STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

CENTRAL ILLINOIS LIGHT COMPANY d/b/a AmerenCILCO	)	**Docket No. 09-0306**
CENTRAL ILLINOIS PUBLIC SERVICE COMPANY d/b/a AmerenCIPS	)	**Docket No. 09-0307**
ILLINOIS POWER COMPANY d/b/a AmerenIP	)	**Docket No. 09-0308**
Proposed general increase in rates for delivery service. (Tariffs filed June 5, 2009)	)	

DIRECT TESTIMONY OF STEVEN A. FENRICK ON BEHALF OF THE CITIZENS UTILITY BOARD AND THE PEOPLE OF THE STATE OF ILLINOIS

CUB-AG EXHIBIT 1.0

September 28, 2009

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Steven A. Fenrick. My business address is 1532 W. Broadway, Suite 100, Madison, Wisconsin 53713.

Q. By whom are you employed?

A. I am an Economist employed by Power System Engineering, Inc.

Q. Please describe Power System Engineering.

A. Power System Engineering, Inc. (PSE) is a full service consulting firm serving the electric utility industry. PSE was founded in 1974 and is headquartered in Madison, WI with offices in Minnesota, Indiana, and Ohio. Professionals at PSE include engineers, economists, and financial analysts. PSE specializes in the areas of transmission and distribution system and line design, utility automation, communications, technology/strategic planning, rates and financial planning, resource planning, substation design, DSM/Energy Efficiency, load forecasting, and statistical benchmarking.

Q. Please describe your background and qualifications.

A. I have been an economist working in the utility industry for the past eight years. Before joining PSE, I worked at Pacific Economics Group in Madison, first as an Economist and later as a Senior Economist. The primary focus of my work has been applying statistical cost research to the regulation of energy utilities. Applications have included benchmarking, price cap regulation, revenue decoupling, and productivity analysis.

Past clients have been both domestic and international, including both regulatory commissions and utilities. For example, power distributors in Ontario, Canada are regulated under multiyear rate plans that are linked to a benchmarking study I co-authored for the Ontario Energy Board. CUB-AG Exhibit 1.1 documents my past research and education.

Q. On behalf of which parties are you presenting this testimony?

A. I am submitting this testimony on behalf of the Illinois Citizens Utility Board and the People of the State of Illinois by Attorney General, Lisa Madigan.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to provide a statistical evaluation of the electric Ameren Illinois Utilities[1] (AIU) performance in managing their electric operations and maintenance (O&M) expenses relative to a sample of 115 U.S. investor-owned electric utilities. This testimony provides a summary of the research. The full report is attached as CUB-AG Exhibit 1.2.

Q. What categories of costs did you examine?

[1] AmerenCILCO, AmerenIP, and AmerenCIPS.

A. I examined two major components of O&M expense performance. The first is electric administrative and general (A&G) expenses.[2] The second is electric distribution and customer care (D&CC) expenses, which consist of the FERC Form 1 O&M subcategories of distribution, customer service and information, customer accounts, and sales.[3] A&G and D&CC comprise over 80% of AIU's electric non-purchased power O&M expenses.

