**Ameren Exhibit 32.0**

**ILLINOIS COMMERCE COMMISSION**

**DOCKET Nos. 11-0279, 11-0282 (Cons.)**

# REBUTTAL TESTIMONY

**OF**

**RYAN K. SCHONHOFF**

**Submitted on Behalf Of**

**AMEREN ILLINOIS COMPANY**

**d/b/a Ameren Illinois**

**July 26, 2011**

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## I. INTRODUCTION

**Q. Please state your name and business address.**

**A.** My name is Ryan K. Schonhoff and my business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.

**Q. Are you the same Ryan K. Schonhoff who provided direct testimony in this proceeding?**

**A.** Yes, I am.

## II. PURPOSE OF TESTIMONY

**Q. What is the purpose of your rebuttal testimony in this proceeding?**

**A.** The purpose of my rebuttal testimony is to respond to Illinois Commerce Commission Staff (Staff) and specific Intervener direct testimony related to the Ameren Illinois Company's (Ameren Illinois or AIC) Electric Cost of Service Studies (ECOSS). Specifically, I will address some of Staff witness Mr. Peter Lazare's concerns with Ameren Illinois' Rate Zone level cost of service studies. I have provided with this rebuttal testimony updated cost of service studies for each Rate Zone. I will address Illinois Industrial Energy Consumers (IIEC) witness, Mr. David

Stowe's three (3) perceived deficiencies with Ameren Illinois' ECOSS. Finally, I will briefly address Mr. Stowe's additional issue related to use of Coincident Peak vs Non-Coincident Peak Demand allocators for allocating substations and primary lines.

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

**A.** Yes, I am sponsoring the following exhibits:

- Ameren Exhibit 32.1: Rate Zone I ECOSS Results
- Ameren Exhibit 32.2: Rate Zone II ECOSS Results
- Ameren Exhibit 32.3: Rate Zone III ECOSS Results
- Ameren Exhibit 32.4: Rate of Return Comparison
- Ameren Exhibit 32.5: Revised Plant and Reserve Comparison

## III. RESPONSE TO STAFF WITNESS, MR. LAZARE

**Q. Mr. Lazare reviewed the three Rate Zone electric ECOSS submitted by Ameren Illinois. What is his position regarding AIC's rate zone electric ECOSSs?**

**A.** Mr. Lazare finds that the Rate Zone electric ECOSSs are of sufficient accuracy to serve as the foundation for ratemaking at the Rate Zone level in this case. To state it another way, he finds the overall rate zone level cost of service results to be appropriate for Rate Zones I, II, and III in total. However, he has concerns about the accuracy of the rate class level cost of service results within each Rate Zone due to the initial allocation method of the Federal Energy Regulatory Commission (FERC) account costs for both plant and reserve for accumulated depreciation. These costs are used as inputs to each Rate Zone ECOSS model. Although he finds discrepancies in the cost of service inputs, Mr. Lazare finds that AIC's choice of customer class allocations made within each of the Rate Zone models, without exception, to be appropriate

and acceptable for ratemaking. Therefore, Mr. Lazare finds the cost inputs to the models to be the root cause of concerns.

**Q. What are Mr. Lazare's concerns about the accuracy of the Rate Zone costs?**

**A.** I have identified three (3) concerns raised by Mr. Lazare to which I will respond:

1) Rate Zone level FERC account plant data used in the initial rate zone ECOSSs did not closely align with historical costs by FERC account when compared to historical plant balances from Docket 09-0306 (Cons.);

2) allocations of reserve for accumulated depreciation did not total 100% of AIC balances at the FERC account level for the three rate zones, even though the total accumulated reserve for depreciation at for each rate zone matched Ameren Illinois's total accumulated reserve for depreciation at the major functional level;

3) sub-functional costs within each FERC Account didn't reconcile with AIC's total costs by sub-function.

**Q. Does the Company believe that Mr. Lazare's concerns about the allocation of costs at the FERC account level are legitimate?**

**A.** The Company understands Mr. Lazare's concern, noting that each rate class utilizes different facilities of the utility's distribution system, each having varying costs. Allocation factors within the cost of service model are derived from various customers, demand, and revenue related factors, and specific cost allocations should reflect cost differences to the extent practical.

