

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)
UTILITIES COMPANY FOR AN ADJUSTMENT)
OF ITS ELECTRIC RATES AND FOR CERTIFICATES) CASE NO. 2016-00370
OF PUBLIC CONVENIENCE AND NECESSITY)

**THE ATTORNEY GENERAL'S RESPONSES TO DATA REQUESTS OF THE
PUBLIC SERVICE COMMISSION OF KENTUCKY**

Come now the intervenor, the Attorney General of the Commonwealth of Kentucky,
by and through his Office of Rate Intervention, and submits the following responses to data
requests of the Public Service Commission of Kentucky.

Respectfully submitted,

ANDY BESHEAR
ATTORNEY GENERAL



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Certificate of Service and Filing

Counsel certifies that the foregoing is a true and accurate copy of the same document being filed in paper medium with the Commission within two business days; that the electronic filing has been transmitted to the Commission on March 31, 2017; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

This 31st day of March, 2017.



Assistant Attorney General

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.1

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Refer to the Direct Testimony of Glenn A. Watkins ("Watkins Testimony"). Provide the class customer charge results from each of the cost of service studies discussed by Mr. Watkins.

RESPONSE:

Mr. Watkins' is unsure of what the Commission means by "class customer charge results." As such, he assumes that this request relates to his residential customer cost analysis provided in his Schedule GAW-14. In this regard, Mr. Watkins' customer cost results are the same under every cost of service study conducted by Mr. Watkins for this case. This is because the various scenarios conducted by Mr. Watkins relate only to: (a) differences in the allocation of generation plant, which has no effect on his customer cost analyses; and, (b) differences in the classification of distribution plant. As discussed on pages 61 through 63 of his testimony, Mr. Watkins' customer cost analysis does not include any costs associated with poles, overhead lines, underground conductors, underground conduit, or transformers. Therefore, differences in the classification of distribution plant have no impact on Mr. Watkins' customer cost analysis.

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.2

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Refer to the Watkins Testimony, pages 22-28, and the Direct Testimony of Stephen J. Baron filed in this proceeding on behalf of Kentucky Industrial Utility Customers, Inc., pages 11-23, wherein Mr. Baron discussed alleged errors in the hourly load data used in Kentucky Utilities Company's ("KU") and Louisville Gas and Electric Company's ("LG&E"), Uointly "Companies"), cost of service studies.

a. Beginning at the bottom of page 22 of his testimony, Mr. Baron states, "[b]ased on my review, the KU and LG&E hourly loads that are used to produce the demand allocation factors directly used in the Companies' class cost of service studies (both BIP and LOLP) are incorrect and therefore the cost of service results themselves cannot be relied on in this case." State whether Mr. Watkins agrees with Mr. Baron that the errors exist and the cost of service studies are unreliable. If not, explain.

b. If the response to part a. is yes, state whether the errors in the Companies' cost of service studies make the cost of service study results presented by Mr. Watkins also unusable. If not, explain.

RESPONSE:

- a. Mr. Watkins did not consult with, or assist Mr. Baron as it relates to his observations and analyses concerning his comparison of the Company's forecasted hourly loads vis a vis historical hourly loads. As a result, Mr. Watkins does not have an opinion at this time as to the veracity of Mr. Baron's opinions as it relates to the impact on class cost allocations. However, given the Companies' revised data request responses modifying the cost of service studies and providing completely new data, Mr. Watkins is in the process of evaluating the Companies' information and will supplement this response if and when he does form an opinion. In this regard, it should be understood that Mr. Watkins' analyses used for his Probability of Dispatch model accepted the Companies' forecasted test year hourly loads as well as its forecasted generation output (on an hourly basis) in order to provide an apples-to-apples comparison of the cost of service studies proposed by the Companies' witness Seeyle that utilized the same forecasted data. Mr. Watkins is unaware of any other sources for this data other than from the Companies.
- b. It is uncertain at this time whether any deficiencies noted by Mr. Baron will or will not have a material impact on class cost of service results. In this regard, it is

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Mr. Watkins understanding that Mr. Baron did not attempt to correct for the alleged errors in the forecasted hourly loads nor did he provide alternative class cost of service results utilizing what he perceives to be more appropriate and accurate data.

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.3

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Refer to the Watkins Testimony , page 41, lines 27-28, which reference a report published by the National Association of Regulatory Utility Commissioners ("NARUC").

a. Confirm that the referenced report was a paper prepared by the Regulatory Assistance Project for NARUC.

b. Confirm that page 2 of the report states "[t]he views and opinions expressed herein are strictly those of the authors and may not necessarily agree with, state, or reflect the positions of NARUC, the Energy Foundation, or those who commented on the paper during its drafting."

