

**COMMONWEALTH OF KENTUCKY  
BEFORE THE  
KENTUCKY PUBLIC SERVICE COMMISSION**

In the Matter of:

The Application of Duke Energy Kentucky, )  
Inc., for a Certificate of Public )  
Convenience And Necessity Authorizing )  
the Implementation of an Accelerated )  
Service Line Replacement Program, ) Case No. 2015-00210  
Approval of Ownership of Service Lines, )  
and a Gas Pipeline Replacement Surcharge )

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**SUPPLEMENTAL DIRECT TESTIMONY OF**

**GARY J. HEBBELER**

**ON BEHALF OF**

**DUKE ENERGY KENTUCKY, INC.**

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August 24, 2015

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**Attachments:**

Attachment GJH Supplemental-1- Service Line Diagrams

**I. INTRODUCTION AND PURPOSE**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Gary J. Hebbeler, and my business address is 139 East Fourth Street,  
3 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 General  
6 Manager, Gas Field and System Operations, for Duke Energy Kentucky, Inc.,  
7 (Duke Energy Kentucky or Company) and Duke Energy Ohio, Inc. (Duke Energy  
8 Ohio). DEBS provides various administrative and other services to Duke Energy  
9 Kentucky and other affiliated companies of Duke Energy Corporation (Duke  
10 Energy).

11 **Q. ARE YOU THE SAME GARY J. HEBBELER WHO FILED DIRECT  
12 TESTIMONY IN THIS PROCEEDING?**

13 A. Yes, I am.

14 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT  
15 TESTIMONY IN THIS PROCEEDING?**

16 A. The purpose of my Supplemental Direct Testimony is to respond to some of the  
17 points raised in the Kentucky Public Service Commission's (Commission) Order  
18 on July 24, 2015. Specifically, I respond to the Commission's directive to  
19 provide "detailed support of how [Duke Energy Kentucky's] proposal to include  
20 meter relocation expense in its proposed [Accelerated Service Replacement  
21 Program] ASRP conforms to the statutory provision of KRS 278.509 for cost  
22 recovery for investment in "natural gas pipeline" replacement programs." In

1           doing so, I will discuss the Company's proposal to relocate interior natural gas  
2           meters attached to service lines that will be replaced as part of the Company's  
3           ASRP.

## II.    DISCUSSION

4    **Q.    PLEASE BRIEFLY SUMMARIZE THE COMPANY'S PROPOSAL IN**  
5           **THIS PROCEEDING REGARDING INTERIOR NATURAL GAS**  
6           **METERS.**

7    A.    As I discussed in my Direct Testimony, as part of the ASRP, the Company is  
8           proposing, where applicable and permissible, to efficiently and economically  
9           relocate natural gas meters that are currently inside a structure to a suitable  
10          external location, where such meters are associated with a service line being  
11          replaced. It is important to understand that the Company is not requesting  
12          authority, under the ASRP, to relocate each and every interior meter throughout  
13          its entire service territory. Duke Energy Kentucky is only proposing to relocate  
14          the interior natural gas services and associated meters that qualify for replacement  
15          as part of the ASRP. The Company is requesting authority to replace these natural  
16          gas meters through a Certificate of Public Convenience and Necessity (CPCN)  
17          and requesting cost recovery as part of a pipeline replacement program.

18   **Q.    PLEASE BRIEFLY EXPLAIN WHY THE COMPANY IS SEEKING THIS**  
19           **AUTHORITY.**

20   A.    The Company's proposal to relocate certain internal natural gas meters is  
21          predicated upon the desire to avoid incremental operation and maintenance  
22          (O&M) costs and customer inconvenience.



1           Internal meters present logistical constraints in terms of regular access for  
2 the Company to perform routine meter readings, let alone mandatory inspections.  
3 Although Duke Energy Kentucky attempts to read each meter on a monthly basis,  
4 it is not uncommon for some of these internal meters to go several months with  
5 either a customer provided reading or estimated readings due to those access  
6 constraints.

7           Federal regulations governing the maintenance and inspection of interior  
8 natural gas installations are becoming more stringent. Indeed, federal rules  
9 mandate more detailed documentation of inspection-related activities than in the  
10 past. These required inspections are date driven and must be completed on time.  
11 To accomplish this, such inspections must be arranged with the cooperation of the  
12 affected customer or the customer will risk termination of service until  
13 inspections can be completed.

14           At the time of original installation, homeowners were more available  
15 which enabled interior meters to be more accessible. The current standards of  
16 living do not afford the Company this accessibility. In fact, the customer may  
17 need to take off work to allow access, causing an imposition. These federally  
18 required inspections, therefore, can give rise to both increased O&M costs and  
19 customer frustration. But, by relocating natural gas meters as part of the ASRP,  
20 the Company will avoid some future O&M costs that would otherwise be  
21 recovered from all customers. And finally, the proposal enables Duke Energy  
22 Kentucky to reduce the imposition currently placed on customers to arrange for  
23 these inspections.

1 Q. ARE YOU FAMILIAR WITH KENTUCKY LAW AND REGULATIONS  
2 REGARDING NATURAL GAS CONSTRUCTION, AND SPECIFICALLY,  
3 KRS 278.509?

4 A. Yes. As an engineer for a public utility providing natural gas service, it is  
5 important that I understand the regulations governing Duke Energy Kentucky's  
6 gas operations. Thus, over my 27 years in the industry and my involvement in  
7 comprehensive pipeline replacement projects, including those in the  
8 Commonwealth, I am familiar with Kentucky's statutes and requirements for a  
9 CPCN and for Pipeline Replacements. The Company's application with respect to  
10 these interior meters, is twofold. First, the Company is requesting authority to  
11 perform the relocation as part of the CPCN filed in this proceeding. Second, the  
12 Company is proposing the recovery of costs as part of the pipeline replacement  
13 program through the proposed Rider ASRP.

14 Q. PLEASE ELABORATE.

15 A. It is my understanding that before the Company can begin any construction  
16 project that is not considered an ordinary extension, the Commission must  
17 determine need and approve the project through the CPCN process. Therefore,  
18 the Company is requesting, as part of its CPCN application, the authority to  
19 relocate these interior meters.

20 Kentucky law also addresses, with more specificity and flexibility, the  
21 recovery of costs for natural gas pipeline replacement programs. As I understand,  
22 Kentucky's Pipeline Replacement statute permits a utility to recover costs of  
23 investment in natural gas pipeline replacement programs that are not recovered in

1 a utility's existing rates if the Commission determines that the costs of that  
2 replacement program are fair, just, and reasonable. Specifically, the Pipeline  
3 Replacement statute, KRS 278.509, states as follows:

4 Notwithstanding any other provision of law to the contrary, upon  
5 application by a regulated utility, the commission may allow  
6 recovery of costs for investment in natural gas pipeline  
7 replacement programs which are not recovered in the existing rates  
8 of a regulated utility. No recovery shall be allowed unless the costs  
9 shall have been deemed by the commission to be fair, just, and  
10 reasonable.

11 **Q. DO YOU BELIEVE THE RELOCATION OF INTERIOR METERS IS**  
12 **CONSISTENT WITH AND CAPTURED WITHIN A PIPELINE**  
13 **REPLACEMENT PROGRAM?**

14 **A.** Yes. As an initial matter, it is important to note that Duke Energy Kentucky has  
15 proposed the ASRP because of federal regulations governing jurisdictional piping.  
16 These federal regulations define the natural gas service to include the meter.  
17 Generally speaking, a pipeline is broadly defined under 49 CFR 192.3 to include  
18 "all parts of those physical facilities through which gas moves in transportation,  
19 including pipes, valves, and other appurtenance attached to pipe, compressor  
20 units, metering stations, regulator stations, delivery stations, holders, and  
21 fabricated assemblies." The regulations further delineate between the different  
22 types of pipelines, expressly defining a distribution line as "a pipeline other than a  
23 gathering line or transmission line." A service line is also defined in the federal  
24 code as one form of distribution line. Specifically, a service line means:

25 [A] distribution line that transports gas from a common source of  
26 supply to an individual customer, to two adjacent or adjoining  
27 residential or small commercial customers, or to multiple  
28 residential or small commercial customers served through a meter

1 header or manifold. A service line ends at the outlet of the  
2 customer meter or at the connection to a customer's piping,  
3 whichever is further downstream, or at the connection to customer  
4 piping if there is no meter.

5 The federal regulations addressed by the proposed ASRP are those  
6 applicable to distribution pipelines, which, as noted above, include service lines.  
7 And, pursuant to this definition, a service line must include a meter because the  
8 outlet of the meter ends at the connection to the customer's piping. Consequently,  
9 a service line, for purposes of the ASRP, includes that piping and equipment  
10 attached thereto from the distribution main to the interior connection to customer  
11 piping.