**Q. What can be done to address these concerns?**

**A.** Ameren Illinois has revised the allocation methodology of FERC account costs for plant and reserve for accumulated depreciation. AIC witness, Mr. Ronald Stafford will discuss the

details of this revised methodology, while I will continue to show how this new methodology addresses Mr. Lazare's concerns.

**Q. Discuss the first concern.**

**A.** Under the initial method, FERC account plant data used as inputs to the initial rate zone ECOSSs did not align with historical costs when compared to plant balances from Docket 09-0306 (cons.), ICC Staff Exhibit 14.0, Schedule 14.02. Generally speaking, the revised method utilizes the most recent FERC account level data available by Rate Zone as a starting point, September 30, 2010. Table 1 below shows the actual plant balances for this period. Table 2 below shows the results of the revised allocation method for test year plant balances, which is used as inputs to the revised Rate Zone level ECOSSs filed in this rebuttal. The revised FERC account data by Rate Zone closely aligns with historical costs by legacy utility.

**Table 1**

| Revised Allocation Methodolgoy- 9/30/10 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Distribution | AIC Total | RZ I | % of Total | RZII | % of Total | RZIII | % of Total |
| 360 | $ 28,950,055 | $ 9,015,126 | 31.1% | $ 3,239,814 | 11.2% | $ 16,695,114 | 57.7% |
| 361 | $ 23,988,099 | $ 3,771,702 | 15.7% | $ 7,204,447 | 30.0% | $ 13,011,950 | 54.2% |
| 362 | $ 690,544,263 | $ 214,675,143 | 31.1% | $119,521,074 | 17.3% | $ 356,348,046 | 51.6% |
| 364 | $ 986,371,352 | $ 311,880,587 | 31.6% | $171,299,002 | 17.4% | $ 503,191,763 | 51.0% |
| 365 | $ 916,419,953 | $ 307,506,396 | 33.6% | $156,623,243 | 17.1% | $ 452,290,314 | 49.4% |
| 366 | $ 95,644,993 | $ 7,721,786 | 8.1% | $ 61,986,442 | 64.8% | $ 25,936,765 | 27.1% |
| 367 | $ 524,639,445 | $ 153,435,314 | 29.2% | $143,107,453 | 27.3% | $ 228,096,679 | 43.5% |
| 368 | $ 535,406,036 | $ 161,667,880 | 30.2% | $ 88,546,714 | 16.5% | $ 285,191,442 | 53.3% |
| 369 | $ 335,786,434 | $ 90,930,821 | 27.1% | $ 51,339,518 | 15.3% | $ 193,516,095 | 57.6% |
| 370 | $ 136,664,990 | $ 46,354,644 | 33.9% | $ 21,482,463 | 15.7% | $ 68,827,883 | 50.4% |
| 371 | $ 122,070 | $ 121,141 | 99.2% | $ - | 0.0% | $ 929 | 0.8% |
| 373 | $ 193,353,291 | $ 44,273,441 | 22.9% | $ 12,914,427 | 6.7% | $ 136,165,422 | 70.4% |
| 374 | $ 373,398 | $ 142,247 | 38.1% | $ - | 0.0% | $ 231,151 | 61.9% |
| Distribution Total | $ 4,468,264,380 | $1,351,496,229 | 30.2% | $837,264,598 | 18.7% | $2,279,503,553 | 51.0% |