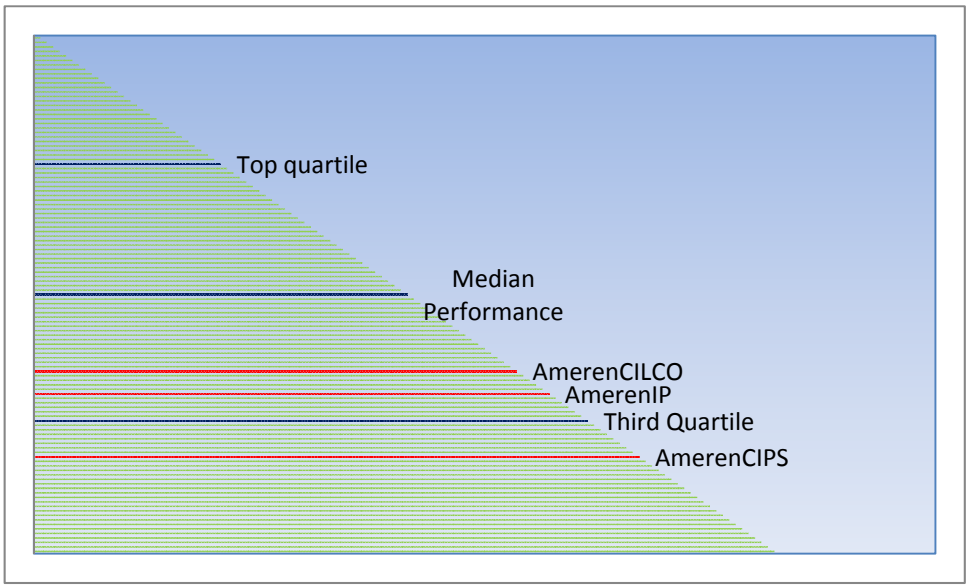
Q. Please summarize your findings.

A. During the timeframe I examined, AIU's actual costs have consistently been above the model's expected costs for each Illinois utility in both of the examined O&M subcategories. In fact, out of the 115 utilities included in the sample, all three of the AIU companies were in the bottom half of the rankings according to the econometric models for both D&CC and A&G expenses. Below is a summary of my findings:

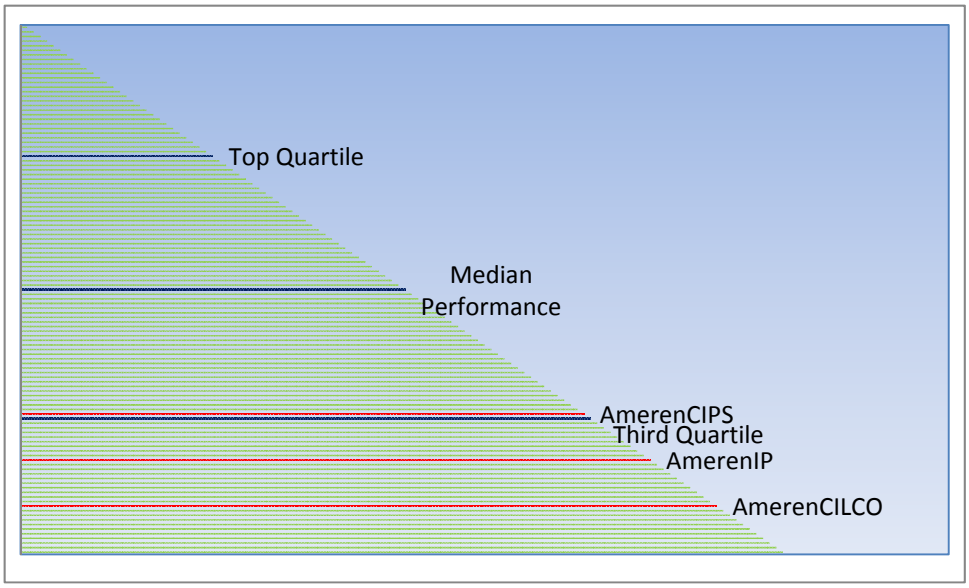
- For the 2005-2007 timeframe, AIU rankings of D&CC expenses are as follows: AmerenCILCO was ranked 76th, AmerenIP 80th, and AmerenCIPS 94th. For A&G, AmerenCILCO was ranked 105th, AmerenIP 95th, and AmerenCIPS 85th.

  The following graph illustrates AIU's rankings relative to the sample, by D&CC costs:

[2] FERC Form 1 accounts 920-925, 927-929, 930.1, 930.2, and 931.
[3] FERC Form 1 accounts 580-598, 901-905, 907-913, and 916.