12 Attachment GJH Supplemental-1 includes two diagrams depicting interior  
13 and exterior service line installations and shows, in general, how the house piping  
14 attaches to the outlet of the meter for interior services. These diagrams are used  
15 by Duke Energy Kentucky's gas engineering as the standard installation for both  
16 interior and exterior meter curb to meter services.

17 The intent of the ASRP program, including the Company's proposal to  
18 relocate a portion of interior meters, is to continue to reduce risk and enhance the  
19 safety and reliability of Duke Energy Kentucky's natural gas system as required  
20 by PHMSA through DIMP, while at the same time providing affordable service.  
21 Due to the more stringent requirements of documentation, it is an opportunity to  
22 avoid future cost and reduce the inconvenience to the customer.

**III. CONCLUSION**

23 **Q. WAS ATTACHMENT GJH SUPPLEMENTAL-1 PREPARED BY YOU**  
24 **AND UNDER YOUR DIRECTION AND CONTROL?**

1 A. Yes.

2 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?**

3 A. Yes.



**VERIFICATION**

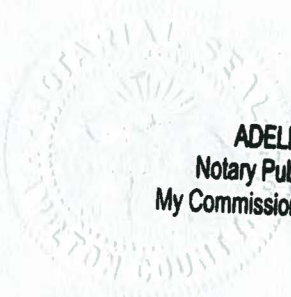
STATE OF OHIO )  
 ) SS:  
COUNTY OF HAMILTON )

The undersigned, Gary J. Hebbeler, General Manager of Gas Field and System Operations, Duke Energy Kentucky, Inc. being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

*Gary J. Hebbeler*

Gary J. Hebbeler, Affiant  
General Manager, Gas Field and System  
Operations, Duke Energy Kentucky, Inc.

Subscribed and sworn to before me by Gary J. Hebbeler on this 12<sup>TH</sup> day of August 2015.



**ADELE M. FRISCH**  
Notary Public, State of Ohio  
My Commission Expires 01-05-2019

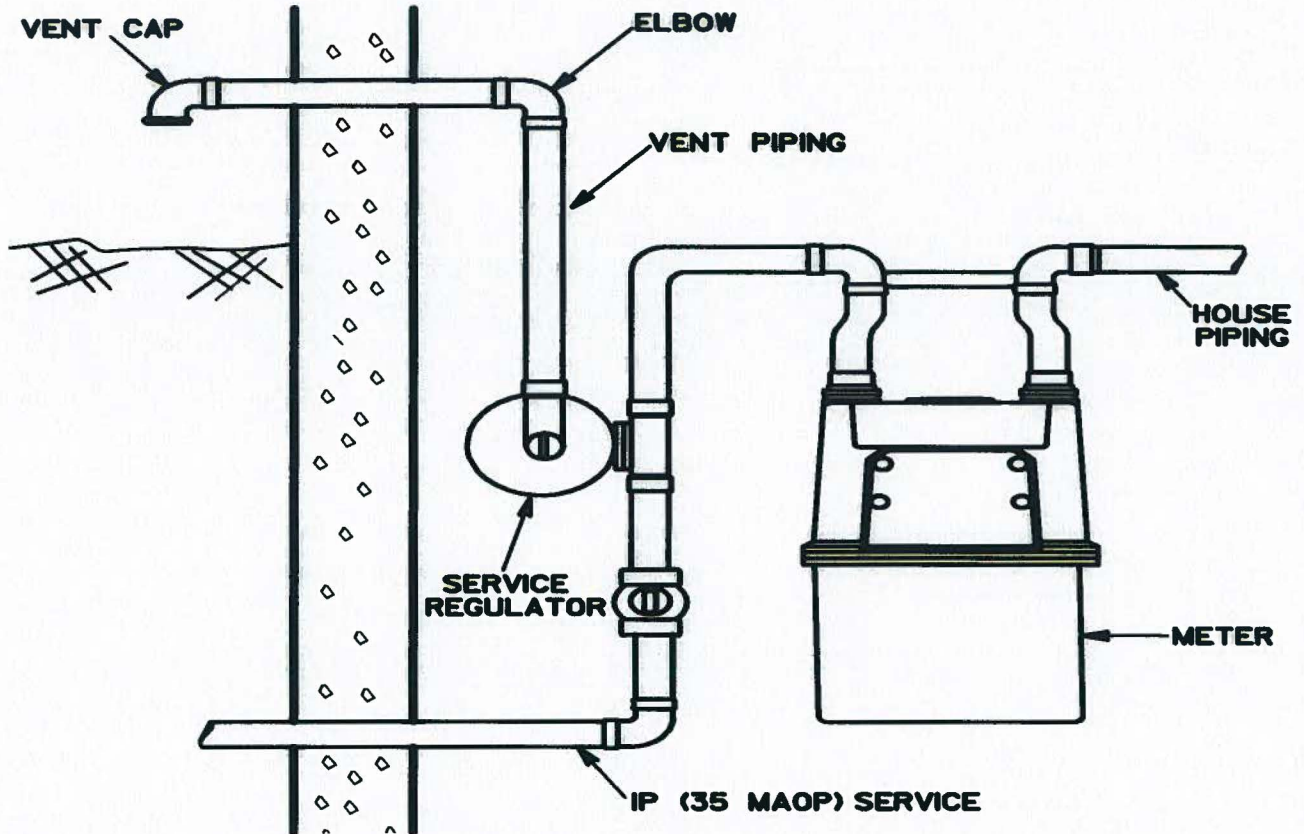
*Adele M. Frisch*

NOTARY PUBLIC

My Commission Expires: 1/5/2019



INSIDE METERS



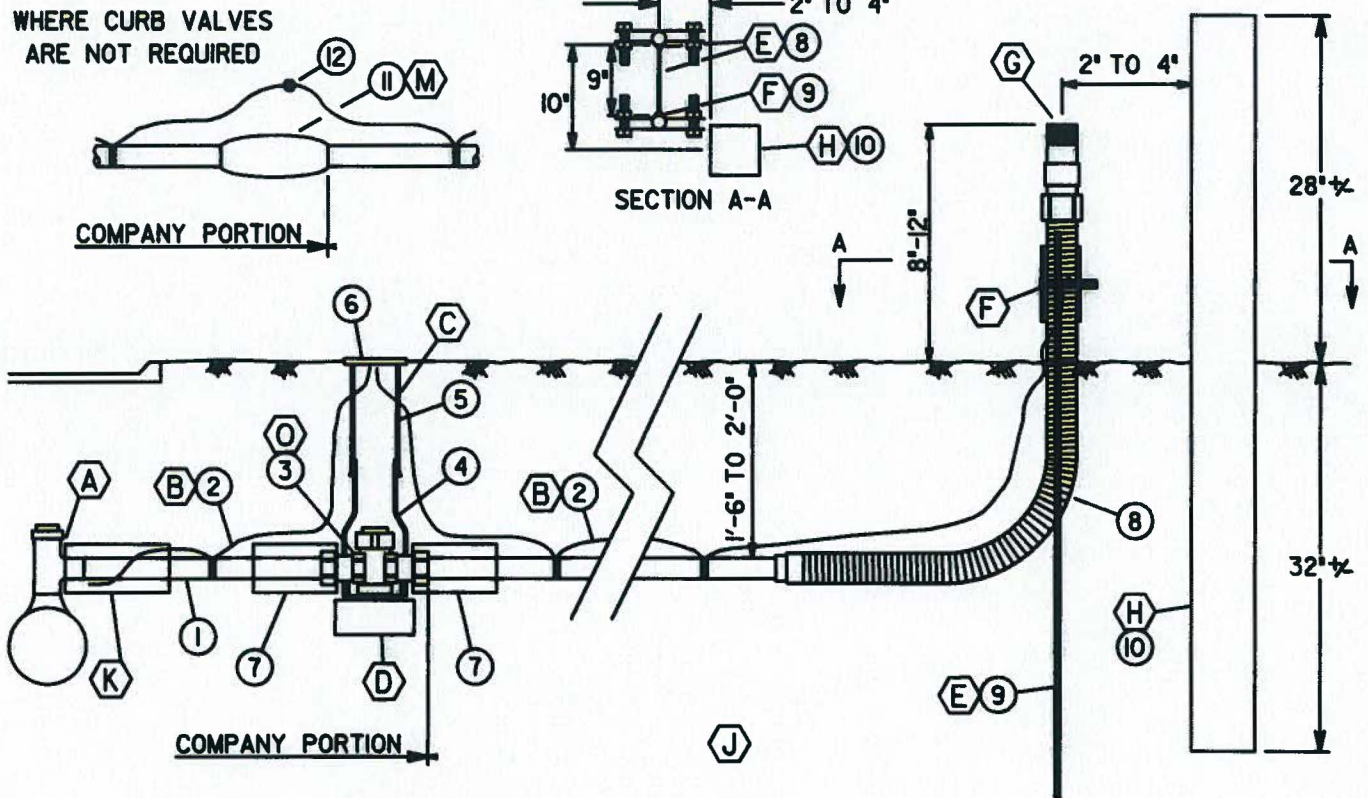
**NOTES:**

- A. Company policy is to install new meters outside. Use this standard for renewing inside meters.
- B. Inside meters are not permitted on services operating above 35 psig.
- C. Sketch shows face view of components and does not necessary represent installed orientation. Meters are typically installed with index facing away from wall.
- D. Service regulator shall be vented to an outside location. Vent piping shall be black iron pipe or approved corrugated stainless steel tubing.
- E. Vent piping shall be 1 inch size or larger. One inch size vent piping shall not exceed 10 feet in length. Larger size vent pipe is required for longer runs.
- F. One inch size vent piping shall not have more than five elbows and one vent cap. Check with Gas Engineering for larger size vent piping.
- G. All inside service fittings prior to inlet of regulator shall be threaded, compression fittings are not permitted.
- H. Inside service length from wall to inlet of regulator shall not exceed 2 feet.