**Table 2**

| Revised Allocation Methodolgoy- Test Year 2012 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Distribution | AIC Total | RZ I | % of Total | RZII | % of Total | RZIII | % of Total |
| 360 | $ 30,516,379 | $ 9,506,462 | 31.2% | $ 3,414,706 | 11.2% | $ 17,595,211 | 57.7% |
| 361 | $ 25,284,094 | $ 3,977,264 | 15.7% | $ 7,593,357 | 30.0% | $ 13,713,473 | 54.2% |
| 362 | $ 727,908,369 | $ 226,375,204 | 31.1% | $125,973,044 | 17.3% | $ 375,560,121 | 51.6% |
| 364 | $ 1,039,745,245 | $ 328,878,465 | 31.6% | $180,546,040 | 17.4% | $ 530,320,740 | 51.0% |
| 365 | $ 958,284,932 | $ 321,926,606 | 33.6% | $163,628,858 | 17.1% | $ 472,729,468 | 49.3% |
| 366 | $ 100,810,332 | $ 8,142,633 | 8.1% | $ 65,332,585 | 64.8% | $ 27,335,114 | 27.1% |
| 367 | $ 553,024,624 | $ 161,797,728 | 29.3% | $150,832,660 | 27.3% | $ 240,394,236 | 43.5% |
| 368 | $ 564,372,805 | $ 170,478,980 | 30.2% | $ 93,326,631 | 16.5% | $ 300,567,194 | 53.3% |
| 369 | $ 353,946,866 | $ 95,886,664 | 27.1% | $ 54,110,921 | 15.3% | $ 203,949,282 | 57.6% |
| 370 | $ 144,061,811 | $ 48,881,029 | 33.9% | $ 22,642,127 | 15.7% | $ 72,538,655 | 50.4% |
| 371 | $ 128,722 | $ 127,743 | 99.2% | $ - | 0.0% | $ 979 | 0.8% |
| 373 | $ 203,804,587 | $ 46,686,399 | 22.9% | $ 13,611,572 | 6.7% | $ 143,506,616 | 70.4% |
| 374 | $ 393,613 | $ 150,000 | 38.1% | $ - | 0.0% | $ 243,613 | 61.9% |
| Distribution Total | $ 4,702,282,380 | $1,422,815,177 | 30.3% | $881,012,500 | 18.7% | $2,398,454,703 | 51.0% |

**Q. Discuss the second concern.**

**A.** Under the initial method, allocations to each Rate Zone of accumulated reserve for depreciation did not total 100% for the three Rate Zones by FERC account, even though the sum of reserve for accumulated depreciation of each Rate Zone did match Ameren Illinois's total reserve at the functional level. Table 3 below shows that there are still relatively small differences between Ameren Illinois's initial filing and the revised Rate Zone reserve balances. However, the sum of Rate Zone balances tie to the revised AIC total by FERC account.

**Table 3**

| Revised Allocation Methodolgoy- Test Year 2012 ($1000) | | | | | Initial Filing ($1000) | | |
|---|---|---|---|---|---|---|---|
| Reserve | AIC Total | RZ I | RZII | RZIII | AIC Total | Difference | % |
| 360 | $ 2,856 | $ 2,851 | $ - | $ 5 | $ 2,876 | $ (20) | -1% |
| 361 | $ 13,098 | $ 2,779 | $ 4,348 | $ 5,971 | $ 13,293 | $ (195) | -1% |
| 362 | $ 327,617 | $135,416 | $ 70,789 | $121,412 | $ 332,069 | $ (4,452) | -1% |
| 364 | $ 606,692 | $279,248 | $139,134 | $188,310 | $ 604,190 | $ 2,503 | 0% |
| 365 | $ 396,279 | $140,656 | $100,749 | $154,874 | $ 395,534 | $ 745 | 0% |
| 366 | $ 49,078 | $ 404 | $ 38,704 | $ 9,970 | $ 49,725 | $ (647) | -1% |
| 367 | $ 237,089 | $ 78,863 | $ 90,336 | $ 67,891 | $ 236,988 | $ 101 | 0% |
| 368 | $ 257,761 | $104,213 | $ 50,907 | $102,641 | $ 260,081 | $ (2,320) | -1% |
| 369 | $ 190,826 | $ 57,215 | $ 26,685 | $106,926 | $ 186,575 | $ 4,251 | 2% |
| 370 | $ 29,119 | $ 13,950 | $ 7,437 | $ 7,731 | $ 28,935 | $ 183 | 1% |
| 371 | $ 86 | $ 86 | $ - | $ - | $ 71 | $ 15 | 21% |
| 373 | $ 119,528 | $ 46,341 | $ 8,979 | $ 64,209 | $ 119,693 | $ (165) | 0% |
| 374 | $ - | $ - | $ - | $ - | $ - | $ - | |
| **Total Reserve** | **$2,230,030** | **$862,022** | **$538,068** | **$829,939** | **$2,230,030** | **$ (1)** | **$ (0)** |

**Q. Why do these differences still exist?**

**A.** These differences are caused by the reference period used in the two allocation methods. For example, the initial AIC filing used FERC account reserve balances as of December 31, 2010 as the basis of allocation. Alternatively, the new method uses balances as of September 30, 2010.