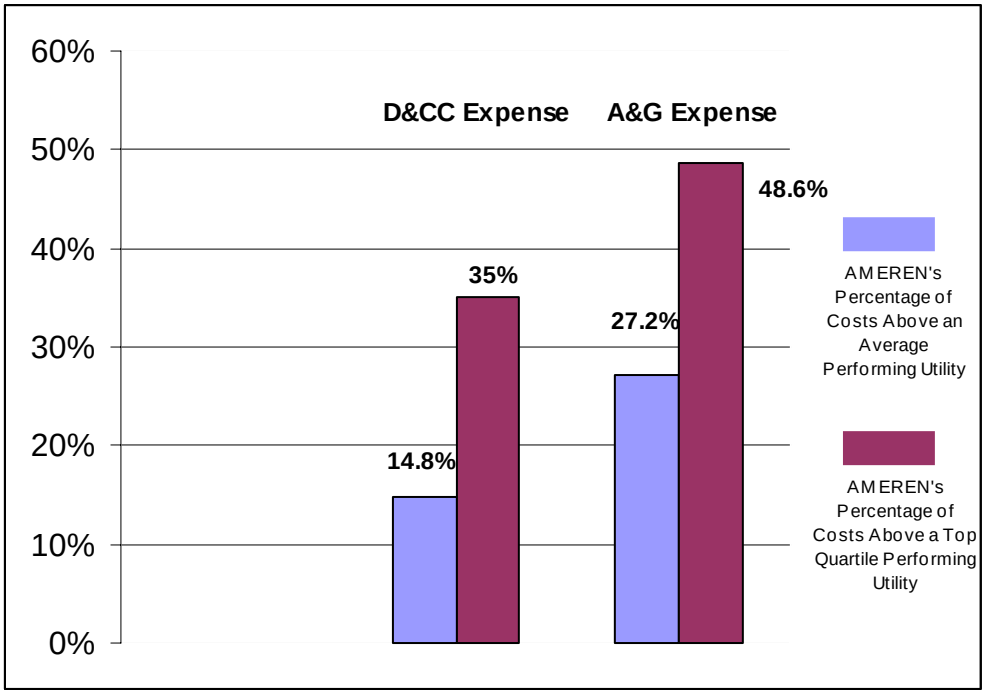
The following graph illustrates AIU's rankings relative to the sample, by A&G costs:



- For the 2005-2007 timeframe, AIU's D&CC expenses have been 14.8 percent[4] above what an average performing utility would have been expected to spend and 35.0 percent above a top quartile standard. A&G expenses have exceeded the model's prediction as spending levels have been 27.2 percent above what an average

[4] All benchmarking percentages are presented in logarithmic form. Continuous growth rates are calculated by the equation, $C_1 = C_0 * e^r$, here r equals the reported percentages, C_1 equals the actual cost, and C_0 equals the expected value of cost.

performing utility would have been expected to spend and about 48.6 percent above a top quartile standard.



- D&CC inefficiencies equate to $96.7 million for AIU's proposed 2008 test year spending levels,[5] assuming an average performance standard. If a top quartile standard is used, D&CC inefficiencies amount to $132.3 million for AIU.
- A&G expense inefficiencies are $61.8 million for AIU's proposed 2008 test year spending levels, assuming an average performance standard. Using a top quartile standard, A&G inefficiencies are estimated at $83.9 million.
- The combined inefficiency for D&CC and A&G 2008 test year spending levels for the electric Ameren Illinois Utilities is estimated at $158.5 million for an average performance standard. For a top quartile standard, the sum of estimated D&CC and A&G inefficiencies is equal to $216.2 million.

[5] Ameren Exhibit 2.1-2.3

Q. How do you use the terms "inefficiency" and "inefficiencies" in your testimony?

A. In this testimony, the term "inefficiencies" or "inefficiency" refers to the amount by which spending or proposed spending would need to be reduced in order to achieve a given performance standard. I refer to two such standards: average and top quartile.