Original	2/6/06			
Revision	-	2/20/06	10/15/2007	
Approved	MBH	MBH	CTL	



1" CTS PLASTIC SERVICE NEW/RENEW INSTALLATION FREE  
STANDING METER MAIN TO METER



**NOTES:**

- A. For connections to main refer to Gas Standards: [3.5.1](#) for connections to steel mains, cast iron and plastic.
- B. See Gas Standard [2.18.20](#) for installation of tracer wire.
- C. See Gas Standard [2.18.21](#) for curb box tracer wire installation.
- D. Curb valve assembly to be supported by solid ground or brick.
- E. Support post (5' long 1" pipe) not supplied in Riser kit.
- F. Tracer wire to extend 6 inches above grade. Wrap tracer wire around bolt between two sides of bracket clamped to riser.
- G. Company to install meter bracket assembly. Refer to Gas Standard [4.6.4](#).
- H. Concrete post (3" X 3" X 5')
- I. For load and length limitations refer to Gas Standards: [1.8.1.1](#) & [1.8.1.2](#) for Standard Pressure Systems  
[1.8.2.1](#) & [1.8.2.2](#) for Medium Pressure Systems  
[1.8.3.1](#) & [1.8.3.2](#) for Intermediate Pressure Systems  
[1.8.4.1](#) & [1.8.4.2](#) for Increased Intermediate Pressure Systems and higher
- J. Standard Pressure applications are limited to residential 50 feet or less.
- K. An Excess Flow Valve (EFV) is required for all IP, HP and F/L single family residential services. See Gas Standard [3.8.1](#) for EFV selection.
- L. See Gas Standard [3.3.9](#) for location of riser and notes specific to mobile home installations.
- M. See Gas Standard [3.7.1](#) for curb valve installation requirements.

Original	3/2/82			
Revision	-	6/23/99	3/16/04	2/13/08
Approved	RBG	SAB	MBH	CTL



1" CTS PLASTIC SERVICE NEW INSTALLATION FREE  
STANDING METER MAIN TO METER**COMPATIBLE UNITS**

Compatible Unit Code	Description
1 PE MM FREESTAND	New 1" PE Service M-M Free Standing Meter

**LIST OF MATERIALS**

ITEM NUMBER	DUKE STOCK NUMBER	ITEM DESCRIPTION
1	<a href="#">0050104506</a>	1" CTS PE Pipe SDR 11.5
2	<a href="#">0050120133</a>	No. 12 Tracer Wire
3	<a href="#">0050056301</a>	1" Plastic Valve and Support
4	<a href="#">0050056188</a>	Valve Box Bottom Section
5	<a href="#">0050056194</a>	Valve Box Top Section
6	<a href="#">0050056191</a>	Valve Box Lid
7	<a href="#">0000900783</a>	3" Split Duct
8	<a href="#">0050103817</a>	Free Standing Flexible Riser Kit
9	<a href="#">0050105447</a>	1" Steel Pipe
10	<a href="#">0050056936</a>	3" X 3" X 5' Concrete Post
11	<a href="#">0050101070</a>	1" CTS PE Stab Coupling
12	<a href="#">0000643360</a>	Tracer Wire Splice Kit



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the Implementation of an Accelerated )  
Service Line Replacement Program, ) Case No. 2015-00210  
Approval of Ownership of Service Lines, )  
and a Gas Pipeline Replacement Surcharge )

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**DIRECT TESTIMONY OF  
WILLIAM DON WATHEN JR.  
ON BEHALF OF  
DUKE ENERGY KENTUCKY, INC.**

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August 24, 2015

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**Attachments:**

WDW-1 Duke Energy Kentucky's Historic Net Plant

WDW-2 Duke Energy Kentucky's Historic O&M Expense

WDW-3 Duke Energy Kentucky's Historic Returns

**I. INTRODUCTION AND PURPOSE**

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 & Regulatory Strategy - Ohio and Kentucky. DEBS provides various  
7 administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy  
8 Kentucky or the Company) and other affiliated companies of Duke Energy  
9 Corporation (Duke Energy Corp.).

10 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND**  
11 **PROFESSIONAL BACKGROUNDS.**

12 A. I received Bachelor Degrees in Business Administration and Chemical  
13 Engineering, and a Master of Business Administration Degree, all from the  
14 University of Kentucky. After completing graduate studies, I was employed by  
15 Kentucky Utilities Company as a planning analyst. In 1989, I began employment  
16 with the Indiana Utility Regulatory Commission as a senior engineer. From 1992  
17 until mid-1998, I was employed by SVBK Consulting Group, where I held several  
18 positions as a consultant focusing principally on utility rate matters. I was hired  
19 by Cinergy Services, Inc., in 1998, as an Economic and Financial Specialist in the  
20 Budgets and Forecasts Department. In 1999, I was promoted to the position of  
21 Manager, Financial Forecasts. In August 2003, I was named to the position of



1 Director - Rates. On December 1, 2009, I took the position of Director of Rates &  
2 Regulatory Strategy - Ohio and Kentucky.

3 **Q. PLEASE SUMMARIZE YOUR DUTIES AS DIRECTOR OF RATES &**  
4 **REGULATORY STRATEGY - OHIO AND KENTUCKY.**

5 A. As Director of Rates & Regulatory Strategy - Ohio and Kentucky, I am  
6 responsible for all state and federal rate matters involving Duke Energy Kentucky  
7 and its parent, Duke Energy Ohio, Inc. (Duke Energy Ohio).

8 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**  
9 **PUBLIC SERVICE COMMISSION?**

10 A. Yes. I have presented testimony on numerous occasions before the Kentucky  
11 Public Service Commission (Commission) and various other state, local, and  
12 federal regulators.

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

15 A. The purpose of my testimony is to respond to the Commission's July 24, 2015,  
16 Order requesting that the Company provide additional information regarding its  
17 current and historic return on equity (ROE) for the last five years. I also discuss  
18 the financial condition of Duke Energy Kentucky's natural gas operations and the  
19 reasons the Company filed this application for a certificate of public convenience  
20 and necessity (CPCN) for the accelerated service line replacement program  
21 (ASRP) and the associated cost recovery mechanism, Rider ASRP.

## II. DISCUSSION

1 **Q. PLEASE PROVIDE A BRIEF OVERVIEW, FROM A FINANCIAL**  
2 **PERSPECTIVE, OF DUKE ENERGY KENTUCKY'S CURRENT**  
3 **NATURAL GAS OPERATIONS.**

4 A. Duke Energy Kentucky's Natural Gas Operations (Gas Operations) consists of  
5 approximately \$295 million in net utility plant, including construction work in  
6 progress, based upon its most recent FERC Form 2 Annual Report data for  
7 calendar year 2014.<sup>1</sup>

8 **Q. WHAT WAS THE ROE ESTABLISHED IN DUKE ENERGY**  
9 **KENTUCKY'S MOST RECENT NATURAL GAS BASE RATE CASE?**

10 A. Duke Energy Kentucky's last natural gas base rate case, Case No. 2009-00202,  
11 was filed on July 1, 2009, with rates going into effect in January 2010. That case  
12 was resolved through a Stipulation and Settlement (Stipulation) with the Attorney  
13 General (AG), the only intervenor in the case, which was approved by the  
14 Commission. The Stipulation established a ROE of 10.375%.

15 **Q. HOW SUCCESSFUL HAS DUKE ENERGY KENTUCKY BEEN AT**  
16 **CONTROLLING ITS COSTS SINCE THAT TIME?**

17 A. Duke Energy Kentucky strives to provide safe and reliable gas service at the  
18 lowest cost and, toward that end, has worked diligently to control its costs to  
19 operate and maintain its natural gas distribution system. Since 2010, the  
20 Company's non-fuel operating and maintenance expenses have been relatively  
21 constant as shown in the following table:

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<sup>1</sup> See Exhibit WDW-1.