**Q. If there are still differences, then how does the revised method solve Mr. Lazare's concerns?**

**A.** AIC is not re-filing an AIC ECOSS with the revised FERC account data; only the three Rate Zone ECOSSs. If AIC had re-filed the AIC electric ECOSS, then the revised reserve FERC account balances under the new method would be used and the costs would match by FERC account when summing across Rate Zones.

**Q. Discuss the third concern.**

**A.** Under the initial FERC account allocation method, the sub-functions within FERC accounts didn't tie out at the AIC level when summing across Rate Zones. This concern is not an issue that needs to be revised; rather an explanation of the issue is more appropriate. The explanation of Ameren Illinois's method of functionalizing distribution line costs was provided in Ameren Exhibit 14.0E, lines 142-157. The method generally prices out each mile of distribution line at each respective voltage level (sub-function) at estimated replacement costs and a percentage of total distribution line costs is determined from those costs; see Table 4. When this method is applied to Ameren Illinois total distribution line costs vs. each Rate Zone, the percentage varies due to different quantities of distribution lines at each voltage level within each Rate Zone. Each Rate Zone ECOSS was developed with unique sub-function allocators, rather than a common AIC allocator to be applied to each FERC balance. Table 5 below shows the revised sub-function costs by Rate Zone for account 364 and the difference in costs that would exist if Ameren Illinois decided to re-file an AIC ECOSS.

**Table 4**

| Overhead Lines- Applies to FERC Accounts 364 & 365 | | | |
|---|---|---|---|
| **Rate Zone** | **Replacement Cost** | | **%** |
| **Rate Zone I** | | **1,369,372,429** | **100.00%** |
| Secondary | $ | 141,779,051 | 10.35% |
| Primary | $ | 630,291,255 | 46.03% |
| Dist. High Voltage | $ | 597,302,124 | 43.62% |
| **Rate Zone II** | | **587,904,492** | **100.00%** |
| Secondary | $ | 124,783,653 | 21.23% |
| Primary | $ | 314,148,869 | 53.44% |
| Dist. High Voltage | $ | 148,971,970 | 25.34% |
| **Rate Zone III** | | **1,648,320,663** | **100.00%** |
| Secondary | $ | 240,256,763 | 14.58% |
| Primary | $ | 943,824,622 | 57.26% |
| Dist. High Voltage | $ | 464,239,278 | 28.16% |
| **Ameren Illinois** | | **3,605,597,584** | **100.00%** |
| Secondary | $ | 506,819,467 | 14.06% |
| Primary | $ | 1,888,264,745 | 52.37% |
| Dist. High Voltage | $ | 1,210,513,372 | 33.57% |

**Table 5**

| FERC Account 364 ($1000) | | | | | | |
|---|---|---|---|---|---|---|
| **Subfunction** | **Difference** | **Revised AIC ECOSS** | **Revised Three Rate Zone ECOSS** | **RZI** | **RZII** | **RZIII** |
| *+100kV Distribution* | $ - | 13,651 | $ 13,651 | $ 4,434 | $ 2,349 | $ 6,869 |
| *Subtransmission* | $ (10,527) | 344,490 | $ 333,963 | $ 141,197 | $ 45,339 | $ 147,427 |
| *Primary* | $ 6,968 | 537,365 | $ 544,333 | $ 148,995 | $ 95,611 | $ 299,727 |
| *Secondary* | $ 3,559 | 144,231 | $ 147,791 | $ 33,515 | $ 37,978 | $ 76,298 |
| **Total** | $ - | $1,039,738 | $ 1,039,738 | $ 328,141 | $ 181,276 | $ 530,321 |

**Q. You made mention of only select FERC accounts in your explanations. Are your statements regarding this revised methodology true for all plant and accumulated depreciation FERC accounts?**

**A.** Yes. These examples are provided for illustrative purposes. See Ameren Exhibit 22.18 for a complete set of revised FERC account detail for both plant and reserve depreciation for September 30, 2010 and Test Year 2012. See Ameren Exhibit 32.5 for comparative FERC account percentages for these periods.