RESPONSE:

- a. Confirmed. Please also refer to Schedule GAW-7, page 1.
- b. Confirmed. In this regard, the statement on page 2 of the report is common practice in white papers and reports conducted on behalf of agencies. Nonetheless, the study and report were commissioned and funded by NARUC and are available for purchase only from the NARUC Professional Library.

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.4

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Refer to the Watkins Testimony, page 50, the table titled "OAG Proposed Class Revenue Distribution At the Company's Proposed Overall Increase." Explain the reasons for keeping the percentage increase for the residential class the same as that proposed by KU.

RESPONSE:

As indicated in Mr. Watkins' direct testimony from page 47, line 25 through page 49, line 16, he evaluated Mr. Seelye's proposed class revenue distribution for all classes and found several of his class increases to be reasonable and consistent with class cost of service coupled with gradualism. However, it is Mr. Watkins' opinion that for some classes, Mr. Seelye's movement towards parity is too narrow. Therefore, in an effort to avoid any needless dispute over those classes in which Mr. Watkins found Mr. Seelye's proposed increases to be within the range of reasonableness, Mr. Watkins accepted Mr. Seelye's proposed revenue increases. For those classes in which Mr. Watkins found that Mr. Seelye's proposal was too narrowly focused, Mr. Watkins adjusted to conform more towards cost of service and yet, maintain reasonable gradualism. In this regard, Mr. Watkins found Mr. Seelye's proposal for the residential class to be in the range of reasonableness and therefore, accepted his proposed increase to the residential class.

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.5

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Refer to the Watkins Testimony , page 52, lines 1-2, which state that there are 25 customers on taking service under the Residential Time-of-Day ("RTOD") Demand tariff but no customers taking service under the RTOD-Energy tariff. Confirm that this statement is incorrect and that there are customers taking service under RTOD-Energy but none taking service under RTOD-Demand.

RESPONSE:

Confirmed. This error will be corrected on the witness stand.

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.6

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Refer to the Watkins Testimony, page 62, lines 4-10. Explain how corporate overhead and other indirect business costs are correlated with usage.

RESPONSE:

Mr. Watkins does not claim that corporate overhead and other indirect business costs are correlated with usage. Rather, and as is clear from Mr. Watkins' direct testimony, overhead is a cost of doing business and because customers do not subscribe to KU's service to simply be connected, they are most appropriately reflected in volumetric energy charges. In this way, customers who use more of the Company's services (energy), and receive more benefits, pay more than customers that do not. This is consistent with economic theory and practice within competitive markets.

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WITNESS/RESPONDENT RESPONSIBLE

Glenn A. Watkins

REQUEST No.7

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Refer to the Watkins Testimony, page 66, line 11, through page 67, line 2.

a. State whether Mr. Watkins believes that net metering customers pay their full share of customer costs.

b. State whether Mr. Watkins believes that customers with distribution generation benefit from intra-class subsidies.

RESPONSE:

- a. Mr. Watkins did not examine the issue of whether net metering customers pay their full costs of service, as this was beyond the scope of Mr. Watkins' engagement in this case. As such, Mr. Watkins offered no testimony on this issue.
- b. This request is predicated on the assumption that customers with distribution generation receive intra-class subsidies. Mr. Watkins' has not conducted any study or analysis to determine whether any intra-class subsidies do or do not exist for KU, as this was beyond the scope of his engagement. As such, Mr. Watkins offered no testimony on this issue.

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WITNESS/RESPONDENT RESPONSIBLE

J. Randall Woolridge, Ph.D.

REQUEST No.8

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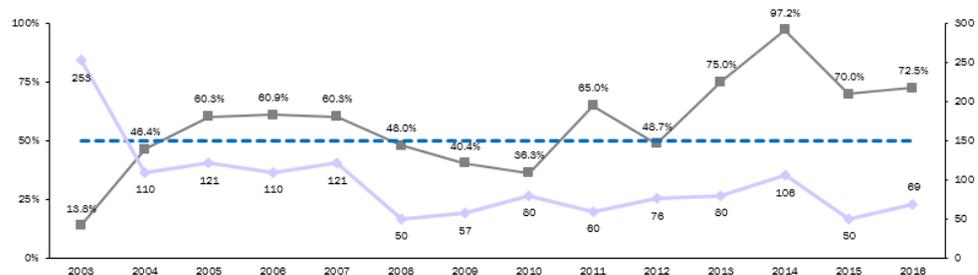
Refer to the Direct Testimony of J. Randall Woolridge, Ph.D. ("Woolridge Testimony"), Exhibit JRW-4 , page 1 of 3. Explain why the AG's proposed return on equity ("ROE") of 8.75 percent for KU is representative of investors' expectations given that the average earned ROE for electric utilities, as shown in Panel A, is 9.5 percent and for combination electric and gas utilities, as shown in Panel B, is 9.8 percent.