Q. Why is the O&M performance of AIU relevant?

A. Effectively managing costs is an essential element of a well-performing utility. Base rate O&M expenses are short-run costs upon which current management can assert the most immediate control. A&G expenses, which are a component of overall O&M expenses, take on even greater importance due to the potential for cross-subsidization of non-regulated affiliates. This testimony and report uses statistical analysis to evaluate AIU's performance in managing these O&M expenses by estimating the cost performance inherent in the proposed test year spending levels.

Q. Why is benchmarking an appropriate tool for regulators to use?

A. Absent market forces to provide the impetus for efficient operation, regulators must provide diligent oversight of expenses in determining their just and reasonable levels. Benchmarking allows a statistical comparison of performance to a utility's peers. In a competitive market setting, a firm may be forced into bankruptcy if its unit costs in producing a homogenous product are higher than its competitors over a sustained period. In a regulatory environment, benchmarking reveals cost performance relative to the industry. If rewards and punishments correspond to benchmarking scores, benchmarking

can simulate competition, while maintaining the natural monopoly benefits inherent in power distribution technology.

Benchmarking has had a growing role in utility regulation. In 2009, Florida Power & Light and Oklahoma Gas & Electric each sponsored benchmarking testimony to display superior cost performance relative to the industry. In the early 2000's, Ameren Corporation's Missouri utility, AmerenUE, filed benchmarking testimony defending the cost performance of its Missouri electric operations. The AmerenUE report used econometric benchmarking techniques similar to the approach I use in this testimony. AIU itself sponsored benchmarking testimony, "the AIU study," in this rate proceeding regarding its A&G expenses. I will respond to the AIU study below.

Q. Please describe the evaluation approach used to appraise AIU's D&CC and A&G expenses.

A. My study benchmarks AIU cost levels using regression models which are fit to a database of FERC Form 1 cost data for 115 electric utilities. Using this technique, an econometric model is estimated in order to ascertain customized cost level expectations for both D&CC and A&G expenses. Each model includes multiple variables believed to impact cost. The translog functional form, popular in the scholarly literature involving production economics, is used in both the A&G and D&CC models.[6]

Variables included in the D&CC model are electric customers, megawatt-hour deliveries, labor price, number of gas customers, amount of generation, percent of lines

[6] For references on the translog function please see the Bibliography included in CUB-AG Exhibit 1.2.

underground, percent of service territory that is forested, and a time trend. Variables in the A&G model are electric customers, amount of generation, labor price, percent of lines underground, and the time trend. All of these variables are statistically tested to assure that they significantly impact cost.

After estimation, model predictions for AIU's observations are compared to AIU's actual costs. This method estimates the average cost performance inherent in AIU's spending levels during 2005-2007 relative to a given performance standard. The econometric model is then used to estimate the change in efficiency from these 2005-2007 levels to AIU's proposed 2008 test year expenses. The overall cost performance evaluation is estimated by summing the average annual cost performance in 2005-2007 and the change in efficiency of AIU's proposed 2008 test year expenses.

Q. Have you reviewed the A&G benchmarking study submitted by AIU in this case?

A. Yes.

Q. Please contrast your approach to benchmarking A&G expenses to the AIU study.

A. The AIU study uses the peer group approach in the benchmarking of A&G expenses. This was done by dividing A&G expenses by the number of customers served and comparing AIU cost per customer to a number of different peer groups.

As stated before, my research is based on the econometric benchmarking approach that simultaneously accounts for multiple variables in determining expected costs. The AIU

study, by contrast, depends solely on the construction of peer groups to adjust for the different operating conditions encountered by each sampled utility. Problems arise with the peer group method in the context of benchmarking AIU's A&G costs. All of the suggested peer groups in the AIU study fail to adequately adjust for one or more variables that my research found to be significant drivers of A&G spending.

Inadequate peer groupings are likely the result of an insufficient number of similar utilities available to construct a proper peer group. The econometric approach, on the other hand, does not require a sufficient number of similar utilities. In fact, the research is enhanced by the inclusion of utilities with varying operating conditions.