**Q. What has Ameren Illinois done to address Mr. Lazare's concerns about the allocation of costs at the FERC account level?**

**A.** Ameren Illinois has included in this rebuttal updated Rate Zone level electric cost of service studies which reflect the revised FERC account cost detail, based on Mr. Lazare's findings in his direct testimony. Summaries of the cost of service studies are included in Ameren Exhibits 32.1 through 32.3.

**Q. Do you believe the ECOSSs submitted during this rebuttal phase are appropriate to use for ratemaking purposes?**

**A.** Yes. As indicated by Mr. Lazare, the cost of service allocation methods used in the Rate Zone ECOSS are the same as those used in the prior proceeding as accepted by the Commission. Mr. Lazare specifically identifies one allocator used for allocating substations and primary lines, and agrees the Company's method is also appropriate given the Commission's recent order. For these reasons, I see no reason why the updated ECOSS models couldn't be used to support rate design proposals by Ameren Illinois, Staff and other Interveners.

**Q. Other than the updated FERC account inputs to the Rate Zone ECOSS models, have you made any other adjustments to the ECOSSs?**

**A.** Yes. I have made an adjustment to the amount of plant and accumulated depreciation for FERC account 362- Station Equipment that was functionally allocated to the 100+kV sub-function. The adjustment is not driven by a change in allocation methodologies, rather improving the accuracy of the data input. I will address this adjustment in more detail when I respond to Mr. Stowe, as it was one of Mr. Stowe's issues with Ameren Illinois' cost of service study.

**Q. How do these revised Rate Zone models compare to the initial single AIC ECOSS and initial Rate Zone ECOSSs?**

**A.** The revised Rate Zone ECOSSs provide identical results at the Rate Zone level when compared to the initial Rate Zone ECOSSs. Also, the total revenue requirement for AIC is equal to the sum of the individual revenue requirements for both the initial and revised Rate Zone ECOSSs. The differences exist within the rate class and subclass level of the studies. When comparing initial to revised ECOSS results of rate classes within each Rate Zone, the results are generally similar. For example, Rate Zone I- DS-1 initially had a rate of return at present rates of 5.56% and 5.46% after the revision; Rate Zone II- DS-2 initially had a rate of return at present rates of 2.75% and 2.37% after revision; Rate Zone III-DS-3 Primary initially had a rate of return at present rates of 10.57% and 10.84% after revision. The complete set of results can be found on Ameren Exhibit 32.4 Rate of Return Comparison.

**Q. Do these revised ECOSS include any adjustments to Ameren Illinois' requested electric rate increase amount, of which will be reflected in Mr. Stafford's rebuttal testimony?**

**A.** No. The studies do not include such adjustments. The revenue requirements and overall cost inputs to the models are consistent with Ameren Illinois' initial rate case filing.

**Q. Do the FERC account balances for the Company's initially filed AIC ECOSS match the sum of the three revised ECOSSs?**

**A.** No, but these differences by FERC Account are small and generally +/-2%. The differences are due to the time period used to allocate test year plant and reserve balances. The initial allocations were based on December 31, 2010 AIC balances while revised allocations are based September 31, 2010 rate zone balances. Table 6 below shows these differences for distribution plant.

**Table 6**

| Gross Plant '($000) | | | | | | |
|---|---|---|---|---|---|---|
| Distribution | AIC Initial Filing | | Revised Three Rate Zones | | Difference | % |
| 360 | $ | 30,525 | $ | 30,516 | $ (9) | 0% |
| 361 | $ | 25,929 | $ | 25,284 | $ (645) | -2% |
| 362 | $ | 716,114 | $ | 727,908 | $ 11,795 | 2% |
| 364 | $ | 1,038,484 | $ | 1,039,745 | $ 1,261 | 0% |
| 365 | $ | 957,653 | $ | 958,285 | $ 632 | 0% |
| 366 | $ | 101,905 | $ | 100,810 | $ (1,095) | -1% |
| 367 | $ | 555,992 | $ | 553,025 | $ (2,967) | -1% |
| 368 | $ | 569,896 | $ | 564,373 | $ (5,523) | -1% |
| 369 | $ | 352,737 | $ | 353,947 | $ 1,210 | 0% |
| 370 | $ | 146,101 | $ | 144,062 | $ (2,039) | -1% |
| 371 | $ | 131 | $ | 129 | $ (3) | -2% |
| 373 | $ | 206,443 | $ | 203,805 | $ (2,639) | -1% |
| 374 | $ | 373 | $ | 394 | $ 20 | 5% |
| Distribution Total | $ | 4,702,283 | $ | 4,702,282 | $ (0) | 0% |