RESPONSE:

As shown in page 3 of Exhibit JRW-7, electric utilities have been earning a ROE of about 9.0% in recent years (current median value of 9.1% in Panel A of Exhibit JRW-4). Dr. Woolridge has relied primarily on the DCF approach which directly measures the expected return on a stock with the dividend yield and expected growth, and the current numbers are a little below 9.0%. Nonetheless, electric utilities, earning a ROE of about 9.0% in recent years, produced an average stock return last year, on average, of about 16%. In addition, as shown in the EEI data below, the ratings actions of S&P, Moody's, and Fitch have been predominantly up in recent years. And finally, electric utilities have been raising about \$50B a year in capital. Therefore, Dr. Woolridge's ROE recommendation appears more than adequate to meet investor's return requirement.

Direction of Ratings Actions
U.S. Shareholder-Owned Electric Utility Industry

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Upgrades	21	35	51	73	67	73	24	23	29	39	37	60	103	35	50
Downgrades	279	218	59	48	43	48	26	34	51	21	39	20	3	15	19
% Upgrades	7.0%	13.6%	46.4%	60.3%	60.9%	60.3%	48.0%	40.4%	36.3%	65.0%	48.7%	75.0%	97.2%	70.0%	72.5%
Total Rating Activity	300	253	110	121	110	121	50	57	80	60	76	80	106	50	69
Upgrades + Downgrades	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%



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WITNESS/RESPONDENT RESPONSIBLE

J. Randall Woolridge, Ph.D.

REQUEST No.9

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Refer to the Woolridge Testimony, page 46, lines 16, through page 47, line 4, which discusses that it is common for analysts to adjust the dividend yield by some fraction of the long-term expected growth rate, and states that the growth rate is adjusted by one-half. Explain why one-half was chosen.

RESPONSE:

As Dr. Woolridge explains in his testimony, according to the traditional DCF model, the dividend yield term relates to the dividend yield over the coming period. As indicated by Professor Myron Gordon, who is commonly associated with the development of the DCF model for popular use, this is obtained by: (1) multiplying the expected dividend over the coming quarter by 4, and (2) dividing this dividend by the current stock price to determine the appropriate dividend yield for a firm that pays dividends on a quarterly basis.¹ However, most companies pay dividends quarterly. In such as case, the dividend over the next year may or may not be equal to $D_0 * (1+g)$. The primary determinant is when the company increases the quarterly dividend. And this can be complicated because firms tend to announce changes in dividends at different times during the year. If the increase is expected to occur at the next quarterly dividend, the $(1+g)$ adjustment is appropriate. However, if the increase is not expected to occur until another quarter in the future ($q+1$, $q+2$, or $q+3$), then the expected dividend in the coming year is some fraction less than the $(1+g)$. Consequently, it is common for analysts to adjust the dividend yield by some fraction of the long-term expected growth rate. The most common such adjustment, which is what Dr. Woolridge has done, is to adjust the dividend yield by one-half ($1/2$) of the expected growth so as to reflect growth over the coming year. This is the approach employed by the Federal Energy Regulatory Commission ("FERC").²

¹ *Petition for Modification of Prescribed Rate of Return*, Federal Communications Commission, Docket No. 79-05, Direct Testimony of Myron J. Gordon and Lawrence I. Gould at 62 (April 1980).

² Opinion No. 414-A, *Transcontinental Gas Pipe Line Corp.*, 84 FERC ¶61,084 (1998).

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WITNESS/RESPONDENT RESPONSIBLE

J. Randall Woolridge, Ph.D.

REQUEST No.10

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Refer to the Woolridge Testimony, Exhibit JRW-10.

a. Refer to page 2 of 6.

- (1) Provide a copy of the source documents for the annual dividends and 30-day, 90-day, and 180-day dividend yields.
- (2) If any of the above is calculated, provide the calculations.

b. Refer to pages 3-5 of 6.

- (1) Explain why negative growth rates were included in the calculation of mean values on pages 3 and 5.
- (2) Explain why the median values produce more meaningful estimates than mean values.
- (3) Explain why averaging median values produces meaningful estimates.

RESPONSE:

a. (1) The requested data are provided in the attached file Electric Proxy Group – Dividend Yields- 1-27-17.

(2) See the response above.

b. (1) Negative growth rates were included in the analysis since negative growth does occur for some companies in the future and therefore the potential for negative growth is part of the expected outcome and thus must be reflected in the distribution of potential outcomes.

(2) As explained in the testimony, the median is used as a measure of central tendency to minimize the impact of outliers.

(3) Since the impact of outliers has been minimized by the medians, Dr. Woolridge takes a simple average of the medians to arrive at an indicator of central tendency.

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WITNESS/RESPONDENT RESPONSIBLE

J. Randall Woolridge, Ph.D.

REQUEST No.11

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Provide the most recently authorized ROE awards for the AG's proxy groups, and the dates they were awarded.