Actual O&M <sup>(a)</sup> (excl. cost of gas) (in \$million)					
2010	2011	2012	2013	2014	2015 <sup>(b)</sup>
\$21.0	\$21.1	\$22.4	\$20.3	\$21.2	\$19.5
<sup>(a)</sup> See Exhibit WDW-2.					
<sup>(b)</sup> 12 months ending June 30, 2015.					

1 As the table above shows, this focus on controlling cost has been  
2 successful and has helped the Company avoid the need to file for rate relief since  
3 its last rate case.

4 In 2011, Duke Energy Kentucky filed an application with the  
5 Commission, in Case No. 2011-00124, seeking its approval of the merger  
6 between Duke Energy Corp. and Progress Energy LLC. As part of the settlement  
7 approved by the Commission in that proceeding, Duke Energy Kentucky agreed  
8 to “not file an application for approval of a base rate increase for its retail electric  
9 or natural gas business for two years from the date of the Commission’s entry of a  
10 final order”<sup>2</sup> in that proceeding. The stay-out commitment agreed to by the  
11 Company ensured that Duke Energy Kentucky could not file a case any time  
12 before November 2013.

13 As a result of the Company’s ability to control its non-commodity O&M  
14 and its merger commitment to “stay out” of filing rate cases for a period of time,  
15 customers have enjoyed approximately six years of not having a natural gas base  
16 rate increase.

17 **Q. HOW HAS DUKE ENERGY KENTUCKY’S NATURAL GAS**  
18 **OPERATIONS PERFORMED FOR THE LAST FIVE YEARS?**

<sup>2</sup> In the Matter of the Joint Application of Duke Energy Corporation, Cinergy Corp., Duke Energy Ohio, Inc., Duke Energy Kentucky, Inc., Diamond Acquisition Corporation and Progress Energy, Inc., for Approval of the Indirect Transfer of Control of Duke Energy Kentucky, Inc., Case No. 2011-00124, Order, Appendix A, paragraph 1.01, (August 2, 2011).

1 A. Based upon Duke Energy Kentucky's FERC Form 2 data, the Company, on  
2 average, has trended slightly below that authorized ROE for gas operations. While  
3 there have been some years where the Company has been above that 10.375%  
4 ROE, there have also been years where the Company's performance has been  
5 below, significantly below, that ROE. For calendar years 2010 through 2014, and  
6 the twelve month period ending June 30, 2015, the Company's ROE has averaged  
7 10.1%. The chart below shows the estimated actual, unadjusted, annual ROEs by  
8 year for the Company's gas operations (see Exhibit WDW-3).

Actual ROEs for Twelve Months Ending					
12/31/10	12/31/11	12/31/12	12/31/13	12/31/14	6/30/15
13.17%	8.62%	5.43%	11.06%	11.85%	10.67%

9 **Q. WERE THERE ANY MAJOR ASSUMPTIONS NECESSARY IN ORDER**  
10 **TO CALCULATE THESE HISTORICAL RETURNS ON EQUITY?**

11 A. Yes. Because Duke Energy Kentucky is a combination gas and electric utility, its  
12 capitalization, *i.e.*, its debt and equity, is common to both businesses. Therefore,  
13 in order to calculate an ROE for either its gas or electric business, it is necessary  
14 to make assumptions to allocate capitalization and certain costs between gas and  
15 electric. Typically, in a rate case, this is done through an extensive analysis that  
16 is undertaken to calculate rate base for both gas and electric. Because the total  
17 capitalization supports both the gas and the electric businesses, the results of this  
18 detailed rate base analysis is used to allocate capitalization between the two  
19 businesses. I made a simplifying assumption for the calculation above, *i.e.*, that  
20 the total capitalization and total interest expense were allocable to gas and electric  
21 based on common plant allocation factors calculated each year and reported in the

1 FERC Form 2. The common plant allocation factor is admittedly not the result of  
2 a detailed calculation that would be performed in a rate case but it is a reasonable  
3 approximation in this case to estimate what the ROEs have been for the  
4 Company's natural gas business.

5 **Q. WILL YOU PLEASE EXPLAIN WHY THE ROES FOR SOME OF THE**  
6 **PERIODS ARE HIGHER THAN THE 10.375% ESTABLISHED IN THE**  
7 **2009 RATE CASE?**

8 A. Yes. The ROEs listed above are based upon publicly available FERC Form 2 data  
9 and are based on unadjusted actual data. While this data provides some insight  
10 into the Company's performance, it does not take into account anomalous events  
11 such as the impact of weather (weather normalization) or other significant  
12 adjustments that would be factored into a rate case application. Recent winters in  
13 our region have been colder than normal and, as a result, the Company has seen  
14 higher than "normal" sales for calendar years 2013 and 2014, and during the early  
15 part of 2015. In particular, the winter heating season of October 2013 through  
16 March 2014, was historically cold; so cold, in fact, that it introduced a new term,  
17 the "polar vortex" to our vernacular. The events of that winter generated much  
18 discussion on both a national and regional level. That winter season saw increased  
19 natural gas sales that were not indicative of either prior or forecasted typical  
20 natural gas sales. The Company routinely calculates the impact on margins (*i.e.*,  
21 revenue minus the cost of gas) from deviations in normal weather and has  
22 estimated that, if weather had been normal during those periods shown in the  
23 chart above, Duke Energy Kentucky's ROE, with normal weather, would have



1           been (see also Exhibit WDW-3):

<b>Weather Normalized ROEs for Twelve Months Ending</b>					
<b>12/31/10</b>	<b>12/31/11</b>	<b>12/31/12</b>	<b>12/31/13</b>	<b>12/31/14</b>	<b>6/30/15</b>
11.97%	9.39%	5.79%	10.00%	10.09%	9.48%

2                       Because Duke Energy Kentucky's non-commodity gas rates are still based  
3 mostly on volumetric charges, it is not surprising that weather has such an  
4 influence on returns, particularly for natural gas service, where volumetric sales  
5 are much more sensitive to weather. Normalized ROEs, therefore, are much  
6 closer to the allowed ROE of 10.375%, as one would expect. Of course, the  
7 current rates were established using a test year that was based on "normal"  
8 weather; so, all else being equal, any deviation from normal weather would result  
9 in a change in the ROE from the allowed ROE.

10 **Q. YOU STATED THAT THE WEATHER EVENTS FOR 2014 AND THE**  
11 **TWELVE MONTHS ENDING JUNE 30, 2015, ARE NOT INDICATIVE OF**  
12 **FUTURE NATURAL GAS SALES, DO YOU HAVE ANY BASIS FOR**  
13 **THAT STATEMENT?**

14 **A.** Yes. The chart below shows the number of monthly heating degree days (HDD)  
15 during the winter months beginning January 2010 through March 2015. This data  
16 shows that calendar year 2014 and the twelve-month period ending June 2015 was  
17 abnormally cold.



**Heating Degree Days for Winter Months (CVG)**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015<sup>(a)</sup></b>
Jan	1,180	1,191	917	951	1,287	1,083
Feb	1,046	809	765	895	1,023	1,165
Mar	603	642	319	858	794	714
Oct	244	320	353	304	295	n/a
Nov	592	476	676	707	774	n/a
Dec	1,182	792	759	919	858	n/a
Total	4,847	4,216	3,826	4,648	5,025	4,900
Normal	4,491	4,491	4,491	4,491	4,491	4,491
Variance	356	(261)	(702)	143	540	398

<sup>(a)</sup> *The Total is the sum of Jan-Mar 2015, plus Oct-Dec 2014.*

*Source: National Oceanographic and Atmospheric Administration for CVG Airport.*

1 Weather has a significant influence on the Company's revenue as most of its base  
2 revenues are recovered from customers at volumetric-based rates and heating load  
3 is a significant driver of overall sales. Intuitively, one would expect that a natural  
4 gas company with mostly volumetric-based rates would experience volatility in its  
5 earnings, and that volatility is evident in Duke Energy Kentucky's actual sales  
6 and, consequently, in its actual financial results. Comparing the following table to  
7 above table one can see that the relationship between volumetric sales and  
8 weather is straightforward. The two years with the lowest volumetric sales, not  
9 surprisingly, are 2011 and 2012. The HDDs in those two years are the lowest  
10 among the six periods shown. For 2013, 2014, and the twelve-months ending June  
11 30, 2015, the weather was colder than normal; so, volumetric sales were much  
12 higher.