## IV. RESPONSE TO IIEC WITNESS, MR. STOWE

**Q. Does IIEC take exception to the validity of AIC's electric ECOSS?**

**A.** No. IIEC relies on AIC's electric ECOSS as the basis for its adjustments.

**Q. What is IIEC's opinion generally about AIC's electric ECOSS?**

**A.** Mr. Stowe finds that the Company's electric ECOSS study generally follows many of the widely accepted cost of service principles.

**Q. Did any other IIEC witnesses address AIC's electric ECOSS?**

**A.** No. IIEC witness Mr. Robert Stephens addresses revenue allocation and electric rate design issues, to which AIC witness Mr. Leonard Jones submits rebuttal testimony.

**Q. Does Mr. Stowe propose any adjustments to the electric ECOSS?**

**A.** Yes. Mr. Stowe identifies what he claims are three deficiencies in the electric ECOSS that he says must be corrected. Mr. Stowe also identifies what he claims is an additional error in the study's allocation of primary circuits and substation costs; this alleged error, however, he does not correct.

**Q. Do you agree with any of Mr. Stowe's modifications to AIC's ECOSS?**

**A.** Only one, related to assignment of station equipment costs to the 100+kV supplied customers. For the reasons explained below, the remainder of Mr. Stowe's proposed modifications to the AIC's ECOSS, as presented, should be rejected.

**Q. Mr. Schonhoff, you have submitted three revised ECOSSs, one for each of Ameren Illinois' three Rate Zones; meanwhile Mr. Stowe addresses the initially filed AIC ECOSS. How do you plan to address his concerns given your revised ECOSSs?**

**A.** This is not a problem. As Mr. Lazare has identified and articulated in his testimony, the three revised Rate Zone ECOSSs follow the same allocation methodologies and format as the

initially filed AIC ECOSS that Mr. Stowe has examined. The study has simply been split into three studies with an identical model. Although the model and allocation methods are identical, individual allocation factors and cost inputs are based on rate zone specific data.

### A. Stowe Issue 1

**Q. What is Mr. Stowe's first claimed deficiency?**

**A.** Mr. Stowe claims that AIC's electric ECOSS does not recognize and separately account for the minimum costs imposed by safety and reliability standards such as the National Electrical Safety Code (NESC). According to Mr. Stowe, such minimum costs are incurred whenever a distribution circuit is extended to serve an additional customer.

**Q. What is Mr. Stowe's recommended modification to AIC's electric ECOSS to correct for this claimed deficiency?**

**A.** Mr. Stowe asserts that he has calculated the costs of the distribution system components that only just conform to the NESC standards. With this technique, he is attempting to calculate the cost of what he refers to as the Minimum Distribution System (MDS). The end results of his MDS analysis is a new classification of costs for FERC accounts 364 through 367, which will consist of both demand and customer related cost components, rather than only demand as proposed by Ameren Illinois. He then modifies the Company's ECOSS model to separate and allocate by class what he claims are customer and demand-related costs for these electric distribution accounts.

**Q. What is the impact of this modification?**

**A.** This modification results in a shifting of costs to AIC's residential DS-1 class. Were the Commission to adopt Mr. Stowe's MDS Adjustment, the revenue increase necessary for the DS-

1 class to earn the Company's proposed rate of return would increase from 8.60 percent to 17.76 percent. *Compare* IIEC Ex. 2.0, p. 57, Table 4 with IIEC Ex. 2.5. Conversely, the DS-4 revenue necessary would decrease from 17.88 percent to -9.18 percent. At the subclass level, revenue necessary to earn the Company's proposed rate of return for DS-4 primary and high voltage subclasses would decrease from 26.08 and 7.50 percent to -7.51 and -14.84 percent.