Q. In what ways do the peer groups found in the AIU study fail to adequately adjust for certain variables?

The peer groups found in the AIU study do not adequately account for input prices and the size and scope of operations. Although input prices have a direct impact on cost, some of the AIU study peer groups were assembled with no consideration of this fact. The AIU study did attempt to correct for input prices in one peer group, a Midwest peer group, however, it is not an adequate adjustment. A utility operating in Chicago, for example, will have different labor price pressures than one operating in Kentucky even though both locations are classified as "Midwest."

In addition, the analysis did not account for the presence of generation facilities while assembling some of the AIU peer groups. Generating electricity will increase A&G

expenses, but if this fact is not accounted for in the peer group, the evaluation will be biased in favor of utilities with no generation facilities.

Another problem with the AIU study is that it does not explicitly correct for scale economies inherent in A&G expenses. My research showed scale economies available to utilities. As size increases, we expect unit costs (A&G cost per customer) to decrease due to economies of scale. Thus, if the analysis does not adequately adjust for this reality, it will be biased toward larger utilities. In most of the AIU peer groups, size is completely ignored. In two of the peer groups, the impact of scale is acknowledged, but the analysts' inclusion criteria was wide ranging (100,000 to 1,000,000 customers), enough to significantly distort the results.

Q. How many utilities does your sample include?

A. The sample includes 115 U.S. investor-owned utilities.

Q. How many years of data are collected for this sample?

A. A panel dataset including the 115 utilities is employed spanning the years of 1994 through 2007. However, not all years for each utility are either available or consistent. If data for any of the included variables was not available then the observation was excluded. Likewise, if data implausibly changed from prior or subsequent years the observation was also excluded. This process led to a sample size of 1,451 observations.

Q. What are the sources of the data used in the analysis?

Data on costs, electric customers, electric deliveries, electric generation, plant in service, and gas customers was gathered from a third-party data vendor, SNL Energy, via a database subscription. Cost, generation, and plant in service data were derived by SNL from FERC Form 1s. Electric customer and delivery data were derived by SNL from FERC Form 1s for 1994-1996, and from the EIA-861 form for 1997-2007. Data on gas customers was gathered by SNL from annual reports filed with state commissions. External labor prices were collected via data available from the U.S. Bureau of Labor Statistics. County-level data on the percent of forestation within each utility's service territory was gathered and processed from the U.S. Forest Service.

Q. Why not include 2008 data in the sample?

A. One of the required data sources of the analysis is the EIA-861 form, which is filed by electric utilities and provides the number of customers and volumes by utility. It is essential to the analysis as it allows the inclusion of unbundled customers and deliveries for those distributors operating under retail competition. The 2008 EIA-861 data was not available during the time of this research.

Q. Describe the econometric approach to cost benchmarking.

A. The econometric approach to cost benchmarking allows the researcher to incorporate multiple variables believed to impact cost. These variables are collected for each utility in a sample. Regressions are then conducted to determine if these variables significantly impact cost, and if so, by what magnitude. This method allows for the simultaneous consideration of these variables in order to customize a cost level prediction for each

utility. Please see CUB-AG Exhibit 1.2, Section 2 for a more detailed description of benchmarking approaches.

Q. In what ways is the D&CC econometric model used to estimate expected expenses for AIU?

A. The D&CC econometric model incorporates utility-specific data on the number of electric customers, retail volumes (MWhs), wage levels, amount of generation, percent of undergrounding, number of gas customers, and percent of service territory that is forested. Electric customers and volumes serve as measures of output. The wage level measures the market price needed to procure labor inputs. The amount of generation and the number of gas customers are measures of the scope of utility operations. The forestation variable measures the prevalence of trees within the utility's service territory. The econometric model converts values for each specific utility to an expected value of D&CC expenses for each observation.

Q. Do all of these variables significantly impact cost?

A. Yes. Each one of the variables impacts cost with logical signs and is significant with a confidence level of 99 percent. Please see CUB-AG Exhibit 1.2, Section 3 for a discussion and table showing these results. All of the variables are tested based on statistical hypothesis tests.