**Total Throughput (Dekatherms x 1,000)**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015<sup>(a)</sup></b>
Retail	10,615	9,719	8,457	10,503	11,440	11,220
Transportation	3,161	3,227	3,325	3,585	3,736	3,817
	<u>13,775</u>	<u>12,946</u>	<u>11,782</u>	<u>14,089</u>	<u>15,117</u>	<u>15,037</u>

<sup>(a)</sup> For the twelve months ending June 30, 2015.

Source: FERC Form 2, page 301.

1       The correlation between the weather and volumetric sales for gas, and the fact that  
2       most of Duke Energy Kentucky's rates for gas service are volumetric-based,  
3       necessarily means that its earnings are also volatile. The Commission recognizes  
4       the influence of weather on gas utility earnings inasmuch as weather-  
5       normalization adjustments are routinely made to test year sales data when the  
6       Commission approves new base rates in general gas rate case proceedings and,  
7       the Commission has approved weather normalization riders for some of its  
8       jurisdiction gas utilities.<sup>3</sup> Duke Energy Kentucky does not have such a rider but  
9       that principle, recognized by the Commission, is similar when reviewing Duke  
10      Energy Kentucky's recent actual earnings. Therefore, the fact that the Company's  
11      earnings exceeded or fell short of its allowed ROE in recent years should not be  
12      taken at face value. Because Duke Energy Kentucky does not have a weather-  
13      normalization adjustment rider, it is important to 'normalize' its actual financial  
14      results for weather in order to get a better understanding of how the Company is  
15      performing under "normal" circumstances.

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<sup>3</sup> Atmos Energy, Columbia Gas of Kentucky, Delta Natural Gas, and LG&E all have Commission-approved weather-normalization adjustment riders.

1 **Q. BASED UPON THAT ANALYSIS, COULD DUKE ENERGY KENTUCKY**  
2 **SIMPLY JUST ABSORB THE COSTS OF ITS PROPOSED ASRP**  
3 **PROGRAM IN ITS CURRENT RATES?**

4 A. Not in my opinion. Given the magnitude of the investment projected for the  
5 ASRP and the fact that weather-normalized earnings are already just under the  
6 allowed return, it is expected that earnings, at current rates, will not generate  
7 enough returns to approach the currently authorized ROE. Consequently, absent  
8 the proposed rider, the Company would find it necessary to seek base rate relief  
9 soon and with more frequency in order to reasonably and fairly compensate its  
10 investors. In this proceeding, the Company is seeking approval to implement a  
11 form of recovery that will allow it to achieve returns that should, on a weather-  
12 normal basis, to reasonably and fairly compensate its investors. As Company  
13 witness Dr. Morin explains, the currently authorized 10.375% ROE continues to  
14 be a fair and reasonable return for Duke Energy Kentucky's natural gas business.

15 **Q. WHY DID THE COMPANY ELECT TO FILE FOR A COST RECOVERY**  
16 **MECHANISM VIA A RIDER IN LIEU OF FILING A FULL BASE RATE**  
17 **PROCEEDING?**

18 A. The Company elected to file the Rider ASRP for three primary reasons or drivers:  
19 (1) timing; (2) minimizing rate impacts to customers; and (3) because Kentucky  
20 law affords an opportunity for cost recovery of pipeline replacement programs  
21 outside of base rate cases.

22 **Q. WHY IS "TIMING" A DETERMINING FACTOR FOR THE**  
23 **COMPANY'S APPLICATION IN THIS PROCEEDING?**

1 A. This timing issue is actually explained fully in the Company's application and  
2 direct testimony already on file. As Company witness Edward McGee explains,  
3 the "service line" issue is one that needs to be addressed as soon as possible from  
4 both safety and integrity perspectives. As he discusses, the Company, as a prudent  
5 operator, should begin construction as quickly as possible, which requires that it  
6 immediately pursue a CPCN from the Commission. The magnitude of the  
7 investment required for the ASRP means cost recovery is an important part of the  
8 program for Duke Energy Kentucky. This "accelerated" service line replacement  
9 program is an incremental program for the Company as it did not exist at the time  
10 of the Company's last base rate case. Furthermore, the fact that the program is  
11 incremental means the revenue requirement associated with this incremental  
12 program is not currently reflected in base rates.

13 The magnitude of the investment requires some form of rate relief that is  
14 contemporaneous to the construction phase of the project. If the Company was  
15 forced to proceed with the project without rate relief, it would materially impair  
16 the Company's financial condition. In light of the expressed policy set forth in  
17 KRS 278.509 to facilitate safety improvements to natural gas systems, there is no  
18 need to delay an important safety program until such time as a rate case can be  
19 filed and adjudicated. Filing a separate CPCN application, and then subsequently  
20 filing a base rate case would be a strain on Duke Energy Kentucky's financial  
21 condition and an inefficient use of resources when KRS 278.509 affords the  
22 opportunity to seek rate recovery outside of a base rate filing.

23 Once Duke Energy Kentucky determined it needed to act to address the

1 service line risks identified, the preparation of a complete base rate case filing  
2 would have delayed Duke Energy Kentucky's ability to implement the program in  
3 a timely basis. It simply takes a much longer time to prepare a full base rate case  
4 than a single rider. Duke Energy Kentucky's customers will directly and  
5 immediately benefit from the enhancements to the overall integrity of the natural  
6 gas delivery system afforded under the ASRP once initiated. It is reasonable that  
7 customers also immediately share in the costs.

8 **Q. PLEASE EXPLAIN THE SECOND REASON REGARDING RATE**  
9 **IMPACTS THAT SUPPORTS FILING A SEPARATE RECOVERY**  
10 **MECHANISM FOR THE ASRP.**

11 A. The discrete cost recovery mechanism afforded by implementing a rider allows  
12 the Company to control and minimize rate increases to customers. Having been  
13 involved in ratemaking, in multiple jurisdictions, for over twenty-five years, it is  
14 my belief that customers generally prefer smaller increases in their bills, even if  
15 more frequent, than less frequent but much greater increases in their bills. The  
16 rider being proposed in this case will allow the Company to better control the  
17 magnitude and the frequency of rate increase customers will experience. By  
18 focusing solely on the service line replacement program and spreading out the  
19 recovery of costs by phasing it in as a steady stream over a five-year term, as is  
20 being proposed in this Application, the risk of customer rate shock is mitigated.  
21 The smaller increases, even if more frequent, that will result from this rider, also  
22 conforms to the long-standing regulatory principle of rate gradualism.

23 By focusing on just the cost of this program through a discrete rider



1 mechanism, the Commission will be able to timely and annually review the  
2 Company's program costs, as the Company is conducting the program, allowing  
3 both the Company and the Commission to make adjustments to the program, as  
4 opposed to only when the Company files a full base rate proceeding. The rider  
5 recovery approach allows the Commission to separately determine whether each  
6 individual adjustment results in a fair, just, and reasonable rate.

7 **Q. PLEASE EXPLAIN THE THIRD REASON THAT DROVE THE**  
8 **COMPANY'S APPLICATION.**

9 A. The third reason supporting the Company's decision to file a discrete cost  
10 recovery mechanism rather than a full, time-consuming, and expensive rate case,  
11 is that there is a specific statute authorizing the Company to do so. Although I am  
12 not an attorney, based upon my more than twenty-five years of experience in the  
13 regulated utility industry, I have extensive familiarity with the various tenets of  
14 rate-making, and have had to read, interpret, and apply various statutes and  
15 regulations that govern the topic. I have been specifically involved in Duke  
16 Energy Kentucky rate matters for approximately twelve years and, in that time, I  
17 have become very familiar with the Commonwealth of Kentucky's rules and  
18 regulations as they pertain to utility rate recovery. I participated in the cost  
19 recovery proceedings involving Duke Energy Kentucky's accelerated main  
20 replacement program (AMRP) and extensively followed the legal process that  
21 culminated in 2010, with the Kentucky Supreme Court ultimately affirming and  
22 validating the Commission's plenary authority to approve cost recovery  
23 mechanisms such as the Company's prior Rider AMRP and the Rider ASRP that



1 the Company is seeking approval for in this case.

2 **Q. BASED UPON YOUR EXPERIENCE IN THE INDUSTRY AND**  
3 **SPECIFICALLY IN KENTUCKY, WHAT IS YOUR UNDERSTANDING**  
4 **OF KENTUCKY REGULATIONS AND LAW AS IT RELATES TO A GAS**  
5 **PIPELINE REPLACEMENT PROGRAM?**

6 A. I am aware that the Kentucky Supreme Court has affirmed this Commission's  
7 authority to approve a pipeline replacement program and cost recovery  
8 methodology under its broad, plenary ratemaking authority, holding:

9 ...We agree with the view that the PSC had the plenary authority to  
10 regulate and investigate utilities and to ensure that rates charged are fair,  
11 just, and reasonable under KRS 278.030 and KRS 278.040. This  
12 authority allowed the PSC to allow the rider and to re-calculate the  
13 dollar amount of the surcharge in expedited annual proceedings even  
14 before the effective date of KRS 278.509, which expressly clarified (but  
15 did not create) the PSC's authority to allow recovery of the cost of  
16 natural gas pipeline replacement not covered by existing rates so long as  
17 the rates are fair, just, and reasonable.<sup>4</sup>

18 I am also aware that the Kentucky Supreme Court affirmed that the Commission  
19 can approve an ASRP-like mechanism outside of a general rate case.