**Q. Were you able to verify Mr. Stowe's MDS calculations and analyze all aspects of his proposal?**

A. No. With limited time between receiving his direct testimony and filing this rebuttal, I have not reviewed every facet of his entire analysis, nor have I fully modeled his MDS methodology. However, I have identified some problem areas and have concerns with some of his methods which I will discuss. My omission of addressing portions of his analysis should not be construed as my acceptance of these methods given the limited time to study his workpapers.

**Q. Were there any obvious concerns regarding Mr. Stowe's proposed MDS methodology?**

**A.** Yes. While MDS is not a new concept, his particular methodology is quite unique. In response to AIC-IIEC 6.05 where Ameren Illinois requests references to proceedings where Mr. Stowe previously has applied this MDS that just conforms to NESC, he states "the instant case is the first commission proceeding where Mr. Stowe has applied this particular method". Mr. Stowe used NESC minimum standards as the proxy for the customer related portion of distribution line costs, rather than more common minimum size or minimum intercept methods. I do not disagree with the fact that distribution lines must be built to standards in compliance

with NESC; however, it is unclear to me that the costs related to compliance with NESC are entirely customer related.

**Q. Did Mr. Stowe provide a thorough MDS analysis to apply to Ameren Illinois ECOSS?**

**A.** I don't believe so. While he performed a very detailed analysis for FERC accounts 364, 365, and 367, he didn't perform the analysis on the remaining distribution plant FERC accounts. In responses to AIC-IIEC 6.09 and AIC-IIEC 6.10, Mr. Stowe states that he didn't have adequate time to perform the study for all accounts. Further, he states that the accuracy of a cost of service study is improved whether performed on one or many FERC accounts. Also, Mr. Stowe uses the results of the analysis of account 367 as a proxy for account 366, stating that the results of account 367 are often times used for account 366, but doesn't explain the reason. Mr. Stowe claims that ignoring these other FERC accounts was conservative. It is not clear to me why a partially developed analysis is necessarily more conservative. It is possible classification of FERC accounts in Ameren Illinois's ECOSS that are currently allocated solely on customer count could have a demand component upon completion of a thorough analysis consistent with the one he has performed. This additional demand allocation could offset the additional customer allocations of the MDS. Without seeing the complete analysis, it is difficult to conclude that all costs shifted to the residential class under Mr. Stowe's proposal are appropriate.

**Q. On pages 27-28 of his direct (ll. 575-618), Mr. Stowe testifies that his MDS method will not result in a double allocation of demand costs to certain customers. Do you agree?**

A. No. I believe there is a flaw in his methodology.

**Q. Please explain this flaw.**

**A.** Yes. Mr. Stowe concludes on page 4 of IIEC Exhibit 2.3 attached to his testimony, the minimum system under his method would be the system that just meets NESC requirements. He states "It is reasonable, therefore, to classify the cost of surpassing the standards as demand-related and the cost of conforming to the NESC as customer-related. On page 2 of this exhibit, he states that this minimum system is capable of serving much more than the typical residential customer, on the order of three to four times the peak load of an average residential customer. In other words, these NESC requirements allow adequate capacity for the average residential customer. This means that a distribution system built just to conform to NESC requirements could carry the entire demand of all residential customers. Under Mr. Stowe's methodology, he splits costs for distribution lines under FERC accounts 364-367 as customer and demand related. He then allocated the customer related portion of costs on customer counts within each class. He then allocates the remaining demand related costs on the same class demands used in Ameren Illinois's ECOSS model. See Mr. Stowe's response to AIC-IIEC 6.12. This step of his analysis is seriously flawed. If the minimum system is capable of carrying the full demand requirements of the typical residential customer, and already allocated, then the remaining demand related costs of distribution lines allocated to the residential class should be very little, if any. Mr. Stowe appears to be double dipping and over allocating costs of accounts 364-367 because of this flaw. Customers with small demands such as DS-1, DS-2, and DS-5 should pay little if any of this remaining demand related component, since the NESC based minimum system is sufficient to deliver all of the average customer's electrical needs, yet Mr. Stowe continues to allocate these costs on a demand allocator that includes 100% of the class demand of residential class. Table 7 below was created from the file "(ECOSS Confidential) Direct - 1Phase, MDS-Direct Assign ECOSS.xlsm" provided as Mr. Stowe's modified ECOSS model. If corrected for the flaw I

described above, roughly $913 million[1] of demand related costs should be removed from the DS-1 residential class, leaving only $907 million in costs allocated to the class. This $913 million of demand related costs would be spread to other classes.

