COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

KENTUCKY INDUSTRIAL UTILITY	CUSTOMERS, INC.)	Case No. 2018-0036
V.	COMPLAINANT)	Case 100, 2018-0030
DUKE ENERGY KENTUCKY, INC.)	
	DEFENDANT)	

DIRECT TESTIMONY OF

WILLIAM DON WATHEN JR.,

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

Attachments:

- WDW-1 Stipulation
- WDW-2 Calculation Supporting Tax Refund Credit
- WDW-3 Workpapers from Case No. 2017-00321
- WDW-4 Updated Rider ASRP Rate Calculations and Tariff
- WDW-5 Proposed Tax Refund Rider Tariff

I.INTRODUCTION

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is William Don Wathen Jr., and my business address is 139 East Fourth
3		Street, Cincinnati, Ohio 45202.
4	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
5	A.	I am employed by Duke Energy Business Services LLC (DEBS), as Director of
6		Rates and Regulatory Strategy for Ohio and Kentucky. DEBS provides various
7		administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy
8		Kentucky or Company) and other affiliated companies of Duke Energy Corporation
9		(Duke Energy).
10	Q.	PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND
11		PROFESSIONAL EXPERIENCE.
12	A.	I received Bachelor Degrees in Business and Chemical Engineering, and a Master of
13		Business Administration Degree, all from the University of Kentucky. After
14		completing graduate studies, I was employed by Kentucky Utilities Company as a
15		planning analyst. In 1989, I began employment with the Indiana Utility Regulatory
16		Commission as a senior engineer. From 1992 until mid-1998, I was employed by
17		SVBK Consulting Group, where I held several positions as a consultant, focusing
18		principally on utility rate matters. I was hired by Duke Energy (then Cinergy
19		Services, Inc.), in 1998, as an Economic and Financial Specialist in the Budgets and
20		Forecasts Department. In 1999, I was promoted to the position of Manager,
21		Financial Forecasts. In August 2003, I was named to the position of Director - Rates.
22		On December 1, 2009, I took the position of General Manager and Vice President of

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1		Rates, Ohio and Kentucky. On July 3, 2012, as a result of the merger between
2		Duke Energy and Progress Energy Corp., my title changed to Director of Rates
3		and Regulatory Strategy for Ohio and Kentucky.
4	Q.	PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR OF
5		RATES AND REGULATORY STRATEGY FOR OHIO AND KENTUCKY.
6	A.	As Director of Rates and Regulatory Strategy for Ohio and Kentucky, I am
7		responsible for all state and federal rate matters involving Duke Energy Kentucky
8		and its parent, Duke Energy Ohio, Inc.
9	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY
10		PUBLIC SERVICE COMMISSION?
11	A.	Yes. I have previously testified in a number of cases before the Kentucky Public
12		Service Commission (Commission) and other regulatory commissions.
13	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE
14		PROCEEDINGS?
15	A.	My testimony is presents and describes in detail the support for the Offer and
16		Acceptance of Satisfaction which the parties are requesting the Commission to
17		approve in full-satisfaction of this case.
		II. <u>DISCUSSION</u>
18	Q.	PLEASE BRIEFLY DESCRIBE THE TAX ACT AND ITS MOST
19		SIGNIFICANT CHANGES.
20	A.	On December 22, 2017, Tax Cuts and Jobs Act of 2017 (Tax Act) was signed into
21		law. The stated purpose behind the Tax Act is to stimulate business investments
22		and grow the economy. This legislation represents the most significant revision

1 to the Federal Tax Code within the last thirty years. The Tax Act has numerous 2 significant changes for all U.S. citizens and corporations, both positive and 3 negative. For regulated utilities, such as Duke Energy Kentucky, some of the key 4 provisions of the Tax Act are as follows: (1) reduction of the corporate tax rate 5 from 35 percent to 21 percent; (2) retention of interest deductibility; and (3) 6 eliminating bonus depreciation. The Tax Act also provides guidance on the 7 treatment of excess accumulated deferred income taxes (ADITs) resulting from 8 the Act.

9 Q. PLEASE SUMMARIZE HOW THE TAX ACT WILL IMPACT 10 UTILITIES LIKE DUKE ENERGY KENTUCKY.

11 A. In summary, the changes will lower the Company's annual federal tax expense 12 because of the approximate 40 percent reduction in the federal Tax Rate.¹ Due to 13 this reduction in the federal income tax rate, the Company will now have excess 14 accumulated deferred income taxes (ADITs) on its regulatory books that will have 15 to be accounted for in conformity with the Tax Act. Further, the Tax Act 16 eliminates 'bonus' depreciation, which historically has been used to reduce utility 17 rate base.

18 Q. PLEASE EXPLAIN THE CONCEPT OF ADITS AND HOW THEY ARE 19 FACTORED INTO UTILITY RATES.

A. Simply put, deferred taxes represent the difference between the income tax expense included in a utility's rates, *i.e.*, what they are recovering from customers, and the income taxes actually paid. These differences arise every year; so, accumulated deferred income taxes or ADITs simply represents the

 $^{^{1}(0.35-0.21)/0.35=0.40 \}text{ or } 40\%$

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cumulative total of those deferred taxes at a point in time.

Most of the deferred taxes accrue because the utility pays less income taxes in a particular year and pay more in later years. And, in most cases, this reversal is complete, i.e., however much customers paid in excess of the actual tax in the early years is completely offset in later years when the company's actual tax expense is greater than the amount included in customers' rates.

7 Prior to passage of the Tax Act, the Company has been collecting these 8 future taxes from customers assuming it would have to pay these taxes based on a 9 35 percent tax rate. Reducing the tax rate to 21 percent means the Company will 10 pay these taxes sometime in the future based on a 21 percent tax rate. The result 11 of this is that the Company has collected taxes from the customers that it will no 12 longer be required to pay to the federal government. The difference between the 13 deferred taxes the Company previously thought it would have to pay in the future 14 at 35 percent and the deferred taxes it will now have to pay in the future at 21 15 percent becomes an "excess" deferred income tax liability.

16 Q. IN AN ORDER ENTERED ON DECEMBER 27, 2017, THE COMMISSION

17 DIRECTED DUKE ENERGY KENTUCKY TO CREATE REGULATORY

18 LIABILITIES ON JANUARY 1, 2018, TO ACCOUNT FOR THE

- IMMEDIATE EFFECTS OF THE TAX ACT. HAS DUKE ENERGY
- 20 **KENTUCKY COMPLIED WITH THIS ORDER?**
 - A. On December 31, 2017, the Company estimated the amount of the excess accumulated deferred income tax and recorded a regulatory liability to reflect that estimate. Beginning in 2018, the Company will defer the impacts of the lower tax

rate until such time as new rates are in effect.

III. STIPULATION AND SETTLEMENT AGREEMENT

1Q.DID DUKE ENERGY KENTUCKY TENDER AN OFFER OF2SATISFACTION TO RESOLVE THE ISSUES RAISED IN THIS3COMPLAINT CASE?

A. Yes. Duke Energy Kentucky filed an Answer and an Offer of Satisfaction on
January 26, 2018. At that same time, Duke Energy Kentucky also filed a Motion
to Schedule an Informal Conference. An Informal Conference was held at the
Commission's office on February 7, 2018. Representatives of Duke Energy
Kentucky, the KIUC, and the Attorney General's Office (the "Parties"), and the
Commission Staff were present during the conference and participated in
settlement discussions.

Q. AS A RESULT OF THE INFORMAL CONFERENCE, DID KIUC AND THE ATTORNEY GENERAL'S OFFICE ACCEPT AN OFFER OF SATISFACTION IN THIS CASE?

14 The Company's initial Offer of Satisfaction was not acceptable to KIUC, the AG, A. 15 or Commission Staff. However, after discussions, a settlement was reached with 16 the Complainant, KIUC. There was agreement, however, that the effects of the 17 Tax Act upon Duke Energy Kentucky's electric rates should be addressed in the 18 context of the Company's pending electric base rate case (Case No. 2017-00321). 19 With regard to its natural gas rates, the Company also offered an alternative offer 20 of settlement that follows the same formula agreed to by the Parties in the 21 Louisville Gas & Electric Company and Kentucky Utilities Company's

1 (LG&E/KU) tax complaint case (Case No. 2018-00034).

Generally, the Company has agreed to provide a credit to customers for an appropriate and agreed upon level of benefits stemming from the Tax Act. The credit will be through a separate surcredit on customer's bills that will commence in May and will last until the Company has new natural gas base rates approved by this Commission in a case to be filed later this year.

7 Q. WAS THE COMPANY'S ALTERANTIVE OFFER OF SETTLEMENT 8 ACCEPTED?

9 A. KIUC agreed that Duke Energy Kentucky was using the same formula as
10 previously agreed to in the LG&E/KU complaint case. It therefore agreed with,
11 and accepted, Duke Energy Kentucky's proposed settlement. I have attached the
12 stipulation, with signatures from the Company and the KICU, as Attachment
13 WDW-1 to my testimony.

14The Attorney General's Office, however, has not agreed to the proposed15stipulation.

16 Q. WILL YOU DESCRIBE THE METHODOLOGY AGREED TO IN THE

- 17 STIPULATION FOR PROVIDING DUKE ENERGY KENTUCKY'S GAS
- 18 CUSTOMERS WITH BENEFITS FROM THE TAX ACT?
- A. Attachment WDW-2 to my testimony includes the calculation of the annualized
 benefit of the Tax Act that the Company is proposing to flow through to
 customers via a rider.
- Generally, the methodology mirrors the methodology already agreed to by
 the KIUC and the Attorney General in Case No. 2018-0034, which would resolve

1 the KIUC's identical complaint against LGE/KU. There are two major 2 components of the calculation. The first component calculates the impact of the 3 change in the federal income tax rate on the Company's pre-tax return 4 requirement (page 1, line 3, of Attachment WDW-2). The second component is 5 to calculate the amortization of the excess ADITs that have been estimated at 6 December 31, 2017, considering the requirement to normalize the return of 7 certain ADITs (page 1, line 9, of Attachment WDW-2).

