuer Rating, Affirmed A2
-Senior Unsecured Regular Bond/Debenture, Affirmed A2

The principal methodology used in rating Public Service Company of Oklahoma, Southwestern Public Service Company, Southern Company (The), Alabama Power Company, Alabama Power Capital Trust V, Southern Elect Generating Co, South Jersey Gas Company, Wisconsin Gas LLC, American Electric Power Company, Inc., Duke Energy Corporation, Piedmont Natural Gas Company, Inc., Avista Corp., Avista Corp. Capital II, ONE Gas, Inc, New Jersey Natural Gas Company, Northwest Natural Gas Company, Questar Gas Company, Entergy Corporation, Consolidated Edison, Inc., Consolidated Edison Company of New York, Inc., Brooklyn Union Gas Company, The, KeySpan Gas East Corporation, and Orange and Rockland Utilities, Inc. was Regulated Electric and Gas Utilities published in June 2017. The principal methodology used in rating American Water Works Company, Inc. and American Water Capital Corp. was Regulated Water Utilities published in December 2015. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

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country of Fagette;

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Linda C. Bridwell, being by me first duly sworn deposed and said that:

He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Public Utility Commission, and if present before the Commission and duly sworn, her testimony would be as set forth in her pre-filed testimony in this matter.

Hude E. Bridwell
Linda C. Bridwell

Sworn to and subscribed before me this 2 Not day of April, 2018.

Notary Public

My Commission Expires: 7 25 2020

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

Daniel P. Whitaker III
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This the 1st day of April, 2019.

Melvin J. Malone