Q. In what ways is the A&G econometric model used to estimate expected expenses for AIU?

A. The A&G econometric model incorporates utility-specific data on the number of electric customers, amount of generation, wage levels, and prevalence of underground lines. The number of electric customers and amount of generation serve as output variables. The wage level measures the market price needed to procure labor inputs. The underground lines variable measures the amount of employees needed to maintain lines, as well as acting as a proxy for customer density. The econometric model converts values for each specific utility to an expected value of A&G expenses for each utility.

Q. Do all of these variables significantly impact cost?

A. Yes. Each of the variables impacts cost with the expected sign and is significant with a confidence level of 99 percent. Please see CUB-AG Exhibit 1.2, Section 4 for a discussion and table showing these results. All of the variables are tested using statistical hypothesis tests.

Q. What is the procedure for evaluating performance?

A. The customized expected level of expenses is compared to the actual costs for each utility in the sample. Averages of the last three years of available data serve as the basis for the utility's performance score. This allows annual cost fluctuations to be smoothed over a three year period. For AIU, this is the 2005-2007 period. One measure of performance is the percentage that actual costs are above or below the model's estimated values for these costs. Good cost performers will have actual costs below the expected amounts, whereas poor performers will have actual costs above the expected amounts.

Q. How do AIU's 2005-2007 actual costs compare to the model's prediction?

A. For D&CC expenses, AIU's average 2005-2007 expenses are 14.8 percent above the model's prediction. For A&G expenses, AIU's average 2005-2007 expenses are 27.2 percent above the model's prediction. Please see the report found in CUB-AG Exhibit 1.2, Sections 3 and 4, for a full breakdown of each AIU utility.

Q. What is the interpretation of these percentages?

A. These percentages show the estimated amount by which AIU's expenses exceed what would be expected for an average performing utility operating under the circumstances of AIU.

Q. Can we estimate the cost reductions that would be required for AIU to attain a top quartile ranking?

A. Yes. The research estimates that AIU would have needed to reduce 2005-2007 D&CC expenses by 35.0 percent to achieve top quartile status. A&G expenses reductions of 48.6 percent would be required to achieve top quartile status in that cost category.

Q. What is the 2005-2007 ranking of AIU for D&CC and A&G costs?

A. When the 115 sampled utilities are ranked according to an average of the latest three years of cost performance, for D&CC spending, AmerenCILCO, AmerenIP, and AmerenCIPS rank 76th, 80th, and 94th, respectively. For A&G spending, AmerenCILCO, AmerenIP, and AmerenCIPS rank 105th, 95th, and 85th, respectively.

Q. How do you estimate the change in cost efficiency from the benchmarked 2005-2007 period to the proposed 2008 test year spending levels?

A. I first compare the actual 2005-2007 expenses to those proposed by AIU for the 2008 test year[7] and calculate the percentage increase. Using the developed econometric models and cost theory, I then estimate the expected increase for a typical utility over this timeframe. The change in cost performance is calculated as the difference between the actual percentage increase and the expected increase.

Q. Describe the calculations you use to determine the expected percentage increase.

A. Economic cost theory states that the escalation in utility costs equals the increase in input price minus productivity increases plus output growth. This equation can be approximated by taking the percentage escalation in the U.S. Gross Domestic Product Price Index (GDPPI) and adding that to the time trend estimate found in each of the econometric models and an estimate of the rate of customer growth. Please see Equations 6 and 8 in CUB-AG Exhibit 1.2 for the equation.

Q. Describe the time trend variable.

A. The time trend is a variable included in both the D&CC and A&G models. The variable has a value of "0" for observations in the year of 1994 and increases by one for each subsequent year. It represents the estimated annual percentage changes in cost throughout 1994-2007, if all other variables remain constant. It captures the annual trend in technological advances in the industry and the difference in the trend of industry input prices compared to the trend in the GDPPI. For both models, the time trend parameter is

[7] Ameren Exhibit 2.1-2.3.

negative. This means that a typical utility will reduce its real costs of operation annually by the parameter amount, assuming output and other variables remain constant.