8 Q. HOW DID YOU CALCULATE THE IMPACT OF THE TAX ACT ON 9 THE PRE-TAX RETURN?

10 A. The Company's existing gas base rates were approved by the Commission in its 11 order Case No. 2009-00202. The basis for computing the return component of the 12 Company's overall revenue requirement was the thirteen-month (January 31, 13 2010, through January 31, 2011) average capitalization allocated to gas service 14 (page 2, line 2, of Attachment WDW-2). The Commission's order, in Case No. 15 2009-00202, did not specify the capitalization that it used as the basis for 16 establishing new rates; so, I used the Company's as filed capitalization.

The return component of the Company's revenue requirement is the basis for calculating income taxes. The Company's after-tax weighted-average cost of capital, as approved in that case, was grossed up in order to convert the after-tax return to a pre-tax return, i.e., includes income taxes. The federal income tax rate included in that calculation at the time of the last rate case included a 35 percent federal income tax rate.

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Following the methodology agreed to by the KIUC and AG in Case No.

1		2018-00034, I next estimated the capitalization for a forecasted period (page 2,
2		line 6, of Attachment WDW-2) and calculated the pre-tax return based on the
3		current 21 percent tax rate, the currently approved return on equity of 10.375
4		percent, the cost of debt in the forecasted period, and the capital structure in the
5		forecasted period (see page 3 of Attachment WDW-2).
6		In Attachment WDW-3, I include copies of the relevant pages from the
7		Company's Application to show the capitalization adjustment and the weighted-
8		average cost of capital.
9	Q.	WHY DID YOU USE 10.375 PERCENT AS THE RETURN ON EQUITY?
10	A.	10.375 percent is the Company's current Commission-authorized return on equity
11		for base natural gas rates. Until new base rates are approved, 10.375 percent is the
12		allowed return on equity. There is no basis to use any other value for this part of
13		the calculation.
14	Q.	WHAT WAS YOUR SOURCE FOR THE FORECASTED DATA?
15	A.	The Company currently has pending a request to increase its base rates for electric
16		service using a forecasted test year of April 1, 2018, through March 31, 2019.
17		Insofar as the Company is expecting to file for new rates around September 2018,
18		the forecasted total company capitalization for the test year used in the electric
19		case represents a reasonable approximation of the total capitalization for the gas
20		business as well. Because the overall capitalization is allocated between electric
21		and gas, I estimated the projected capitalization for the gas business to be the
22		capitalization that was not allocated to electric. Inasmuch as neither the AG nor
23		the KIUC, or any other party to Case No. 2017-00321, objected to the ratio used

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for allocating capitalization between gas and electric, it should be a reasonable
 and uncontroversial basis for making this estimate.

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Q. WHAT WAS THE RESULT OF YOUR CALCULATIONS?

A. Because the Company's capitalization has grown significantly since the existing
base rates were approved, meaning that the Company's required return on rate
base is significantly below what was previously authorized by the Commission
and this deficiency exceeds the benefit of a lower pre-tax return that results from
the lower federal income tax expense and the lower after-tax weighted average
cost of capital for the forecasted period.

10 The net result of this calculation shows that, following the methodology 11 agree to by the KIUC and the AG in Case No. 2018-00034, the Company is 12 underrecovering through rates and thus there is no refund due to customers for the 13 change in taxes as it relates to the return component of capitalization. Based on 14 the result of this calculation, the Company and KIUC agree that this component of 15 the refund obligation be set at \$0, instead of the under-recovered amount, so not 16 to reduce the amount of excess ADITs that will be refunded.

17 Q. HOW DID THE COMPANY ESTIMATE THE AMOUNT OF EXCESS 18 ADITS TO BE REFUNDED TO CUSTOMERS?

A. The Company made an estimate of the excess ADIT balance as of December 31,
20 2017 (page 4, lines 2-3, of Attachment WDW-2). There will be a true-up to
21 adjust the estimate after the tax returns have been finalized for 2017, sometime
22 later this year. As has been discussed in the Company's earlier testimony in this
23 case, there are "protected" and "unprotected" excess ADITs.

For the protected excess ADITs, Duke Energy's tax department provided the amortization rates to be used under the 'average rate assumption method' (ARAM) that will avoid any violation of normalization rules. That rate, for 2018, is 1.8 percent (page 4, line 4, of Attachment WDW-2). The rate will change in 2019 to 2.8 percent. Applying these rates to the balance of protected excess ADITs yields the amortization amounts that will, once grossed up for taxes, be refunded to customers.

8 For the unprotected excess ADITs, in order to minimize controversy, the 9 Company proposes to use the same fifteen-year amortization period that was used 10 in the settlement agreed to in Case No. 2018-00034. The amortization amount for 11 the unprotected excess ADITs is also grossed up for taxes.

12 Q. WHAT IS THE ESTIMATED BENEFIT TO NATURAL GAS13 CUSTOMERS OF THE TAX ACT?

14 A. From January 1, 2018, to March 31, 2019, the estimated amount of the benefits of 15 the Tax Act to be distributed by Duke Energy Kentucky to its natural gas retail 16 customers, as provided in this Agreement are \$1,070,207 (page 1, line 9, of 17 Attachment WDW-2). This amount includes both protected and unprotected 18 amortized excess ADITs multiplied by the gross revenue conversion factor filed 19 in Case No. 2017-00321, as adjusted for a new 21 percent federal income tax rate. 20 This amount also excludes the increase in the annual revenue requirement that 21 would otherwise be attributed to the increase in Duke Energy Kentucky's 22 capitalization for the same period even when the reduced federal income tax rate 23 is taken into account

Q. ACCORDING TO THE AGREEMENT, HOW WILL NATURAL GAS CUSTOMERS RECEIVE THE ESTIMATED BENEFITS OF THE TAX ACT?

A. The Company proposes to implement a new rider, the Tax Refund Rider, to be
effective beginning May 1, 2018, and continuing through the date new base gas
rates are approved and implemented, which is expected to be around April 1,
2019. This new rider will reflect a credit based on usage (*i.e.*, \$/MCF) basis.

8 Q. HOW IS THE SURCREDIT FOR RESIDENTIAL NATURAL GAS 9 CUSTOMERS CALCULATED?

10 A. The Tax Refund Rider rate for is computed by first allocating the amount of the 11 refund to residential and non-residential customers based on their relative shares 12 of overall revenue from the most recent base rate case. The amount of the refund 13 allocated to each class is then divided by the usage for each class that was used in 14 the last base rate case for establishing base rates in order to calculate the Tax 15 Refund Rider rates for residential and non-residential customers. The calculations 16 are shown on page 1, line 10, of Attachment WDW-2.

17 Q. PLEASE SUMMARIZE THE ESTIMATED BENEFITS TO BE 18 DISTRIBUTED TO NATURAL GAS CUSTOMERS?

A. Over the period May 1, 2018, through March 31, 2019, Duke Energy Kentucky's residential natural gas customers can expect to see approximately \$680,680 in refunds due to the impact of the Tax Act for the period from January 1, 2018, through March 31, 2019. Non-residential customers will receive \$389,526 over that same period, for a total of \$1,070,207 for all customers.

1 Q. WHEN WOULD THE TAX ACT NATURAL GAS SURCREDIT END?

A. The Company anticipates filing a base rate case around September 2018 and
expects to use a forecasted test year. Based on the time expected between the
filing of the application and the establishment of new base rates, it is reasonable
to expect that a September 2018 application would mean new base rates around
April 1, 2019.

To be clear, customers will continue receiving the benefits associated with
the Tax Act but those benefits will be incorporated into base rates when the
Company's next rate case is approved.

10 Q. DOES THE AGREEMENT ALSO ADDRESS THE IMPLICATIONS OF

11 THE LOWER FEDERAL INCOME TAX RATE ON THE COMPANIES' 12 OTHER RATE MECHANISMS?

13 Yes. In addition to the surcredit for natural gas base rates, the reduction in the A. 14 federal income tax rate will be taken into account when the Company updates its 15 Accelerated Service Replacement Program Rider (Rider ASRP). Rider ASRP is 16 affected by the Tax Act because it includes a component for a return on the ASRP 17 rate base. Duke Energy Kentucky will update its current Rider ASRP to reflect 18 lower income tax rate so that customers will see a lower Rider ASRP charge 19 beginning May 1, 2018. Attachment WDW-4 is a revised Rider ASRP rate 20 calculation, including a revised Rider ASRP tariff, based on the filing made in 21 July 2017 updated to reflect the lower federal income tax rate. All subsequent 22 annual filings for Rider ASRP, beginning with the filing expected on or before 23 July 2018 (for rates effective January 1, 2019), will also reflect the lower federal

- income tax. The Company's forms will be updated at the time of their next filing
 to take into account the reduction in the federal income tax rate.
- 3 Q. IS DUKE ENERGY KENTUCKY PROPOSING NEW RATE SCHEDULES
 4 TO REFLECT THE TCJA SURCREDIT?
- 5 A. Yes. I have included Attachment WDW-5, which is a proposed tariff for the Tax
 6 Refund Rider.

