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## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

OCT 1 3 2011 PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES	)	
COMPANY FOR CERTIFICATES OF	)	
PUBLIC CONVENIENCE AND NECESSITY	)	CASE NO. 2011-00161
AND APPROVAL OF ITS 2011 COMPLIANCE	)	
PLAN FOR RECOVERY BY	)	
ENVIRONMENTAL SURCHARGE	)	

-and-

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY FOR CERTIFICATES	)	
OF PUBLIC CONVENIENCE AND NECESSITY	)	CASE NO. 2011-00162
AND APPROVAL OF ITS 2011	)	
COMPLIANCE PLAN FOR RECOVERY BY	)	
ENVIRONMENTAL SURCHARGE	)	

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# ATTORNEY GENERAL'S RESPONSES TO DATA REQUESTS FROM KENTUCKY PUBLIC SERVICE COMMISSION STAFF

Comes now the Attorney General of the Commonwealth of

Kentucky, by and through his Office of Rate Intervention, and tenders his

responses to the Data Requests tendered by the Kentucky Public Service

Commission Staff.

Respectfully submitted,

JACK CONWAY ATTORNEY GENERAL

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Certificate of Service and Filing

Counsel certifies that the responses set forth herein are true and accurate to the best of his knowledge, information, and belief formed after a reasonable inquiry. Counsel further certifies that an original and fifteen photocopies of the foregoing were served and filed by hand delivery to Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; counsel further states that true and accurate copies of the foregoing were mailed via First Class U.S. Mail, postage pre-paid, to:

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this  $\underline{13^{+}}$  day of October, 2011.

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Assistant Attorney General

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**QUESTION 1** 

Refer to the Direct Testimonies of J. Randall Woolridge ("Woolridge Testimonies") at pages 4-9 and 17-18. Explain how the U. S. Environmental Protection Agency's recently enacted and pending rule changes might affect capital markets in terms of capital availability, capital cost, investor expectations, and risk, both for the electric utility industry and specifically for Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E").

**RESPONSE:** 

Dr. Woolridge has not performed any independent analysis of how the U. S. Environmental Protection Agency's recently enacted and pending rule changes might affect capital markets in terms of capital availability, capital cost, investor expectations, and risk, both for the electric utility industry and specifically for Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E"). Dr. Woolridge has reviewed the bond rating reports from credit agencies, the comments from management regarding financing, and presentations to investment firms. This review did not provide any 'red flags' concerning the capital market impact of the new regulations. Capital costs should be mitigated due to the low interest rate environment.

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## QUESTION 2:

Refer to the Woolridge Testimonies at pages 8-9.

- a. Compare KU's and LG&E's percentage of revenues derived from regulated electric operations to that of the proxy group companies.
- b. Explain why the selection criteria of 80 percent of revenues derived from regulated electric operations used by Mr. Woolridge in Case Nos. 2009-00548 and 2009-00549 were lowered to 50 percent for this case.
- c. Explain how the proxy group changes if the 50 percent of revenue from regulated electric operations selection criteria were changed to more closely fit with the percentage of revenue from regulated electric operations of KU and LG&E.
- d. Compare KU's and LG&E's percentage of coal used for generation to that of each company in the proxy group.
- e. Explain why the selection criteria for the proxy group do not include electric generation fuel mixes similar to that of KU and LG&E.
- f. Explain why the selection criteria of requiring an annual dividend history of three years as used by Mr. Woolridge in Case Nos. 2009-00548 and 2009-00549 was changed to simply paying a cash dividend in this case.
- g. Explain the inclusion of selection criteria 5 and 6.

#### **RESPONSE:**

- a. KU receives 100% of their revenues from regulated electric operations, while LGE receives 77% of their revenues from regulated electric operations and 23% from regulated gas operations. The proxy group's percent of regulated electric revenues is provided in Exhibit JRW-4.
- b. Dr. Woolridge uses Value Line and AUS industry screens, as well as the 50% of regulated electric utility revenues screen, to insure that the utilities in the proxy group are primarily electric utilities. However, these days most electric utilities have other regulated and unregulated business activities. For example, PPL Corporation, the parent and ultimate source of capital for KU and LGE, receives 50% of revenues from regulated electric operations. The lower percentage of regulated revenues allows for a larger proxy group so as to get more of an

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industry standard equity cost rate. Furthermore, Dr. Woolridge has relied on the bond ratings of the utilities to insure that the proxy companies are comparable to KU and LGE.