RESPONSE:

Dr. Woolridge does not have access to the authorized ROEs for the companies in his proxy group and did not use these authorized ROEs in preparing his testimony.

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WITNESS/RESPONDENT RESPONSIBLE

Ralph C. Smith

REQUEST No.12

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Refer to the Direct Testimony of Ralph C. Smith ("Smith Testimony"), specifically, Mr. Smith's discussion of incentive compensation and his recommended adjustment to reduce test year incentive compensation expense by one-fourth based on the Net Income Component ("NI Component") making up 25.3 percent of the base period's Team Incentive Award ("TIA") expense. Mr. Smith's table of the NI Component as a percentage of TIA expense in 2015, 2016, and the base period, shows 52.94 as the 2015 percentage, 30.07 as the 2016 percentage, and 25.32 as the base period percentage. Explain why Mr. Smith chose to use only the base period percentage in calculating his recommend adjustment.

RESPONSE:

Mr. Smith did not choose to use only the base period percentage in calculating his recommended adjustment. The basis for the adjustment is described in Mr. Smith's testimony and considered the information sources discussed therein. In reviewing the historical information, he gave more weight to the base period percentage as it represented the most recent information available that included the Net Income Component.

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WITNESS/RESPONDENT RESPONSIBLE

Ralph C. Smith

REQUEST No.13

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Refer to the Smith Testimony, page 50, specifically, Mr. Smith's discussion of the amortization period for the net book value of retired meters that are to be replaced with meters being installed with the roll-out of Automated Metering Systems ("AMS"). The second full sentence in the response to the question, "Do you agree with that Company proposal?" states, "I would recommend, consistent with Commission precedent, that the amortization occur over the same period that the Commission determines for the average service life for the new AMS meters." There was no footnote reference for this sentence. Identify and describe the Commission precedent to which Mr. Smith alludes.

RESPONSE:

The mention of Commission precedent there was generally in reference to instances where the remaining un-depreciated net book value of plant that was retired was amortized over the estimated service life of the replacement plant. For instance, see Case Nos. 2015-00312, 2015-00141 and 2014-00376. In particular, in Case No. 2015-00312, the Commission stated: "In this case, . . . the estimated life of [Kenergy's] AMI meters is 15 years. Based on the above estimated regulatory asset amount of \$3,570,322, Kenergy's annual amortization expense would be \$238,021 for a 15-year amortization period. The Commission finds that the regulatory asset for the undepreciated cost of the electro-mechanical meters should be amortized over the 15-year estimated life of Kenergy's AMI meters" (Case No. 2015-00312, Final Order, pp. 6-7).

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WITNESS/RESPONDENT RESPONSIBLE

Paul Alvarez

REQUEST No.14

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Refer to the Direct Testimony of Paul Alvarez pages 49 and 50 which discuss the Green Button Connect My Data program. Also refer to the Direct Testimony of John P. Malloy, Exhibit JPM-1, page 19, which states "[f]ull deployment of AMS technology would make this feature available to all customers within [the] scope of this project. The Green Button Download My Data system provides every utility customer with the ability to download their personal energy consumption data directly to their computer in a secure manner." Explain if the program referenced in Exhibit JPM-1 is the same program referenced in the Alvarez Testimony.

RESPONSE: Yes, the Green Button *Connect My Data* standard referred to in Mr. Alvarez's testimony is different than the Green Button *Download My Data* system referred to in Company witness Mr. Malloy's testimony. The Connect My Data standard represents a significant enhancement over the Download My Data system from the perspective of customers and prospective energy efficiency contractors and management service suppliers and software developers.

As described by Mr. Malloy, the Download My Data system offers customers the opportunity to download personal energy consumption data to their computers. Mr. Malloy goes on to describe how customers with an interest can deliver their data to third parties on their own efforts. (Exhibit JPM-1, page 19).

Connect My Data is an expanded standard which specifies protocols and automation associated with customer authorization for specific third parties to access their energy data directly on an initial and/or ongoing basis. A customer might want to authorize a third party energy efficiency contractor or energy management services supplier to access his or her energy data in order to identify energy efficiency opportunities, verify savings associated with energy efficiency actions, better optimize potential benefits from a time-varying rate, or to populate a customer's own energy management software application routinely. Connect My Data thereby offers a "set it and forget it" approach to third party data sharing, whereas Download My Data requires a customer to take their own action each and every time he or she wishes to share data with a prospective energy efficiency contractor or energy management service supplier/software developer (for example, on a monthly basis).

Connect My Data also defines standards by which third parties can access the energy data of authorizing customers on an automated basis from utilities. Thus, third parties can design data download routines that work for all utilities complying with the Connect My

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Data standard, facilitating cost-effective third party energy efficiency, energy management, and end-user software or mobile device application development across multiple utilities for thousands or perhaps millions of customers.