IV. <u>CONCLUSION</u>

- 7 Q. DO YOU RECOMMEND THAT THE COMMISSION ACCEPT THE
 8 AGREEMENT?
- 9 A. Yes.
- 10 Q. PLEASE EXPLAIN.
- 11 A. The Agreement is a reasonable settlement of this proceeding. The same formula
- 12 is being used in this Agreement as was used in the LG&E/KU Offer and
- 13 Acceptance of Satisfaction that was tendered to the Commission a short time ago.
- 14 The Agreement achieves a result that is fair, just and reasonable.
- 15 Q. WERE ATTACHMENTS WDW-1 THROUGH WDW-5 PREPARED BY
- 16 YOU OR UNDER YOUR SUPERVISION?
- 17 A. Yes.
- 18 Q. DOES THIS CONCLUDE YOUR PRE-FILED TESTIMONY?
- 19 A. Yes.

VERIFICATION

STATE OF OHIO)	
)	SS:
COUNTY OF HAMILTON)	

The undersigned, William Don Wathen, Jr., Director of Rates & Regulatory Strategy, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

William Don Wathen Jr., Affiant

Subscribed and sworn to before me by William Don Wathen, Jr., on this 2nd day of March , 2018.

My Commission Expires: July 8.2022



E. MINNA ROLFES-ADDINS Notary Public, State of Ohio My Commission Explose July 8, 2022

NON-UNANIMOUS STIPULATION AND SETTLEMENT AGREEMENT

This Stipulation and Settlement Agreement ("Agreement") is entered into on this 2nd day of March, 2018, by and between Duke Energy Kentucky, Inc. ("Duke Energy Kentucky") and Kentucky Industrial Utility Customers, Inc., ("KIUC") (collectively, "the Parties").

RECITALS

WHEREAS, KIUC filed a complaint with the Kentucky Public Service Commission ("Commission"), on December 21, 2017, requesting the Commission to lower the rates of Duke Energy Kentucky and other jurisdictional utilities due to the anticipated effects of the Tax Cuts and Jobs Act ("Tax Act"); and

WHEREAS, on December 22, 2017, the Tax Act was signed into law by President Donald Trump; and

WHEREAS, on December 27, 2017, the Commission issued an Order which determined that KIUC's complaint had established a *prime facie* case and established Case No. 2017-00477 to investigate the claims made in KIUC's complaint; and

WHEREAS, on January 25, 2018, the Commission issued an Order separating Case No. 2017-00477 into three separate cases, with the new case number for the complaint against Duke Energy Kentucky being 2018-00036 (the "Complaint Proceeding"); and

WHEREAS, the Commission has granted full intervention to the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention, ("AG"); and

WHEREAS, an informal conference was held on February 7, 2018, for the purpose of discussing possible settlement and was attended by representatives of Duke Energy Kentucky, KIUC, the AG and Commission Staff; and

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WHEREAS, the Parties hereto desire to satisfy all the issues pending before the Commission in the Complaint Proceeding relating to Duke Energy Kentucky's natural gas operations; and

WHEREAS, it is understood by both Parties hereto that this Agreement is subject to the approval of the Commission, insofar as it constitutes an agreement by the Parties for satisfying the Complaint Proceeding, and, absent express agreement stated herein, does not represent agreement on any specific claim, methodology, or theory supporting the appropriateness of any proposed or recommended adjustments to Duke Energy Kentucky's rates, terms, or conditions; and

WHEREAS, the Parties to this Agreement agree that this Agreement, viewed in its entirety, is a fair, just and reasonable resolution to all of the issues in the Complaint Proceeding; and

WHEREAS, the AG has decided not to join in this Agreement; and

WHEREAS, to the maximum extent possible the terms and conditions of this Agreement were modeled on the Offer And Acceptance Of Satisfaction entered into and submitted to the Commission by KIUC, the AG, Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") in Case No. 2018-00034; and

WHEREAS, the Parties believe that there is sufficient evidence, including data and other information, in the record of this proceeding to support this Agreement, and further believe that the Commission should approve this Agreement and dismiss the Complaint Proceeding pursuant to 807 KAR 5:001, Section 20(2).

ARTICLE I

SCOPE

1.1 This Agreement shall provide for the disposition of the benefits arising from the Tax Act as applied only to the natural gas operations of Duke Energy Kentucky. The benefits of the Tax Act that are applicable to Duke Energy Kentucky's electric operations shall be reviewed and addressed in the course of Duke Energy Kentucky's pending electric base rate case, which is docketed as Case No. 2017-00321.¹

1.2 The bill surcredits described herein are intended to provide the natural gas customers of Duke Energy Kentucky with an immediate benefit from the passage of the Tax Act. The bill surcredits described herein will remain in effect until the effective date of Duke Energy Kentucky's new rates for its natural gas service approved in the context of a base rate case. Duke Energy Kentucky anticipates filing a natural gas base rate case using a forecasted test year on or about September 1, 2018, with proposed rates to be effective on or about April 1, 2019.

ARTICLE II

BASE RATE TAX ACT BENEFITS

2.1 For the fifteen month period January 1, 2018, to March 31, 2019, the amount of the benefits of the Tax Act that served as the basis for the calculation of the surcredits to be distributed by Duke Energy Kentucky to its natural gas retail customers, as provided in this Agreement, is \$1,070,207., This amount will be credited to customers over the eleven month period May 1, 2018 through March 31, 2019.. The calculation of this credit is reflected in the supporting schedules included as Attachment WDW-2 and is based upon a fifteen year amortization of "unprotected" excess accumulated deferred income taxes (ADITs) and the amortization of "protected" excess ADIT using the Average Rate Assumption Method ("ARAM"). The existing regulatory liability reflects the protected and unprotected excess ADIT balances as of December 31, 2017, which

¹ See In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. for: 1) an Adjustment of the Electric Rates; 2) Approval of an Environmental Compliance Plan and Surcharge Mechanism; 3) Approval of New Tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 5) all Other Required Approvals and Relief, Application, Case No. 2017-00321 (Ky. P.S.C.) (filed Sep. 15, 2017).

means that customers shall receive 100% of the regulatory liability. This credit includes the impact of the Tax Act on Duke Energy Kentucky's gas operations based upon the impact of the Company's capitalization in its most recent base rate case, per the Company's application in Case No. 2009-00202, and adjusted to reflect the Company's forecasted capitalization through April 1, 2019, the estimated date of new base natural gas rates. The calculation of the credit on the Company's forecasted capitalization reflects the impact of: (1) the reduction in the federal income tax rate that became effective January 1, 2018; (2) the amortization normalization of protected excess ADITs, consistent with normalization rules; and (3) other adjustments necessary to determine the Company's present and forecasted beginning January 1, 2018, with the effective date of the Tax Act.

2.2 The provision of the Tax Act lowering the federal income tax rate also reduces the revenue requirement included in the Company's natural gas Accelerated Service Replacement Program (Rider ASRP). The Company is including a proposal to update the existing Rider ASRP to reflect the reduced revenue requirement beginning April 1, 2018, and will incorporate the lower federal income tax rate in all future Rider ASRP update filings.

2.3 Beginning May 1, 2018, and continuing through the date when new base rates are established for natural gas service, estimated to be approximately March 31, 2019, Duke Energy Kentucky will establish a new rider, the Tax Refund Rider, to provide a surcredit to customers as a result of the Tax Act. The Company will update this rider as necessary to reflect any changes in the amortization rate of "protected" excess ADITs. The Tax Refund Rider will contain both a residential surcredit and a non-residential surcredit based upon a total revenue allocation. The eleven month CCF usage for calculating the residential and non-residential surcredits is taken from Duke Energy Kentucky's last base rate case. The Tax refund Rider is not subject to "true-up". If new base rates are not established effective as of April 1, 2019, then the Tax Refund Rider will be lowered to an annualized level.

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2.4 Duke Energy Kentucky will distribute other benefits arising from the Tax Act and relating to Rider ASRP using a 21% tax rate for 2018 in the Company's next rider adjustment filings that true-up for prior period expenses. Duke Energy Kentucky's next Rider ASRP filing is estimated to be made in July 2018 and will include a gross up for changes resulting from the Tax Act. For its Rider ASRP, Duke Energy Kentucky will update its Rider ASRP to include the effect of the Tax Act changes in its Rider ASRP rates effective with the April 2018 billing cycle.

ARTICLE III

MISCELLANEOUS PROVISIONS

3.1 Except as specifically stated otherwise in this Agreement, entering hereinto shall not be deemed in any respect to constitute an admission by any of the Parties that any computation, formula, allegation, assertion, or contention made by any other party in this Complaint Proceeding is true or valid.

3.2 The Parties hereto agree that the foregoing Agreement represents a fair, just, and reasonable resolution of the issues presented in this case and therefore request the Commission to approve this Agreement in its entirety and without modification.

3.3 Following the execution of this Agreement, the signatory Parties shall cause the Agreement to be filed with the Commission on or about March 9, 2018. In order to expedite the reduction in rates for customers, Duke Energy Kentucky will request the Commission to approve said filing on or before April 15, 2018. The Company will need approximately two weeks to implement the rider from the date of an Order approving same. The Company prefers any rider mechanism go into effect at the start of the monthly billing cycle.

3.4 The Agreement is subject to the acceptance of, and approval by, the Commission. The Parties agree to act in good faith and to use their best efforts to recommend to the Commission that this Agreement be accepted and approved as the complete disposition and resolution of the Complaint Proceeding as it pertains to the natural gas rates of the Company. The Parties commit to notify immediately any other signatory to this Agreement of any perceived violation of this provision so the Party may have an opportunity to cure any perceived violation, and all Parties commit to work in good faith to address and remedy promptly any such perceived violation. In all events counsel for all signatory Parties will represent to the Commission that the Agreement is a fair, just, and reasonable means of resolving all issues in the Complaint Proceeding relating to Duke Energy Kentucky's natural gas operations and rates, and will clearly and definitively ask the Commission to accept and approve the Agreement as such.

3.5 If the Commission issues an order adopting this Agreement in its entirety and without additional conditions, each of the Parties agrees that it shall file neither a motion for rehearing with the Commission, nor an appeal to the Franklin Circuit Court with respect to such Order.