20 ...The plain language of KRS 278.190 does not actually require the PSC  
21 proceed with a general rate case or other particular process every time  
22 some new rate or change in rates is requested. To the contrary, the  
23 statute simply provides that upon filing of the schedule of new rates, the  
24 PSC "may" conduct a "hearing concerning the reasonableness of the  
25 new rates" on its own motion or if the complaint is filed by any person  
26 challenging the rates as unreasonable or otherwise contrary to the law  
27 under KRS 278.260.<sup>5</sup>

28 Finally, I am familiar with the language in KRS 278.509, *Recovery of costs for*  
29 *investment in natural gas pipeline replacement programs*, that provides:

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<sup>4</sup> *Kentucky Public Service Commission v. Commonwealth of Kentucky ex. rel. Jack Conway*, 324 S.W.3d 373, 383 (Ky. 2010).

<sup>5</sup> *Id.*, at 378.

1                   Notwithstanding any other provision of law to the contrary, upon  
2                   application by a regulated utility, the commission may allow recovery  
3                   of costs for investment in natural gas pipeline replacement programs  
4                   which are not recovered in the existing rates of a regulated utility. No  
5                   recovery shall be allowed unless the costs shall have been deemed by  
6                   the commission to be fair, just, and reasonable.

7                   Rider recovery is not a novel concept. It is not new to Kentucky and it is not new  
8                   to other jurisdictions. Rider recovery typically provides all parties involved with  
9                   the means of achieving an optimal balance among all stakeholder interests.  
10                  Having participated in rider cases involving Duke Energy Kentucky, it is clear  
11                  that there is precedent for such cost recovery mechanisms; so, the Commission  
12                  has the ability to consider and to approve discrete cost recovery mechanisms such  
13                  as the rider being requested by the Company in this case. It seems evident that  
14                  the Commission has such authority but, if there was any ambiguity, one only has  
15                  to read the Supreme Court opinion above or the language of KRS 278.509 to end  
16                  any doubt that the Commission has the requisite authority.

17   **Q.   HOW DOES THE CASE LAW AND STATUTORY AUTHORITY**  
18   **SUPPORT DUKE ENERGY KENTUCKY’S PROPOSAL IN THIS**  
19   **PROCEEDING TO IMPLEMENT RIDER ASRP AS A PIPELINE**  
20   **REPLACEMENT COST RECOVERY MECHANISM?**

21   A.   As it relates to the proposed Rider ASRP, Duke Energy Kentucky witnesses  
22   Hebbeler, Whitlock, and Hill describe the nature of the program as a natural gas  
23   service line replacement program necessary for safety and system integrity  
24   improvement. This is very similar to what is pointed out in paragraph six of the  
25   Application regarding other Kentucky jurisdictional utility pipeline replacement  
26   programs that encompass service lines and that have a discrete cost recovery

1 mechanism. Duke Energy Kentucky's ASRP is a new initiative that is responsive  
2 to directives promulgated by the Pipeline and Hazardous Materials Safety  
3 Administration (PHMSA). Neither the program nor the directives driving the  
4 program existed at the time of the Company's last natural gas base rate case in  
5 2009. Therefore, the costs of this program were not included in the test year  
6 revenue requirement used in the most recent base rate proceeding and,  
7 consequently, none of the related costs are reflected in the existing rates of the  
8 Company. While the statute clearly states that such a discrete mechanism is  
9 discretionary, in that the Commission *may* allow such recovery, there is no  
10 requirement in the statute that such recovery could only come or that such a  
11 mechanism could only be established during a base rate proceeding. The  
12 Kentucky Supreme Court decision I cited above explicitly states as much. KRS  
13 278.509, which supports the Commission's authority to permit recovery of  
14 pipeline replacement programs not currently recovered in a utility's existing rates,  
15 provides that no cost recovery shall be allowed unless the costs have been deemed  
16 to be fair, just, and reasonable by the Commission. Therefore, the only express  
17 statutory limitation on the implementation of a pipeline replacement program  
18 established by the Kentucky General Assembly is that the costs of the  
19 replacement program must be deemed fair, just, and reasonable. As it happens,  
20 Duke Energy Kentucky's current base rates are producing returns, as shown  
21 above, that are approximately, albeit slightly lower, than a fair, just, and  
22 reasonable return.

1 Q. IN YOUR OPINION, WHAT IS THE SIGNIFICANCE OF STATUTE'S  
2 SILENCE AS IT RELATES TO ASSESSING A UTILITY'S OVERALL  
3 RATES?

4 A. I am speaking from a logical basis. Again, I am not an attorney. However, the  
5 statute speaks only to the fairness, justness, and reasonableness of the costs of the  
6 pipeline replacement program. By limiting the focus of review to only the  
7 fairness, justness, and reasonableness of the pipeline replacement program, it is  
8 reasonable to conclude that justification for the program and associated recovery  
9 be considered separate and apart from other issues. Consequently, the pipeline  
10 replacement program and associated cost recovery mechanism may be filed and  
11 considered separately and distinctly, outside of a base rate proceeding. The only  
12 reference to a utility's existing rates is to determine whether such costs are  
13 currently being recovered. The statute does not set forth a determination as to  
14 whether the costs of such a program could be covered by existing rates or whether  
15 the utility's earnings are sufficient enough to absorb such an initiative.

16 The statute directs the Commission to determine whether a proposed  
17 pipeline replacement program *costs* are fair, just, and reasonable. It does not state  
18 whether the existing base rates are fair, just, and reasonable. If it determined that  
19 the proposed pipeline replacement program costs are fair, just, and reasonable,  
20 then, under the statute, the utility may receive cost recovery in the form of a rider  
21 mechanism. If the Commission determines that such costs are not fair, just, and  
22 reasonable, then the Commission can deny the CPCN for the program and,  
23 consequently, deny cost recovery for the program in whole or in part. And the



1 utility can then evaluate whether or not to proceed with the program.

2 For a program such as the ASRP being proposed by Duke Energy  
3 Kentucky, the Commission will fulfill the statutory test by determining either that  
4 the costs of a pipeline replacement program are fair, just, and reasonable, or that  
5 the costs of the pipeline replacement program are not fair, just, and reasonable.  
6 Approving the program but arbitrarily insisting that the utility file a base rate  
7 proceeding to implement cost recovery for such a pipeline replacement program is  
8 not what is stated in the statute and contravenes the flexibility afforded by the  
9 General Assembly to encourage natural gas utilities to quickly address safety and  
10 pipeline integrity issues. The General Assembly wisely provided this flexibility in  
11 order to unburden both the Commission and the utilities with the need for  
12 cumbersome and time consuming full base rate proceedings that would be  
13 required without this insightful legislation. Ignoring the flexibility afforded in the  
14 statutes effectively makes moot the General Assembly's effort that resulted in  
15 KRS 278.509.

16 **Q. ARE YOU SUGGESTING THAT THE OVERALL RATES OF DUKE**  
17 **ENERGY KENTUCKY DO NOT NEED TO BE FAIR, JUST, AND**  
18 **REASONABLE?**

19 **A.** Not at all. Duke Energy Kentucky's rates, like all jurisdictional utility rates must  
20 be fair, just, and reasonable. The Commission determined in 2009 that the  
21 Company's natural gas rates were fair, just, and reasonable when it approved the  
22 stipulation agreed to in Case No. 2009-00202.



1 Q. DO YOU BELIEVE DUKE ENERGY KENTUCKY'S RATES WITH THE  
2 PROPOSED ASRP CONTINUE TO RESULT IN FAIR, JUST, AND  
3 REASONABLE NATURAL GAS RATES?

4 A. Yes.

5 Q. IN YOUR EXPERIENCE, ARE RIDERS A COMMON MECHANISM FOR  
6 COST RECOVERY?

7 A. Albeit more common in some jurisdictions than in others, riders are a common  
8 mechanism to relieve utilities, commissions, and all other stakeholders of the  
9 onerous process of filing, reviewing, and litigating full-blown rate cases. The  
10 ASRP Program, absent the requested Rider ASRP, would require the Company to  
11 file a base rate case, and possibly multiple rate cases over the life of program in  
12 order to fairly compensate shareholders for investing in the Company's  
13 infrastructure. Duke Energy Kentucky proposed the Rider ASRP, as is permitted  
14 under Kentucky law, for several reasons.