- c. The percent of regulated electric revenues is provided in Exhibit JRW-4. The number of proxy companies would decline as the percentage of regulated revenues is increased.
- d. Dr. Woolridge does not have this data and did not use it in developing his testimony.
- e. Dr. Woolridge did not include fuel mix in the proxy group selection because (1) fuel generation is considered in the bond rating process and (2) Dr. Woolridge has relied on the bond ratings of the utilities to insure that the proxy companies are comparable to KU and LGE.
- f. The number of dividend cuts in recent years have diminished for electric utilities and therefore this is not an issue in selecting a proxy group.
- g. The lack of takeover criteria (5) is meant to keep out companies whose stocks prices have been affected by mergers and acquisitions. Criteria (6) EPS growth rate forecasts from Yahoo, Zacks, and Reuters is meant to insure that there are an adequate number of analysts' forecasts available from different sources for use in the DCF model.

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## **QUESTION 3:**

Refer to the Woolridge Testimonies at pages 30-31 and page 3 of Exhibits JRW-10.

- a. Identify the outliers among the proxy group companies and the criteria used for identifying them as outliers.
- b. Explain why it is appropriate to include companies with either 10 or 5 year negative average Earnings Per Share ("EPS"), Dividend or Book Value, figures in the proxy group or in the analysis.
- c. Explain how averaging the median values of 10 and 5 year historical averages of EPS, Dividend and Book Value, produce a meaningful growth rate measure.
- d. Explain whether the 3.4 percent Average of Median Figure in the Exhibit is the Discounted Cash Flow growth rate adjustment to the historical data referenced on page 31 of the Testimonies.

# **RESPONSE:**

- a. Dr. Woolridge has not identified any specific outliers. As explained in his testimony, the use of the median serves to mitigate the influence of any potential outliers in measuring central tendency.
- b. Earnings for companies go up and down over the years, primarily in response to expansions and contractions in the economy as well as industry and company specific events. Dividend and book value growth is more stable and less volatile. If one measures growth over time, and excludes periods of negative growth, the resulting measures of central tendency are overstated.
- c. Dr. Woolridge employs this approach to arrive at a measure of central tendency. He includes medians due to the impact of extreme outcomes or numerical values that are distanced from the majority of the values.
- d. The 3.4% figure is the historic measure of EPS, DPS, and BVPS growth developed by Dr. Woolridge. There was no adjustment to this figure.

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## **QUESTION 4:**

Refer to the Woolridge Testimony for KU at page 31 and for LG&E at page 32, along with page 4 of Exhibits JRW-10, the Return on Equity column. Since the return on equity for regulated utilities is determined by awards of utility regulatory commissions, explain why the use of this measure in not circular, especially in the context of utilities with a high percentage of revenues derived from regulated operations.

#### **RESPONSE:**

The ROE figure is used to compute the sustainable growth rate and is the forecasted value by *Value Line*. Since utility sustainable growth rates are a function of authorized ROEs to some extent, these growth rates do reflect the ROE awards of other utility commissions. However, this is only one of a number of growth rate indicators used by Dr. Woolridge.

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#### **QUESTION 5:**

Refer to the Woolridge Testimonies at Exhibits JRW-11, page 6.

- a. Explain why it is appropriate to include estimates based upon the geometric mean.
- b. Explain whether these surveys were conducted for the purpose of determining risk premiums for use in contested utility rate proceedings. If they were not, explain why it is appropriate to use these estimates.

#### **RESPONSE:**

a. The use of the arithmetic versus the geometric mean as a measure of central tendency in assessing historic return performance is often debated. When analyzing a single security price series over time (i.e., a time series), the best measure of investment performance is the geometric mean return. Using the arithmetic mean overstates the return experienced by investors. Nonetheless, in measuring historic returns to develop an expected equity risk premium, many will recommend the use of an arithmetic mean return as a measure of central tendency. A common justification for using the arithmetic mean return is that since annual stock returns are not serially correlated, the best measure of a return for next year is the arithmetic mean of past returns. On the other hand, Damodaran suggests that such an estimate is not appropriate in estimating an equity risk premium:<sup>1</sup>

There are, however, strong arguments that can be made for the use of geometric averages. First, empirical studies seem to indicate that returns on stocks are negatively correlated over long periods of time. Consequently, the arithmetic average return is likely to overstate the premium. Second, while asset pricing models may be single period models, the use of these

<sup>&</sup>lt;sup>1</sup>Aswath. Damodaran, "A New "Risky" World Order: Unstable Risk Premiums - Implications for Practice" NYU Working Paper, 2010, p. 25.

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> models to get expected returns over long periods (such as five or ten years) suggests that the estimation period may be much longer than a year. In this context, the argument for geometric average premiums becomes stronger

b. No. These surveys were conducted to get measures of the expectations of the survey respondents. Since the market risk premium is based on expectations of the future, these surveys are one measure of the expected market risk premium.