3.6 If the Commission does not accept and approve this Agreement in its entirety and without modification, then either adversely affected Party may withdraw from this Agreement within the statutory periods provided for rehearing and appeal of the Commission's order by giving notice of withdrawal to the other Party and timely filing for rehearing or appeal. If any Party timely seeks rehearing of or appeals the Commission's order, both Parties will continue to have the right to withdraw until the conclusion of all rehearings and appeals. Upon the latter of either the expiration of the statutory periods provided for rehearing and appeal of the Commission's Order or the conclusion of all rehearings and appeals, all Parties that have not withdrawn will continue to be bound by the terms of the Agreement as modified by the Commission's Order.

3.7 If the Agreement is voided or vacated for any reason after the Commission has approved same, neither of the Parties will be bound by the Agreement.

3.8 The Agreement shall inure to the benefit of and be binding upon the Parties hereto

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and their successors and assigns.

3.9 The Agreement constitutes the complete agreement and understanding among the signatory Parties, and any and all oral statements, representations, or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into the Agreement.

3.10 The Parties hereto agree that, for the purpose of the Agreement only, the terms are based upon the independent analysis of the Parties to reflect a fair, just and reasonable resolution of the issues herein related to Duke Energy Kentucky's natural gas operations and rates and are a product of compromise and negotiation.

3.11 The Parties hereto agree that neither the Agreement nor any of the terms shall be admissible in any court or commission except insofar as such court or commission is addressing litigation arising out of the implementation of the terms herein or the approval of this Agreement shall not have any precedential value in this or any other jurisdiction.

3.12 The signatories hereto warrant that they have appropriately informed, advised, and consulted their respective Parties in regard to the contents and significance of this Agreement and based upon the foregoing are authorized or reasonably expect to be authorized to execute this Agreement on behalf of their respective Parties.

3.13 The Parties hereto agree that this Agreement is the product of negotiation among the Parties hereto, and no provision of this Agreement shall be strictly construed in favor of or against any Party. Notwithstanding anything contained in the Agreement, the Parties recognize and agree that the effects, if any, of any future events upon the operating income of Duke Energy Kentucky are unknown and this Agreement shall be implemented as written.

IN WITNESS WHEREOF, the Parties have hereunto affixed their signatures.

7

HAVE SEEN AND AGREED

Duke Energy Kentucky, Inc.

.

You behalf of By: Rocco D'Ascenz

HAVE SEEN AND AGREED

Kentucky Industrial Utility Customers, Inc.

P. Ka

By: Michael L. Kurtz

Duke Energy Kentucky Case No. 2018-0036

		Case No. 2009-00202 (a)	Forecast Period 4/1/18 - 3/31/19 (b)	Difference (c)	
1	Capitalization Allocated to Gas	\$253,750,235	\$311,173,596	\$57,423,361	Schedule 1, page 2 of 4
2	Pre-Tax Return	10.78%	8.85% (a)	-1.93%	Schedule 1, page 3 of 4
3	Increase/(Decrease) in Annual Revenue Requirement	\$27,351,443	\$27,538,425	\$186,982	(a)(3) - (b)(3)
4	Amount to (Refund) or Recover		I	\$0	Lesser of \$0 or Line 3
5 6	Total Amort of Excess ADITs 1/1/18-3/31/19 (Protected) Total Amort of Excess ADITs 1/1/18-3/31/19 (Unprotected)			\$772,711 \$25,364	Schedule 1, page 4 of 4. Schedule 1, page 4 of 4.
7	Total Amortization of Excess ADITs through December 31, 2018		,	\$798,074	Line 5 + Line 6
8	Gross Revenue Conversion Factor			1.3409866	GRCF as Filed in Case No. 2017-00321 adjusted for 21% FIT
9	Total Refund: May 1, 2018, thru March 31, 2018		i	\$1,070,207	Line 7 * Line 8

		Total 2017	% of Total	
	Total Gas Revenue (Base & All riders)			
10	Residential Revenue	\$59,228,599	63.6%	
11	Non-Residential Revenue	44,065,602	36.4%	
12	Total Gas Revenue	\$93,122,758	100.0%	
		-		Revenue & Sales From Test Year Used in 2009-00202
13	Annual Gas Sales (CCF) from Most Recent Rate Case			
14	Residential Usage		68,500,260	
15	Non-Residential Usage		63,964,420	
	Pro rated Gas Sales from Prior Case (11 months/12 months)			
16	Residential Usage		62,791,905	Line 14 * 11 months/12 months
17	Non-Residential Usage		58,634,052	Line 15 * 11 months/12 months
16	Residential Tax Refund Rider Rate		\$0.0108	Residential Share of Total Revenue * Line 9 ÷ Line 16
18	Non-Residential Tax Refund Rider Rate		\$0.0062	Non-Residential Share of Total Revenue * Line 9 ÷ Line 16

Note: (a) The ROR for the Forecast Period assumes the currently approved ROE from Case No. 2009-00202 updated for the change in capital structure and current debt rates. (b) Refund period is assumed to be 10 months; so, annual sales from 2009 rate case are pro rated.

> \$680,680.6022 \$389,526.30

1	Current Capitalization Allocated to Gas in Base Rates	\$253,750,235	Schedule A-1, DEK Application in Case No. 2009-00202
	Calculate Capitalization Allocable to Gas for Forecast Period ^(a)		
2	Total Capitalization from Pending Electric Rate Case	\$1,113,123,218	Schedule WPA-1c, Line 8, from Case No. 2017-00321
3	Electric Jurisdictional Rate Base Allocation Percent	72.05%	Schedule WPA-1c, Line 10, from Case No. 2017-00321
4	Capitalization Allocated to Electric	\$801,949,623	Line 2 * Line 3
5	Capitalization Allocated to Gas	311,173,596	Line 2 - Line 4
6	Total Capitalization	\$1,113,123,218	Line 4 + Line 5

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Notes: ^(a) Forecast period in current rate case is April 1, 2018, through March 31, 2019. See Attachment WDW-3

Duke Energy Kentucky Case No. 2018-0036

		Capitalization from J-1 Forecast in Case No. 2017-00321 (w/ GRCF @ 21% FIT and 10.375% ROE)								
Line	Capital Component	13-Mo Avg. Bal.	% of Total	Cost	Weighted Cost	GRCF	Pre-Tax ROR			
1	Common Equity	\$522,765,867	48.89%	10.375%	5.073%	1.3409866	6.80%			
2	Long-Term Debt	434,934,967	40.68%	4.243%	1.726%	1.0000000	1.73%			
3	Short-Term Debt	111,491,538	10.43%	3.083%	0.321%	1.0000000	0.32%			
4	Total Capital	\$1,069,192,372	100.00%		7.120%	1	8.85%			

		Capitalization As Approved in Case No. 2009-00202								
	Capital Component	13-Mo Avg. Bal.	% of Total	Cost	Weighted Cost	GRCF	Pre-Tax ROR			
5	Common Equity	\$411,218,278	50.80%	10.375%	5.270%	1.6437800	8.66%			
6	Long-Term Debt	352,923,437	43.60%	4.703%	2.050%	1.0043490	2.06%			
7	Short-Term Debt	45,403,690	5.61%	1.009%	0.057%	1.0043490	0.06%			
8		\$809,545,405	100.00%		7.377%		10.78%			

Duke Energy Kentucky Tracking the Regulatory Liability For Excess Deferred Income Taxes

	Acco	unt 254.XX: Protected El	TIC	Accoun	t 254.YY: Regulatory Lial	pility	Total Gross	Levelized Refund	to Customers	Remaining
Protected EDITs	Beg Balance	Debit: Amort Exp	Ending Balance	Beg Balance	(Debit)/Credit	Ending Balance	Reg Liability	Debit: Acct 254	Credit: Cash	Reg Liability
	ia)	00	(d)=(a)-(b)	(4)	(#)	(f)=(d)+(v)	(g)-(u)+(f)	(h)	(0	εu)
December 31, 2017 (per books)			(\$31,411,000)				(\$31,411,000)			(\$31,411,000
lanuary 2018	(\$31,411,000)	\$46,069	(31,364,931)	\$0	\$46,069	\$46,069	(31,318,861)	\$0	\$0	(31,411,000
February 2018	(31,364,931)	46,069	(31,318,861)	46,069	46,069	92,139	(31,226,722)			(31,411,000
March 2018	(31,318,861)	46,069	(31,272,792)	92,139	46,069	138,208	(31,134,583)			(31,411,000
April 2018	(31,272,792)	46,069	(31,226,722)	138,208	46,069	184,278	(31,042,444)			(31,411,000
May 2018 (Refund Begins)	(31,226,722)	46,069	(31,180,653)	184,278	(24,177)	160,101	(31,020,552)	70,246	70,246	(31,340,754
une 2018	(31,180,653)	46,069	(31,134,583)	160,101	(24,177)	135,924	(30,998,659)	70,246	70,246	(31,270,50
uly 2018	(31,134,583)	46,069	(31,088,514)	135,924	(24,177)	111,747	(30,976,767)	70,246	70,246	(31,200,26)
August 2018	(31,088,514)	46,069	(31,042,444)	111,747	(24,177)	87,570	(30,954,874)	70,246	70,246	(31,130,014
September 2018	(31,042,444)	46,069	(30,996,375)	87,570	(24,177)	63,393	(30,932,982)	70,246	70,246	(31,059,76
October 2018	(30,996,375)	46,069	(30,950,305)	63,393	(24,177)	39,216	(30,911,089)	70,246	70,246	(30,989,52)
November 2018	(30,950,305)	46,069	(30,904,236)	39,216	(24,177)	15,039	(30,889,197)	70,246	70,246	(30,919,27
December 2018	(30,904,236)	46,069	(30,858,166)	15,039	(24,177)	(9,138)	(30,867,304)	70,246	70,246	(30,849,029
anuary 2019	(30,858,166)	73,292	(30,784,874)	(9,138)	3,046	(6,092)	(30,790,966)	70,246	70,246	(30,778,78.
ebruary 2019	(30,784,874)	73,292	(30,711,582)	(6,092)	3,046	(3,046)	(30,714,628)	70,246	70,246	(30,708,53
March 2019	(\$30,711,582)	73,292	(\$30,638,289)	(\$3,046)	3,046	(\$0)	(\$30,638,289)	70,246	70,246	(\$30,638,28
Total Amortized EDITs (Protected		\$772,711			(\$0)			\$772,711	\$772,711	