15 Like any form of regulation, the general idea is to, as much as possible,  
16 fairly balance the interests of all stakeholders. Such Solomonic decisions are  
17 made easier for the regulator when there are a number of tools available to  
18 accomplish that goal. Riders offer regulators one essential tool it can use to meet  
19 that very important goal of ensuring that the interests of all stakeholders are  
20 optimally balanced. The General Assembly explicitly provided the Commission  
21 with such tools as it gave the Commission the authority to approve the rider being  
22 sought by Duke Energy Kentucky and, combined with the underlying ASRP  
23 program, it will allow the Commission to ensure that the interests of Duke Energy

1 Kentucky's stakeholders are appropriately balanced.

**III. CONCLUSION**

2 **Q. WOULD YOU SUMMARIZE YOUR CONCLUSIONS AND**  
3 **RECOMMENDATIONS?**

4 A. In responding to the Commission's July 24, 2015, Order in this case as to the need  
5 for or the desirability to file a base rate case, it is my opinion that the benefits to  
6 all stakeholders justify the approval of the Company's Rider ASRP. As discussed  
7 above, the Commission has the authority to approve such a rider. In addition to  
8 the safety and system integrity improvements created through the ASRP proposal,  
9 the financial benefits to the customer, the Company, and all stakeholders of  
10 avoiding full rate cases, minimizing rate increases, and still affording an  
11 opportunity for timely cost recovery warrants the Commission's consideration of  
12 the rider mechanism warrants the Commission's consideration.

13 Duke Energy Kentucky cannot simply absorb the costs of the ASRP  
14 initiative in its current natural gas base rates. Based on the weather-normalized  
15 actual earnings over the recent few years, the Company's ROEs are slightly lower  
16 than the currently allowed return. Although weather-normalized earnings have  
17 been slightly lower than the allowed return, Duke Energy Kentucky, or any utility  
18 for that matter, is not likely to file a general rate case for an ROE deficiency of  
19 only a few basis points. It is, admittedly, a judgment call to be made by a utility's  
20 management but rate cases are not typically filed when ROEs are 'close' to the  
21 allowed return.

1           Although implementation of a rider under Kentucky statutes and  
2 regulations does not require a review of the base rates, the Company's recent  
3 actual weather-normalized ROEs should assure the Commission that its approval  
4 of the proposed Rider ASRP will not result in the Company earning unreasonable  
5 returns.

6 **Q.   WERE ATTACHMENTS WDW-1 THROUGH WDW-3 PREPARED BY**  
7 **YOU AND AT YOUR DIRECTION AND CONTROL?**

8 A.   Yes.

9 **Q.   DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

10 A.   Yes.

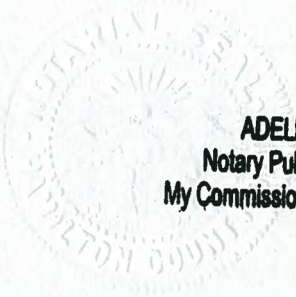
**VERIFICATION**

STATE OF OHIO )  
 ) SS:  
COUNTY OF HAMILTON )

The undersigned, William Don Wathen Jr, Director of Rates & Regulatory Strategy – Ohio/Kentucky being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

William Don Wathen Jr, Affiant  
Director of Rates & Regulatory Strategy –  
Ohio/Kentucky

Subscribed and sworn to before me by William Don Wathen Jr on this 13<sup>th</sup> day  
of AUGUST 2015.



**ADELE M. FRISCH**  
Notary Public, State of Ohio  
My Commission Expires 01-05-2019

NOTARY PUBLIC

My Commission Expires: 1/5/2019



**Duke Energy Kentucky  
Historical Net Plant**

	2010	2011	2012	2013	2014	6/30/2015
Plant in Service	\$287,190,837	\$298,860,888	\$297,426,942	\$329,534,409	\$341,381,951	\$341,381,951
Property Under Capitalized Leases	18,766,043	12,970,448	15,217,968	17,040,464	17,919,796	17,919,796
Completed Construction Not Yet Classified	89,473,217	94,160,857	107,617,453	81,948,956	76,590,763	76,590,763
Total Utility Plant in Service	\$395,430,097	\$405,992,193	\$420,262,363	\$428,523,829	\$435,892,510	\$435,892,510
Accumulated Depreciation	(\$109,623,421)	(\$118,161,278)	(\$125,355,666)	(\$134,248,076)	(\$142,929,153)	(\$142,929,153)
Net Plant	\$285,806,676	\$287,830,915	\$294,906,697	\$294,275,753	\$292,963,357	\$292,963,357
Construction Work in Progress	\$2,006,535	\$3,837,880	\$1,062,709	\$2,240,529	\$1,755,636	\$1,755,636
Net Plant Plus CWIP	\$287,813,211	\$291,668,795	\$295,969,406	\$296,516,282	\$294,718,993	\$294,718,993

Source: FERC Form 2: Annual Report of Major Natural Gas Companies and Supplemental Form 3-Q: Quarterly Financial Report, pages 200-201.



	2010	2011	2012	2013	2014	12 ME 6/30/15
Manufactured Gas Production	\$247,622	\$302,892	\$208,033	\$344,868	\$719,564	\$1,402,247
Total Production Expense	247,622	302,892	208,033	344,868	719,564	1,402,247
Other Gas Supply Expense						
Purchased Gas Expense						
801000 Natural Gas Field Line Purchases	\$67,656,917	\$53,561,882	\$38,854,469	\$48,754,644	\$61,360,267	\$68,363,946
805200 Purchased Gas Costs - Unbilled	353,063	998,371	(1,306,847)	(2,839,136)	(1,533,801)	2,918,645
807000 Gas Purchased Expense	511,819	426,221	418,241	482,030	579,080	514,741
813000 Other Gas Supply Expense	-	-	-	1,309,849	1,043,049	750,313
Total Other Gas Supply Expense	\$68,769,421	\$55,289,366	\$38,173,896	\$48,052,255	\$62,168,159	\$73,949,892
Transmission Expense						
859000 Other Expense	\$13,010	\$68,606	\$0	\$0	\$0	\$0
Distribution Expenses						
Operation						
870000 Supervision and Engineering	\$9,334	\$9,376	\$2,276	\$11,975	\$78,111	
871000 Load Dispatching	145,842	176,867	182,919	195,057	209,998	
874000 Mains and Services	1,715,933	1,828,624	2,943,249	2,275,639	2,526,753	
875000 Measuring and Reg. Stations - General	32,028	5,355	1,184	2,537	6,289	
876000 Measuring and Reg. Stations - Industrial	31,911	38,197	43,871	35,509	39,835	
878000 Meters and House Regulators	186,972	474,720	801,200	1,037,024	2,539,145	
879000 Customer Installations	1,154,549	1,239,450	1,280,145	1,402,870	1,931,827	
880000 Other Expenses	589,369	630,468	547,749	734,135	773,891	
881000 Rents Interco	387,624	161,510				
Total Operation	\$4,253,562	\$4,564,567	\$5,802,593	\$5,694,746	\$8,105,849	\$6,316,083
Maintenance						
885000 Supervision and Engineering	\$24,493	\$38,525	\$48,352	\$97,008	\$56,010	
887000 Mains	477,915	403,553	590,849	701,922	790,001	
889000 Measuring and Regulating Stations - General	46,549	26,019	44,238	82,784	45,914	
890000 Measuring and Regulating Stations - Industrial	8,490	1,925	4,873	4,139	6,117	
892000 Services	758,115	848,507	652,379	592,670	733,022	
893000 Meters	294,785	249,858	244,363	192,215	354,154	
894000 Other	19,116	49,415	33,601	22,158	23,265	
Total Maintenance	1,629,463	1,617,802	1,618,655	1,692,896	2,008,483	1,613,994
Total Distribution Expenses	\$5,883,025	\$6,182,369	\$7,421,248	\$7,387,642	\$10,114,332	\$7,930,077
Customer Accounts Expense						
901000 Supervision & Engineering	\$569	\$282	\$0	\$130	\$32,802	
902000 Meter Reading Expense	661,780	659,485	693,459	682,775	514,255	
903000 Customer Records & Collections	2,970,386	3,257,712	2,803,957	2,535,317	2,676,423	
904000 Uncollectible Accounts	925,196	925,068	547,638	374,134	297,865	
905000 Cust Reltns Billg & Coll-Gas			21	111	378	
Total Customer Accounts Expense	\$4,557,931	\$4,842,547	\$4,045,075	\$3,592,467	\$3,521,723	\$3,698,005
Customer Services & Information Expense						
908000 Customer Assistance	\$138,390	\$132,457	\$133,191	\$130,093	\$157,313	
909000 Information and Instructional Advertising	13,140	3,923	9,468	8,963	5,456	
910000 Misc Cust Serv and Info - Gas	982,628	1,330,567	1,210,948	933,451	625,453	
Total Customer Services & Info Expense	\$1,134,158	\$1,466,947	\$1,353,607	\$1,072,507	\$788,222	\$754,337
Sales Expense						
911000 Supervision	\$0	\$2,301	(\$1,404)			
912000 Demonstration & Selling Expense	75	27	3,410	1	201,746	
913000 Advertising Expense	12,557	34,826	25,343	16,392	7,119	
916000 Misc. Sales Expense						
Total Sales Expense	\$12,632	\$37,154	\$27,349	\$16,393	\$208,865	\$93,593
Administrative & General Expense						
Operation						
920000 Administrative & General Salaries	\$3,010,311	\$2,023,847	\$2,554,894	\$1,620,342	\$1,632,452	\$1,780,506
921 Office Supplies & Expenses	1,368,441	1,479,614	1,431,640	1,237,400	923,272	967,084
922 (Less) Admin Exepenses Transferred - Credit	10	(110)	(50)	(8)	-	(2)
923000 Outside Services Employed	1,265,096	1,332,913	1,289,206	1,107,981	1,042,364	925,697
924000 Property Insurance	139,562	210,573	152,510	150,873	168,422	162,117
925000 Injuries & Damages	105,968	136,517	175,019	152,048	54,082	256,014
926 Employee Pension & Benefits	2,288,199	2,372,491	2,589,141	2,807,898	2,135,551	2,374,201
928000 State Reg. Commission Expense	624,440	284,622	261,390	181,122	180,171	180,171
929010 (Less) Duplicate Charges-Credit	186,583	247,938	204,857	78,937	222,852	246,092
930100 General Advertising Expenses	7,126	5,727	4,937	1,909	25,759	9,745
930200 Misc Advertising Expenses	190,691	201,211	510,343	459,926	186,059	188,884
931000 Rents	483,223	679,221	747,115	530,832	455,680	450,304
Total Operation	\$9,296,464	\$8,478,908	\$9,511,388	\$8,171,402	\$6,580,960	\$7,048,633
Maintenance						
935000 Maintenance of General Plant	\$134,034	\$56,000	\$49,705	\$17,184	\$2,852	\$6,014
Total Administrative & General	\$9,430,498	\$8,534,908	\$9,561,093	\$8,188,586	\$6,583,812	\$7,054,647
Total Operating Expense	\$89,800,675	\$76,421,897	\$60,582,268	\$68,309,850	\$83,385,113	\$93,480,551
O&M Excluding Purchased Gas Cost	\$21,031,254	\$21,132,531	\$22,408,372	\$20,257,595	\$21,216,954	\$19,530,659