Q. What are the percentage increases in proposed spending for AIU versus 2005-2007 spending?

A. AIU's proposed D&CC spending is about 31 percent above the average level of AIU spending during 2005-2007. AIU's proposed A&G spending is about 24 percent above the average level of AIU spending during 2005-2007.

Q. What are the model expectations for cost increases from 2005-2007 to 2008?

A. From 2005-2007 to 2008, the estimated increase that is expected from a typical utility for D&CC expenses is about 6 percent. The estimated increase that is expected from a typical utility for A&G expenses is about 8 percent.

Q. Why should we expect an annual increase in expenses?

A. As stated in Equations 6 and 8 found in CUB-AG Exhibit 1.2, we should expect the annual percentage increase in utility cost to equal the percentage change in the GDPPI plus the trend plus customer growth. These equations incorporate the cost impacts of inflation, productivity, and system growth. In normal years and for typical utilities the cost pressures of inflation and system growth outweigh the cost reductions attributable to productivity.[8]

[8] This might not be true for utilities with contracting customer counts, or in years of high deflation.

Q. What are your estimates for the performance change of AIU from 2005-2007 to 2008?

A. Taking the difference between the expected increases in D&CC spending and AIU's proposed amount leads to cost increases which exceed the model's expectation of 31 percent minus 6 percent equaling about 25 percent. Taking the difference between the expected increases in A&G spending and AIU's proposed amount leads to increased inefficiency of 24 percent minus 8 percent equaling about 16 percent. Please see CUB-AG Exhibit 1.2, Section 5 for further detail.

Q. How are the proposed test year overall cost performances calculated?

A. The estimates of 2005-2007 cost performance for AIU are added to the estimated performance change attributable to the 2008 proposed spending levels.

Q. What calculations are required to convert the cost performance into dollar terms?

A. After estimating the percentage by which actual costs are above or below the expected amount, I use this number to approximate how much AIU's proposed costs would need to change in order to achieve a given performance standard, whether that be an average or top quartile standard.

Q. What are your findings for AIU's proposed test year regarding D&CC spending levels?

A. For AmerenCILCO, AmerenIP, and AmerenCIPS, the amounts by which D&CC proposed test year expenses are above the expected levels are $13.6 million, $51.2

million, and $31.8 million, respectively. These are the amounts by which proposed D&CC costs would need to be reduced for each utility to be at the industry norm, given each utility's operating conditions. Proposed expenses are $19.5 million, $69.4 million, and $43.3 million above expected amounts if a top quartile standard is chosen. Proposed expenses would need to be reduced by these amounts for each utility to achieve top quartile status in the sample of 115 utilities. For AIU as a whole, this comprises estimated D&CC cost reductions within their proposed test year of about $96.7 million for an average standard and $132.3 million if a top quartile standard is preferred. Please see CUB-AG Exhibit 1.2, Section 5 for further discussion.

Q. What are your findings for AIU's proposed test year regarding electric A&G spending levels?

A. For AmerenCILCO, AmerenIP, and AmerenCIPS, the amounts A&G proposed test year expenses are above the expected levels are $8.0 million, $39.5 million, and $14.3 million, respectively. These are the amounts by which proposed A&G costs would need to be reduced for each utility to be at the industry norm given each utility's operating conditions. Proposed expenses are $12.5 million, $50.0 million, and $21.4 million above expected amounts if a top quartile standard is chosen. Proposed expenses would need to be reduced by these amounts for each utility to achieve top quartile status in the sample of 115 utilities. For AIU as a whole, this comprises estimated electric A&G cost reductions within their proposed test year of about $61.8 million for an average standard and $83.9 million if a top quartile standard is preferred. Please see CUB-AG Exhibit 1.2, Section 5 for further discussion.

Q. Does this conclude your testimony?

A. Yes.