2018 ARAM Rate 2019 ARAM Rate

1.8%

2.8%

	Accou	nt 254.XX: UnProtected I	EDIT	Accour	t 254.YY: Regulatory Lia	bility	Total Gross	Levelized Refund	to Customers	Remaining
Unprotected EDITs	8eg Balance	Credit: Amort Exp	Ending Balance	Beg Balance	Debit/(Credit)	Ending Balance	Reg Liability	(Debit): Acct 254	Credit: Cash	Reg Liability
	(4)	101	(c)+(a)-(b)	(d)	(e)	(1)+(d)+(e)	(8)-(4)+(1)	(h)	ţû.	цi
December 31, 2017 (per books)			(\$304,364)				(\$304,364)			(\$304,364
anuary 2018	(\$304,364)	\$1,691	(302,673)	\$0	\$1,691	\$1,691	(300,982)	\$0	\$0	(304,364
ebruary 2018	(302,673)	\$1,691	(300,982)	1,691	1,691	3,382	(297,600)			(304,364
March 2018	(300,982)	1,691	(299,291)	3,382	1,691	5,073	(294,219)			(304,364
April 2018	(299,291)	1,691	(297,600)	5,073	1,691	6,764	(290,837)			(304,364
May 2018 (Refund Begins)	(297,600)	1,691	(295,909)	6,764	(615)	6,149	(289,761)	2,306	2,306	(306,670
une 2018	(295,909)	1,691	(294,219)	6,149	(615)	5,534	(288,685)	2,306	2,306	(304,364
iuly 2018	(294,219)	1,691	(292,528)	5,534	(615)	4,919	(287,609)	2,306	2,306	(302,058
August 2018	(292,528)	\$1,691	(290,837)	4,919	(615)	4,304	(286,533)	2,306	2,306	(299,75)
September 2018	(290,837)	\$1,691	(289,146)	4,304	(615)	3,689	(285,457)	2,306	2,306	(297,44)
October 2018	(289,146)	\$1,691	(287,455)	3,689	(615)	3,074	(284,381)	2,306	2,306	(295,14)
November 2018	(287,455)	\$1,691	(285,764)	3,074	(615)	2,460	(283,304)	2,306	2,306	(292,83
December 2018	(285,764)	\$1,691	(284,073)	2,460	(615)	1,845	(282,228)	2,306	2,306	(290,52
anuary 2019	(284,073)	\$1,691	(282,382)	1,845	(615)	1,230	(281,152)	2,306	2,306	(288,22
February 2019	(282,382)	\$1,691	(280,691)	1,230	(615)	615	(280,076)	2,306	2,306	(285,91
March 2019	(280,691)	\$1,691	(\$279,000)	\$615	(615)	(\$0)	(\$279,000)	2,306	2,306	(\$283,61
Total Amortized EDITs (UnProtected	i)	\$25,364			(\$0)			\$25,364	\$25,364	

Amortization Period (yrs)

rrs)

Notes: (b) For protected EDITs, reflects the monthly amortization at the ARAM rate. For unprotected, represents the agreed upon amortization of EDITs over 15 years since no actual amortization rate has been approved. (e) Until customers begin receiving credits for the amortization of EDITs. The amortization of the EDIT balance is accrued to another Account 254 Subaccount for Regulatory Liabilities.

(h) Reflects the ongoing monthly amortization

15

(i) Reflects the average monthly revenue being flowed through to customers,

(j) Reflects the remaining balance of the EDITs owed to customers,

Duke Energy Kentucky, Inc. Case No. 2017-00321 East Bend Deferral Analysis

	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
DEK East Bend Deferral Forecast	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
O&M	\$1,189,456	\$1,415,405	\$1,386,209	\$1,213,065	\$1,099,822	\$833,247	\$828,586	\$815,016	\$831,442	\$1,036,648	\$747,881	\$1,274,277
Reagents EB Incremental	\$369,911	\$318,621	\$243,277	\$276,276	\$328,776	\$279,073	\$331,357	\$274,584	\$300,394	\$249,432	\$287,363	\$227,098
Total Incremental	\$1,559,367	\$1,734,026	\$1,629,485	\$1,489,341	\$1,428,597	\$1,112,320	\$1,159,943	\$1,089,600	\$1,131,836	\$1,286,079	\$1,035,244	\$1,501,375
Less MF6 base	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$384,590)	(\$364,590)	(\$364,590)	(\$364,590)
Total Deferral	\$1,194,778	\$1,369,436	\$1,264,895	\$1,124,751	\$1,064,008	\$747,730	\$795,353	\$725,011	\$767,246	\$921,489	\$670,654	\$1,136,785
Cumulative Deferral	\$1,194,778	\$2,569,896	\$3,847,014	\$4,990,061	\$6,077,800	\$6,854,435	\$7,682,387	\$8,443,934	\$9,251,338	\$10,216,825	\$10,936,069	\$12,124,864
Carrying Costs (1)	\$5,682	\$12,222	\$18,296	\$23,732	\$28,905	\$32,599	\$36,536	\$40,158	\$43,998	\$48,590	\$52,010	\$57,664
Cumulative Deferral with carrying costs	\$1,200,460	\$2,582,118	\$3,865,309	\$5.013,793	\$6,106,705	\$6,887,034	\$7,718,923	\$8,484,092	\$9.295,336	\$10,265,415	\$10,988,079	\$12,182,528
		A start	(a) (c)	Astural	Actual		Actual	Articl		1.1.1		A
	Actual Jan:16	Actual Feb-16	Actual Mar-16	Actual Apr-16	May-16	Actual Jun-16	Jul-16	Actual Aug-16	Actual Sep-15	Actual Oct-16	Actual Nov-16	Actual Dec-16
	Jan-10-	Febrio	Migi - IU	201-10	mayrig	Suma	501-10	HOU-TO	560-10	OCCIO	1404-10	Decito
O&M	\$451,395	\$915,244	\$1,383,284	\$3,067,186	\$760,341	\$828,786	\$529,828	\$707,425	\$676,474	\$454,622	\$601,413	\$1,018,180
Reagents EB Incremental	5284,029	\$270.017	\$226,066	\$7,413	\$169,194	\$293,808	\$304,607	\$363,747	\$343,535	\$354,215	\$325,529	\$253,949
Total Incremental	\$735,424	\$1,185,261	\$1,609,350	\$3,074,599	\$929,536	\$1,122,595	\$834,436	\$1,071,172	\$1,020,008	\$808,837	\$926,943	\$1,272,129
Less MF6 base	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$384,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)
Total Deferral	\$370,835	\$820,671	\$1,244,761	\$2,710,009	\$564,946	\$758,005	\$469,846	\$706,583	\$655,419	\$444,247	\$562,353	\$907,539
Cumulative Deferral	\$12,553,362	\$13,433,735	\$14,742,385	\$17,522,506	\$18,170,786	\$19,015,208	\$19,575,487	\$20,375,168	\$21,127,487	\$21,672,214	\$22,337,636	\$23,351,409
Carrying Costs (1)	\$59,702	\$63,889	\$70,112	\$83,334	\$86,417	\$90,433	\$93,098	\$96,901	\$100,479	\$103,069	\$106,234	\$111,055
Cumulative Deferral with carrying costs	\$12,613,064	\$13,497,624	\$14,812,497	\$17,605,840	\$18,257,203	\$19,105,641	\$19,668,585	\$20,472,069	\$21,227,966	521,775,283	\$22,443,870	\$23,462,464
								and the second se	and the second sec			A DESCRIPTION OF THE OWNER

			and the second	U	dated in Kollen's T	estimony					Additional Ad	tual Data
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sup-17	Oct-17	Nov-17	Dec-17
O&M	\$681,758	\$725,179	\$799,666	\$656,943	\$1,273,571	\$759,832	\$812,725	\$556,055	\$752,834	\$749,750	\$668,984	\$911,123
Reagents EB Incremental	\$404,277	\$295,316	\$429,854	\$250,741	\$238,575	\$278,503	\$279,075	\$318,951	\$360,157	\$299,022	\$334,635	\$318,683
Total Incremental	\$1,086,035	\$1,020,495	\$1,229,520	\$907,684	\$1,510,146	\$1,038,335	\$1,091,800	\$875,006	\$1,112,991	\$1,048,772	\$1,003,618	\$1,229,806
Less MF6 base	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$364,590)	(\$384,590)	(\$364,590)	(\$364,590)
Total Deferral	\$721,445	\$655,905	\$864,930	\$543,094	\$1,145,556	\$673,745	\$727,210	\$510,417	\$748,401	\$684,182	\$639,029	\$865,216
Cumulative Deferral	\$24,183,909	\$24,954,829	\$25,938,440	\$26,604,893	\$27,876,978	\$28,683,302	\$29,546,925	\$30,197,862	\$31,089,879	\$31,921,920	\$32,711,137	\$33,730,402
Carrying Costs (1)	\$115,015	\$118,681	\$123,359	\$126,528	\$132,578	\$136,413	\$140,520	\$143,616	\$147,858	\$150,188	\$154,049	\$158,359
Cumulative Deferral with carrying costs	\$24,298,924	\$25,073,510	\$26,061,799	\$26,731,422	\$28,009,556	\$28.819,715	\$29,687,445	\$30,341,478	\$31,237,737	\$32,072,108	\$32,865,186	\$33,888,761

Last Known Actual	Kollen's Pr	bjection	
Jan-18	Feb-18	Mar-18	
\$776,976			
\$355,996			
\$1,132,973			
(\$364,590)			
\$768,383	\$728,732	\$728,732	
\$34,657,144	\$35,548,872	\$36,444,935	
\$162,996,45	\$167,332	\$171,593	
\$34,820,141	\$35,718,204	\$36,616,528	
	Jan-18 \$776,976 \$355,996 (\$364,550) \$768,383 \$34,657,144 \$162,996,45	Jan-18 Feb-18 \$776,976 \$355,996 \$1,132,973 (\$364,550) \$768,383 \$728,732 \$34,657,144 \$35,548,872 \$162,996,45 \$167,332	

Notes:

(1) Debt Rate assumed through March 2018 5,707%

RIDER ASRP

ACCELERATED SERVICE REPLACEMENT PROGRAM RIDER

APPLICABILITY

Applicable to all customers receiving service under the Company's sales and transportation rate schedules.