Duke Energy Kentucky  
Historical Returns on Equity for Natural Gas Operations (2010-2014)

	2010	2011	2012	2013	2014	
1 Operating Revenue	\$139,332,186	\$115,203,744	\$89,877,413	\$102,404,440	\$122,400,659	FF2, pg 115, ln 1
<b>Operating Expenses (excl Income Tax)</b>						
2 O&M Expense	89,800,699	76,421,897	60,582,268	68,309,940	\$83,385,303	FF2, pg 115, ln 2-3
3 Depreciation	11,337,278	11,214,591	11,372,428	11,589,042	11,575,069	FF2, pg 115, ln 6-8
4 Regulatory Debits	3,406,353	1,854,568	(475,191)	(4,600,714)	(2,002,219)	FF2, pg 115, ln 12
5 Total Taxes Other Than Income Taxes	3,375,587	3,922,832	4,058,474	4,112,119	4,382,562	FF2, pg 115, ln 14
6 Total Expense Before Income Taxes	\$107,919,917	\$93,413,888	\$75,537,979	\$79,410,387	\$97,340,715	Sum Lines 2-5
7 Earnings Before Interest and Taxes	<b>\$31,412,269</b>	<b>\$21,789,856</b>	<b>\$14,339,434</b>	<b>\$22,994,053</b>	<b>\$25,059,944</b>	Line 1 - Line 6
8 Total Equity (a)	# \$465,354,065	\$354,663,683	\$372,884,543	\$377,954,114	\$413,255,929	FF2, pg 112, ln 15
9 Total Interest Expense	\$16,182,440	\$17,492,351	\$17,520,182	\$15,988,796	\$16,345,283	FF2, pg 116, ln 70
10 Common Plant Allocator (Gas Portion)	28.74%	28.74%	28.55%	26.31%	27.03%	Form 1, pg 356
11 Average Equity Allocated to Gas	\$123,115,242	\$117,836,550	\$104,194,440	\$102,949,132	\$105,571,403	Line 8 * Line 10
12 Interest Expense Allocated to Gas	\$4,650,833	\$5,027,302	\$5,002,012	\$4,206,652	\$4,418,130	Line 9 * Line 10
13 Taxable Income	\$26,761,436	\$16,762,554	\$9,337,422	\$18,787,401	\$20,641,814	Line 7 - Line 12
14 Pre-Tax Return on Equity Allocated to Gas	21.74%	14.23%	8.96%	18.25%	19.55%	Line 13 + Line 11
15 Tax Gross Up Factor (Appr)	1.65	1.65	1.65	1.65	1.65	Schedule A-1, Case No. 2009-00202
16 After Tax Return for Gas (Avg Equity)	<b>13.17%</b>	<b>8.62%</b>	<b>5.43%</b>	<b>11.06%</b>	<b>11.85%</b>	Line 14 ÷ Line 15
17 Incremental Margin Attributable to Weather	\$2,437,000	(\$1,487,000)	(\$612,000)	\$1,799,000	\$3,060,000	Internal Accounting
18 Weather-Normalized ROE	<b>11.97%</b>	<b>9.39%</b>	<b>5.79%</b>	<b>10.00%</b>	<b>10.09%</b>	Line 16 - [(Line 17 ÷ Line 11) ÷ Line 15]

Notes: (a) The average equity for 2010 ROE calculation uses a 2009 ending Common Equity balance of \$422,092,777 per the 2009 FERC Form 2, page 112, line 15.



Duke Energy Kentucky  
Historical Returns on Equity for Natural Gas Operations (12 Months Ending June 30, 2015)

	Year-to-Date June 30		All of 2014	12 ME June 30, 2015		
	2015	2014				
1	<b>Operating Revenue</b>	\$70,941,620	\$75,387,800	\$122,400,659	\$117,954,479	FF2 3-Q, pg 115, ln 1
	<b>Operating Expenses (excl Income Tax)</b>					
2	O&M Expense	\$42,764,207	\$50,716,344	\$83,385,303	\$75,433,166	FF2 3-Q, pg 115, ln 2-3
3	Depreciation	5,756,368	5,781,686	\$11,575,069	\$11,549,751	FF2 3-Q, pg 115, ln 6-8
4	Regulatory Debits	1,816,573	(2,378,789)	(\$2,002,219)	\$2,193,143	FF2 3-Q, pg 115, ln 12
5	Total Taxes Other Than Income Taxes	2,055,369	2,123,884	\$4,382,562	\$4,314,047	FF2 3-Q, pg 115, ln 14
6	<b>Total Expense Before Income Taxes</b>	<b>\$52,392,517</b>	<b>\$56,243,125</b>	<b>\$97,340,715</b>	<b>\$93,490,107</b>	Sum Lines 2-5
7	<b>Earnings Before Interest and Taxes</b>	<b>\$18,549,103</b>	<b>\$19,144,675</b>	<b>\$25,059,944</b>	<b>\$24,464,372</b>	Line 1 - Line 6
	Equity	\$438,816,067	\$413,255,929		\$438,816,067	FF2 3-Q, pg 112, ln 15
	Interest Expense	\$7,296,958	\$8,159,999	\$16,345,283	\$15,482,242	FF2 3-Q, pg 116, ln 70
	Common Plant Allocator (Gas Portion)				27.03%	2014 Allocator from WDW-3, page 1
	Average Equity Allocated to Gas				\$115,157,530	Line 8 * Line 10
	Interest Expense Allocated to Gas				\$4,184,850	Line 9 * Line 10
	Taxable Income				\$20,279,522	Line 7 - Line 12
	Pre-Tax Return on Equity Allocated to Gas				17.61%	Line 13 ÷ Line 11
	Tax Gross Up Factor (Appr)				1.65	Schedule A-1, Case No. 2009-00202
	After Tax Return for Gas (Avg Equity)				<b>10.67%</b>	Line 14 ÷ Line 15
	Incremental Margin Attributable to Weather				\$2,271,000	Internal Accounting
	Weather-Normalized ROE				<b>9.48%</b>	Line 16 - [(Line 15 ÷ Line 11) ÷ Line 15]