CALCULATION OF ACCELERATED SERVICE REPLACEMENT RIDER REVENUE REQUIREMENT

The ASRP Rider revenue requirement includes the following:

- a. ASRP-related Plant In-Service not included in base gas rates minus the associated ASRPrelated accumulated depreciation and accumulated deferred income taxes;
- b. Retirement and removal of plant related to ASRP construction;
- c. The rate of return on the net rate base is the overall rate of return on capital, using the capital structure and debt rates from the most recent base gas rate case and using a 9.7% ROE, grossed up for federal and state income taxes;
- d. Depreciation expense on the ASRP-related Plant In-Service less retirements and removals;
- e. Property taxes related to ASRP and;
- f. Operation and Maintenance Costs for reconnaissance and relocation of meters.

ACCELERATED SERVICE REPLACEMENT PROGRAM FACTORS

All customers receiving service under Rate RS and Rate GS shall be assessed a separate monthly charge that will enable the Company to complete the service replacement program. This monthly charge is in addition to the Customer Charge component of their applicable rate schedule, as well as any other applicable monthly charges. Customers receiving service under Rate DGS, Rate FT-L, Rate IT and Rate SSIT will be assessed a separate throughput charge in addition to their commodity delivery charge, for that purpose.

Rider ASRP will be updated annually, to reflect the anticipated impact on the Company's revenue requirements of net plant additions and projected operations and maintenance expense during the upcoming calendar year. Such adjustments to the Rider will become effective with the first billing cycle of January, and will reflect the allocation of the required revenue increase based on the revenue distribution approved by the Commission. After each year, the Company will submit a balancing adjustment to true-up the actual costs with the projected program costs for the preceding year. Any balancing adjustment will become effective with the first billing cycle on or after the effective date of the change.

The charges for the respective gas service schedules for the revenue month beginning January April (T) 2018 are:

Rate RS, Residential Service Rate GS, General Service	\$1.80 1.65/month \$1.78 1.64/month	(R)
Rate DGS, Distributed Generation Service	\$0.00045 0.00041/CCF	(R) (R)
Rate FT-L, Firm Transportation Service Large Rate IT, Interruptible Transportation Service	\$0.00045 0.00041/CCF \$0.00039 0.00036/CCF	(R) (R)
Rate SSIT, Spark Spread Interruptible Transportation Rate	\$0.00039 0.00036/CCF	(R)

Issued by authority of an Order of the Kentucky Public Service <u>Commission dated August 31, 2017</u> in Case No. <u>2017-00249</u>2018-00036 Issued: November 21, 2017 Effective: January 2, 2018 April 1, 2018 Issued by James P. Henning, President /s/ James P. Henning

Exhibit 1 Summary Page 1 of 17

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Forecasted Period Ending December 31, 2018 Table of Contents

Schedule	Description
1.0	ASRP Rates by Rate Schedule
1.1	Revenue Requirement
1.2	Cost of Capital
2.0	Plant Additions and Depreciation
2.1	Tax Depreciation
2.2	ASRP Additions and Retirements
2.3	Reconnaissance O&M
2.4	Meter Relocation O&M
3.0	Billing Determinants
4.1	Revenue Requirement - True Up
4.2	Cost of Captial - True Up
4.3	Plant Additions and Depreciation - True Up
4.4	Tax Depreciation - True Up
4.4	ASRP Additions and Retirements - True Up
4.5	Reconnaissance O&M - True Up
4.6	Meter Relocation O&M - True Up

Exhibit 1 Schedule 1.0 Page 2 of 17

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") ASRP Rider by Rate Schedule

<u>Line No.</u>	Rate Schedule	Weighted Customers- Services Approved PSC <u>Case No. 2009-202</u>	2018 Projected Revenue <u>Requirement</u>	2016 True Up Revenue <u>Requirement</u>	<u>Total</u>	Billing Determinants # of Bills / CCF	Monthly ASRP <u>Rider</u>	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
1	RS- Residential	92.301%	\$ 1,999,584	\$ (194,780)	\$ 1,804,804	1,091,097	5 1.65	Per Customer
2	GS - General Service	6.969%	150,975	(14,706)	136,269	83,060	5 1.64	Per Customer
3	FT - Firm Transportation (Includes DGS)	0.454%	9,835	(958)	8,877	21,632,800	\$ 0.00041	Per CCF
4	IT - Interruptible Transportation	0.276%	5,979	(582)	5,397	15,067,630	\$ 0.00036	Per CCF
5	Total	100.000%	\$ 2,166,373	\$ (211,026)	\$ 1,955,347			

Residential charge per customer is under the \$3 cap for calendar year 2018

Exhibit 1 Schedule 1.1 Page 3 of 17

4

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Forecasted ASRP Revenue Requirement for 2018

Line No.			P Investment mber 31, 2018	Reference	
	(A)		(B)	(C)	
	Return on Investment				
	Rate Base				
1	Net ASRP Investment - Property, Plant and Equipment	\$	15,750,551	Form 2.2	
2	Cost of Removal		8 798	Form 2.2	
3	Accumulated Reserve for Depreciation		,) Form 2.0	
4	Net PP&E	-	15,340,769	-	
5	Accumulated Deferred Taxes on Liberalized Depreciation		(3,258,517)		
6	Net Rate Base	-		Line 4 + Line 5	
7	Authorized Rate of Return, Adjusted for Income Taxes		2 2	6 Form 1.2	
8	Required Return on ASRP Related Investment	\$	1,050,781	Line 6 * Line 7	
	Operating Expenses				
9	Depreciation	\$	428,927	' Form 2.0	
10	Property Tax		218,146	Line 4 * 1.422%	
11	O&M related to reconnaissance fees		461,734	Form 2.3	
12	O&M related to relocation of meters		2,580	Form 2.4	
13	PSC Assessment		4,205	(Sum Line 8 thru 12) * (0.1941% / (1-0.1941%))	
14	Total Operating Expenses		1,115,592	Sum Lines 9 thru 13	
15	Total Annual Revenue Requirement	\$	2,166,373	Line 8 + Line 14	

Notes:

(1) Property taxes estimated using an effective rate of 1.422%

(2) PSC Assessment using Fiscal Year 2017 rate of 0.1941%

Exhibit 1 Schedule 1.2 Page 4 of 17

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Cost of Capital

<u>Line No.</u>	<u>Capital Structure</u> (A)	<u>Ratio</u> (B)	<u>Cost</u> (C)	Weighted <u>Cost</u> (D)	Pre-Tax @ Effect. <u>Tax Rate of 25.22%</u> (E)
15	hort term Debt	5.609%	1.009%	0.057%	0.057%
2 Lo	ong term Debt	43.595%	4.703%	2.050%	2.050%
3 E	quity	50.796%	9.700%	4.927%	6.590%
4 T	otal	100.000%		7.034%	8.697%

Capital structure and cost of debt as approved in Case No. 2009-202

Return on equity as approved in settlement in Case No. 2015-210 and adjusted to reflect the Tax Cut and Jobs Act of 2017 becoming law. The Return on Equity has been lowered to reflect a reduction of the Corporate tax rate from 35% to 21%.

Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Depreciation

		Acct		EOY							Projected 201	18 Additions						EOY
Line No.	Description	Number		2017	Ja	<u>n</u>	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	{L}	(K)	(L)	(M)	(N)	(0)	(P)	(Q)
	Gas Plant Investments (1) Additions																	
1	Service Lines	380		\$ 13,041,85	5 \$ 10	0,000 \$	200,000 \$	200,000 \$	600,000 \$	600,000	\$ 1,000,000	\$ 1,600,000 \$	\$ 1,700,000 \$	1,700,000	\$ 1,500,000 \$	600,000 \$	200,000	\$ 23,041,855
2	Meter Installations	382		•							*1	-			4		÷	÷
з	Total Additions			\$ 13,041,85	5 \$ 10	0,000 \$	200,000 \$	200,000 \$	600,000 \$	600,000	\$ 1,000,000	\$ 1,600,000	\$ 1,700,000 \$	1,700,000	\$ 1,500,000 \$	600,000 \$	200,000	\$ 23,041,855
	Retirements																	
4	Service Lines	380		\$ (903,61	7)\$ (1	2,060) \$	(24,120) \$	(24,120) \$	(72,359) \$	(72,359)	\$ (120,598)	\$ (192,957) \$	\$ (205,016) \$	(205,016)	\$ (180,897) \$	(72,359) \$	(24,120)	\$ (2,109,596)
5	Meter Installations	382				*		14	1.0	÷			140	74			al	
6	Total Retirements			\$ (903,61	7)\$ (1	2,060) \$	(24,120) \$	(24,120) \$	(72,359) \$	(72,359)	\$ (120,598)	\$ (192,957) \$	\$ (205,016) \$	(205,016)	\$ (180,897) \$	(72,359) \$	(24,120)	\$ (2,109,596)
	Cost of Removal																	
7	Service Lines	380		\$ 8,79	3 5	8,798 \$	8,798 \$	8,798 \$	8,798 \$	8,798	\$ 8,798	\$ 8,798	5 8,798 S	8,798	\$ 8,798 \$	8,798 \$	8,798	\$ 8,798
8	Total Cost of removal			\$ 8,79	3 \$	8,798 \$	8,798 \$	8,798 \$	8,798 \$	8,798	\$ 8,798	\$ 8,798	\$ 8,798 \$	8,798	\$ 8,798 \$	8,798 \$	8,798	\$ 8,798
			Annual															
			Depreciation															13 month
			Rate	EOY								preciation Expe						Average
	Accumulated Depreciation Additions	<u>n Reserve</u>		2017	Ja	n	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	<u>Dec</u>	
9	Service Lines	380	2.80%	\$ 237,04	5\$З	0,431 \$	30,664 \$	31,131 \$	31,598 \$	32,998	\$ 34,398	\$ 36,731	\$ 40,464 \$	44,431	\$ 48,398 \$	51,898 \$	53,298	
10	Meter Installations	382										*						
11	Total Additions			\$ 237,04	5 \$ 3	0,431 \$	30,664 \$	31,131 \$	31,598 \$	32,998	\$ 34,398	\$ 36,731 :	\$ 40,464 \$	44,431	\$ 48,398 \$	51,898 \$	53,298	
	Retirements																	
12	Service Lines	380	2.80%	\$ (10,86	2)\$ (2,108) \$	(2,137) \$	(2,193) \$	(2,249) \$	(2,418)	\$ (2,587)	\$ (2,868)	\$ (3,318) \$	(3,797)	\$ (4,275) \$	(4,697) \$	(4,866)	
13	Meter Installations	382		ř.		12			.*.	*	•					141	¥.,	
14	Total Retirements			\$ (10,86	2)\$ (2,108) \$	(2,137) \$	(2,193) \$	(2,249) \$	(2,418)	\$ (2,587)	\$ (2,868)	\$ (3,318) \$	(3,797)	\$ (4,275) \$	(4,697) \$	(4,866)	

\$ 226,183 \$ 254,506 \$ 283,083 \$ 311,971 \$ 341,320 \$ 371,900 \$ 403,711 \$ 437,574 \$ 474,720 \$ 515,354 \$ 559,477 \$ 606,678 \$ 655,110 \$ 418,580

15 Total Accumulated Depreciation Reserve

Notes:

(1) See Form 2.2 for detail of 2017 ASRP eligible additions

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Deferred Taxes on Liberalized Depreciation

		Та	ix Year 2016		Та	x Year 2017				Tax Year 20)18	
<u>Line No</u>	-	в)	Vintage <u>2016</u> (C)		Vintage <u>2016</u> (D)	Vintage <u>2017</u> (E)	<u>TOTAL</u> (F)		Vintage <u>2016</u> (G)	Vintage <u>2017</u> (H)	Vintage <u>2018</u> (I)	<u>TOTAL</u> (J)
1	Total ASRP Plant Additions	\$	4,339,804	\$	4,339,804 \$	8,702,051	\$ 13,041,855	\$	4,339,804 \$	8,702,051 \$	4,107,692	\$ 17,149,547
	Tax Base In-service subject to :											
2	Bonus Depreciation		4,339,804		4,339,804	8,702,051	13,041,855		4,339,804	8,702,051	4,107,692	17,149,547
3	MACRS	-	2,169,902	_	0	0	0		0	0	0	0
	Tax Depreciation											
4	Bonus Depreciation		2,169,902		0	4,351,026	4,351,026		0	0	1,643,077	1,643,077
5	MACRS on Balance		81,371	0 = ==	156,645	163,163	319,808		144,884	314,101	92,423	551,408
б	Total Tax Depreciation	_	2,251,273		156,645	4,514,189	4,670,834	20 7 	144,884	314,101	1,735,500	2,194,485
7	Book Depreciation		23,628		120,165	82,390	202,555		120,165	219,706	89,056	428,927
8	Tax Depreciation in Excess of Book Depreciation		2,227,645		36,480	4,431,799	4,468,279		24,719	94,395	1,646,444	1,765,558
9	Cost of Removal		8,798		0	0	×	-	0	0	0	
10	Total Difference	\$	2,236,443	\$	36,480 \$	4,431,799	\$ 4,468,279	\$	24,719 \$	94,395 \$	1,646,444	\$ 1,765,558
11	Deferred Taxes @ 38	8.47%	860,360		14,034	1,704,913	1,718,947		9,509	36,314	633,387	679,210

12 Accumlated Deferred Income Tax

\$ 3,258,517

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Thirteen Month Average Additions and Retirements

Test Year 12/31/18 ASRP Investment Summary

2 3 4	Month (A) Balance @ 12/31/2017 Jan-18	Months (B)	<u>By Month</u> (C)	<u>Cumulative</u> (D)	<u>By Month</u> (E)	<u>Cumulative</u> (F)	<u>By Month</u> (G)	<u>Cumulative</u> (H)
2 3 4	Balance @ 12/31/2017		(C)	(D)	(E)	(F)	(G)	(H)
2 3 4		13						
2 3 4		13						
4	Jan-18			\$ 13,041,855		\$ (903,617)		\$ 8,798
4		12	\$ 100,000	13,141,855	\$ (12,06	0) (915,677)	.*.	8,798
4	Feb-18	11	200,000	13,341,855	(24,12	0) (939,796)		8,798
-	Mar-18	10	200,000	13,541,855	(24,12	0) (963,916)	÷.	8,798
5	Apr-18	9	600,000	14,141,855	(72,35	9) (1,036,275)		8,798
6	May-18	8	600,000	14,741,855	(72,35	9) (1,108,633)		8,798
7	Jun-18	7	1,000,000	15,741,855	(120,59	8) (1,229,231)		8,798
8	Jul-18	6	1,600,000	17,341,855	(192,95	7) (1,422,188)		8,798
9	Aug-18	5	1,700,000	19,041,855	(205,01	6) (1,627,205)		8,798
10	Sep-18	4	1,700,000	20,741,855	(205,01	6) (1,832,221)		8,798
11	Oct-18	3	1,500,000	22,241,855	(180,89	(2,013,118)		8,798
12	Nov-18	2	600,000	22,841,855	(72,35	(2,085,477)		8,798
13	Dec-18	1	200,000	23,041,855	(24,12	.0) (2,109,596)		8,798
				222,944,115		(18,186,950)	N	114,374
14 Nur	mber of months			13		13	2	13
15 13 1	Month Average							

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Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") O&M - Reconnaissance

Test Year 12/31/18 Reconnaissance O&M

<u>Line No.</u>	<u>Month</u> (A)	<u>A</u>	<u>SRP O&M 2018</u> (B)
1	Jan-18	\$	4,617
2	Feb-18		9,235
3	Mar-18		9,235
4	Apr-18		27,704
5	May-18		27,704
6	Jun-18		46,173
7	Jul-18		73,877
8	Aug-18		78,495
9	Sep-18		78,495
10	Oct-18		69,260
11	Nov-18		27,704
12	Dec-18		9,235
13	Total	\$	461,734

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Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") O&M Meter Relocation

Test Year 12/31/18 ASRP Meter Relocation O&M

<u>Line No.</u>	<u>Month</u> (A)	<u>ASRP O&</u> (B)	
1	Jan-18	\$	215
2	Feb-18		215
3	Mar-18		215
4	Apr-18		215
5	May-18		215
6	Jun-18		215
7	Jul-18		215
8	Aug-18		215
9	Sep-18		215
10	Oct-18		215
11	Nov-18		215
12	Dec-18		215
13	Total	\$	2,580

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") ASRP Rider Billing Determinants by Rate Schedule for the Twelve Month Ending April 30, 2017

<u>Line No.</u>	<u>Rate Schedule</u>	<u>May-16</u>	<u>Jun-16</u>	<u>Jul-16</u>	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>Total</u>
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
1	RS- Residential (Number of Customers) GS - General Service (Number of	90,811	90,475	90,187	90,160	90,239	90,427	90,972	91,662	91,946	91,138	91,961	91,119	1,091,097
2	Customers)	6,888	6,812	6,756	6,736	6,738	6,762	6,921	7,084	7,133	7,112	7,123	6,995	83,060
3	FT - Firm Transportation (CCF)	1,697,350	1,527,790	1,347,270	1,286,170	1,301,520	1,277,850	1,474,330	1,871,960	2,734,360	2,653,140	2,135,980	2,325,080	21,632,800
4	IT - Interruptible Transportation (CCF)	1,151,670	1,305,840	1,183,700	1,110,280	1,253,250	1,187,330	1,315,110	1,366,330	1,394,310	1,346,610	1,200,790	1,252,410	15,067,630

Exhibit 1 Schedule 4.1 Page 11 of 17

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") ASRP Revenue Requirement for 2016

		ASRP Investment			
Line No.		D	ecember 31, 2016	<u>Reference</u>	
	(A)		(B)	(C)	
	Pat and a second second				
	Return on Investment				
	Rate Base	<u>~</u>	4 400 400	5 A 5	
1	Net ASRP Investment - Property, Plant and Equipment	\$	1,109,126	Form 4.5	
2	Cost of Removal		4,187	Form 4.5	
3	Accumulated Reserve for Depreciation		(4,980)	Form 4.3	
4	Net PP&E		1,108,333	•	
5	Accumulated Deferred Taxes on Liberalized Depreciation		(225,274)	Form 4.4	
6	Net Rate Base		883,059	Line 4 + Line 5	
7	Authorized Rate of Return, Adjusted for Income Taxes		10.117%	Form 4.2	
8	Required Return on ASRP Related Investment	\$	89,338	Line 6 * Line 7	
				-	
	Operating Expenses				
9	Depreciation	\$		Form 4.3	
10	Property Tax		13,854	Line 4 *	1.250%
11	O&M related to reconnaissance fees		40,586	Form 4.6	
12	O&M related to relocation of meters		1,724	Form 4.7	
13	PSC Assessment		322	(Sum Line 8 th	ru 12) * (0.1901% / (1-0.1901%))
14	Total Operating Expenses		80,114	Sum Lines 9 th	ru 11
					_
15	Total Annual Revenue Requirement	\$	169,452	Line 8 + Line 1	2
	Collections/(Refunds) for prior years		0		
	Adjusted Revenue Requirement	\$	169,452	-3	
	2016 Billed Revenues	-	380,478	-	
	Total (Over)/Under Collections	\$	(211,026)	an - ■3	

Notes:

(1) Property taxes estimated using an effective rate of 1.25%

(2) PSC Assessment using Fiscal Year 2016 rate of 0.1901%

Exhibit 1 Schedule 4.2 Page 12 of 17

Duke Energy Kentucky ASRP Rider by Rate Schedule Cost of Capital

<u>Line No.</u>	<u>Capital Structure</u> (A)	<u>Ratio</u> (B)	<u>Cost</u> (C)	Weighted <u>Cost</u> (D)	Pre-Tax @ Effect. <u>Tax Rate of 38.47%</u> (E)
1 S	hort term Debt	5.609%	1.009%	0.057%	0.057%
2 L	ong term Debt	43.595%	4.703%	2.050%	2.050%
3 E	quity	50.796%	9.700%	4.927%	8.010%
4 T	otal	100.000%		7.034%	10.117%

Capital structure and cost of debt as approved in Case No. 2009-202 Return on equity as approved in settlement in Case No. 2015-210

Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Depreciation

		Acct		EOY							Actual 2016	Additions						EOY
Line No.	Description (A)	Number (B)	(C)	2015 (D)		<u>Jan</u> (E)	<u>Feb</u> (F)	<u>Mar</u> (G)	Apr (H)	<u>May</u> (I)	<u>Jun</u> (J)	<u>Jul</u> (K)	Aug (L)	<u>Sep</u> (M)	Oct (N)	<u>Nov</u> (O)	Dec (P)	2016 (Q)
	Gas Plant Investments (1)																	
	Additions	e -																
1	Service Lines	380		Ś	- 5	37.729 Ś	16,027 \$	20,485 \$	34,739 \$	72,395 \$	84.870 Ś	571,890 \$	458,274 \$	706,429 \$	587.077 S	315 355	\$ 1,434,533	4 3 3 9 804
2	Meter Installations	382								-	-		-	,00,125 \$	201,011 \$	515,555	, 1,131,333 ,	
з	Total Additions			\$	- \$	37,729 \$	16,027 \$	20,485 \$	34,739 \$	72,395 \$	84,870 \$	571,890 \$	458,274 \$	706,429 \$	587,077 \$	315,355	\$ 1,434,533 \$	4,339,804
	Retirements																	
4	Service Lines	380		Ś	- 5	- Š	(15,895) \$	(835) \$	(2,556) \$	(4) \$	- 5	(3,045) \$	- S	(397) \$	(5,368) \$	(13,766)	\$ (6,339) \$	(48,206)
5	Meter Installations	382		*		14	(,, +	(000) ¢	(2,000) \$	-	-	(3,0157 \$		(337) \$	(3,300) \$	(15,700)	÷ (0,335) •	, (40,200)
6	Total Retirements			\$	- \$	- \$	(15,895) \$	(835) \$	(2,556) \$	(4) \$	- \$	(3,045) \$	- \$	(397) \$	(5,368) \$	(13,766)	\$ (6,339) \$	(48,206)
	Cost of Removal																	
7	Service Lines	380		s	. \$	- S	- 5	- 5	2,389 \$	- 5	2,753 S	1,934 \$	- 5	- 5	. \$	330	\$ 1,392 \$	8,798
8	Total Cost of removal			\$	- \$	- \$	- \$	- \$	2,389 \$	- \$		1,934 \$	- \$	- S	- \$	330		
			Annual															
			Depreciation							1.34350								13 month
			Rate	EOY	-		14.7			Che beau al in		ciation Expense						Average
	Accumulated Depreciation	on Reserve		2015		Jan	Feb	Mar	Apr	May	Jun	lut	Aug	Sep	Oct	Nov	Dec	
9	Service Lines	380	2.80%	\$	- 5	- \$	88 \$	125 \$	173 \$	254 \$	423 \$	621 \$	1,956 \$	3,025 \$	4,673 \$	6,043	\$ 6,779	
10	Meter installations	382							7 2		-				5 6 (+	
11	Total Additions			\$	- \$	- \$	88 \$	125 \$	173 \$	254 \$	423 \$	621 \$	1,956 \$	3,025 \$	4,673 \$	6,043	\$ 6,779	
	Potimomonto																	

	Retirements																	
12	Service Lines 3	380	Z.80%	\$	- \$	- 5	- \$	(37) \$	(39) \$	(45) \$	(45) \$	(45) \$	(52) \$	(52) \$	(53) \$	(66) \$	(98)	
13	Meter Installations 3	382						1.41	÷:	÷	-				- E	¥.		
14	Total Retirements			\$	- 5	- \$	- \$	(37) \$	(39) \$	(45) \$	(45) \$	(45) \$	(52) \$	(52) \$	(53) \$	(66) \$	(98)	
15	Total Accumulated Depreciatio	on Reserve		5	- \$	- 5	88 \$	176 \$	310 \$	519 \$	897 S	1,473 \$	3,377 \$	6,350 \$	10,970 \$	16,947 \$	23,628 \$	4,980

Notes:

(1) See Form 2.2 for detail of 2017 ASRP eligible additions

Exhibit 1 Schedule 4.4 Page 14 of 17

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Deferred Taxes on Liberalized Depreciation

<u>Line No.</u>	(A)	(B)	Ti	ax Year 2016 Vintage <u>2016</u> (C)
1	Total ASRP Plant Additions		\$	1,130,362.00
	Tax Base In-service subject to :			
2	Bonus Depreciation- 50%			1,130,362
3	MACRS			565,181
	Tax Depreciation			
4	Bonus Depreciation- 50%			565,181
5	MACRS on Balance			21,194
6	Total Tax Depreciation			586,375
7	Book Depreciation			4,980
8	Tax Depreciation in Excess of Book Depreciation			581,395
9	Cost of Removal			4,187
10	Total Difference		\$	585,582
11	Deferred Taxes @	38.47%		225,274

12

Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") Thirteen Month Average Additions and Retirements

Test Year 12/31/16 ASRP Investment Summary

		Number of	mber of ASRP Capex		Retirer	nents	Cost of Removal		
Line No.	Month	Months	By Month	Cumulative	By Month	Cumulative	By Month	<u>Cumulative</u>	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	
1	Balance @ 12/31/2015	13		\$ -	\$ -	\$ - :	\$-	\$ -	
2	Jan-16	12	\$ 37,729	37,729			-		
3	Feb-16	11	16,027	53,756	(15,895)	(15,895)			
4	Mar-16	10	20,485	74,241	(835)	(16,730)		-	
5	Apr-16	9	34,739	108,980	(2,556)	(19,286)	2,389	2,389	
6	May-16	8	72,395	181,375	(4)	(19,290)		2,389	
7	Jun-16	7	84,870	266,245		(19,290)	2,753	5,142	
8	Jul-16	6	571,890	838,135	(3,045)	(22,335)	1,934	7,076	
9	Aug-16	5	458,274	1,296,409	5e)	(22,335)	4	7,076	
10	Sep-16	4	706,429	2,002,839	(397)	(22,733)		7,076	
11	Oct-16	3	587,077	2,589,916	(5,368)	(28,101)		7,076	
12	Nov-16	2	315,355	2,905,271	(13,766)	(41,867)	330	7,406	
13	Dec-16	1	1,434,533	4,339,804	(6,339)	(48,206)	1,392	8,798	
				14,694,701		(276,067)		54,428	
14	Number of months			13		13	13	13	
15	13 Month Average			\$ 1,130,362		\$ (21,236)		\$ 4,187	

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Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") O&M - Reconnaissance

Test Year 12/31/16 Reconnaissance O&M

<u>Line No.</u>	<u>Month</u> (A)	<u>ASRP O&M 2016</u> (B)			
1	Jan-17	\$	-		
2	Feb-17		- 2-		
3	Mar-17		1		
4	Apr-17				
5	May-17		-		
6	Jun-17		-		
7	Jul-17		-		
8	Aug-17		9,264		
9	Sep-17		18,719		
10	Oct-17		7,750		
11	Nov-17		4,853		
12	Dec-17		075		
13	Total	\$	40,586		

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Duke Energy Kentucky Annual Adjustment to the Accelerated Service Line Replacement Program ("ASRP") O&M Meter Relocation

Test Year 12/31/16 ASRP Meter Relocation O&M

<u>Line No.</u>	<u>Month</u> (A)	ASF	<u>RP O&M 2016</u> (B)
1	Jan-17	\$	-
2	Feb-17		
3	Mar-17		172
4	Apr-17		-
5	May-17		345
6	Jun-17		345
7	Jul-17		-
8	Aug-17		517
9	Sep-17		345
10	Oct-17		-
11	Nov-17		-
12	Dec-17		1
13	Total	\$	1,724