**Table 7**

| | Gross Plant Costs -FERC Accounts 364-367 ($1000) | | | | | |
|---|---|---|---|---|---|---|
| | **DS1** | **DS 2** | **DS 3** | **DS 4** | **DS5** | **Total** |
| Customer Related | $ 907,479 | $ 154,990 | $ 3,193 | $ 247 | $ 4,683 | 1,070,592 |
| Demand Related | $ 913,224 | $ 318,365 | $ 172,265 | $ 148,913 | $ 4,417 | 1,557,183 |
| Total | 1,820,703 | 473,355 | 175,457 | 149,160 | 9,100 | 2,627,775 |

**Q. Should the Commission adopt his MDS adjustment in this proceeding?**

**A.** No. The Commission should decline to adopt his MDS adjustment in this proceeding, as it did in Dockets 07-0585 (Cons.) for the reasons identified above. Mr. Stowe's NESC-related MDS proposal, as presented here, does not accurately identify the AIC's MDS and capture the associated costs. Although Mr. Stowe relies on AIC specific data to formulate new allocation factors, it does not make his approach any less problematic. AIC believes Mr. Stowe's MDS methodology, as developed, overstates the costs that reasonably should be borne by the residential class. Any consideration of this method should be done with caution and full understanding by the Commission.

**Q. So you are recommending that the Commission approve allocation of all costs associated with FERC Accounts 364-367 using demand allocators, as presented in AIC's ECOSS?**

[1] See Table 7, DS-1 column, Demand Related row

**A.** Yes. It remains the more reasonable approach to cost allocation for these accounts given the concerns of the Company and the complexity of the method proposed by IIEC.

### B. Stowe Issue 2

**Q. What is Mr. Stowe's second claimed deficiency?**

**A.** Mr. Stowe claims AIC's electric ECOSS fails to recognize that a significant portion of the primary distribution system, namely the vast network of single-phase primary circuits, is used exclusively to serve secondary voltage customers. Mr. Stowe proposes an adjustment to Ameren Illinois ECOSS for this shortfall.

**Q. What is Mr. Stowe's recommended modification to AIC's electric ECOSS to correct for this claimed deficiency?**

**A.** Mr. Stowe has modified AIC's ECOSS study to separate the costs of primary voltage distribution lines into single, dual, and three-phase circuits and allocate the costs of the single-phase and dual-phase distribution circuits entirely to secondary voltage customers (DS-1, DS-2, and DS-5 classes). He also proposes to allocate the three-phase primary circuit costs to all rate classes, including classes served from secondary, single-phase lines.

**Q. What is the impact of this modification?**

**A.** The adoption of this modification would shift costs to the secondary voltage customers. Specifically, the revenue increase required for the Company's proposed rate of return for DS-1, relying on Mr. Stowe's calculations, would further increase from 17.76 percent (with MDS adjustment) to 19.48 percent. *Compare* IIEC Ex. 2.8 with IIEC. Ex. 2.5. Conversely, the revenue increase required for total DS-4, again relying on Mr. Stowe's exhibits, would decline from -9.18 percent to -17.03 percent. In particular, the required revenue increase for primary

DS-4 customers would decrease further from -7.51 percent to -22.79 percent. The percent revenue increase for primary DS-3 customers also would decrease further from -28.16 to -38.68.

**Q. Mr. Stowe testifies the costs of single-phase primary distribution circuits are incurred predominantly to serve secondary voltage customers. Do you disagree?**

A. No. Mr. Stowe appears to be generally correct in his position. However, he admits that occasionally, the utility will use single-phase circuits to serve primary voltage customers.

**Q. Did Mr. Stowe adjust his analysis to reflect that some single and dual phase circuits do provide service to DS-3 and DS-4 customers, even though it is very limited?**

A. No. When applying his methodology, Mr. Stowe didn't give credit to the secondary customers for the facilities that DS-3 and DS-4 customers admittedly use.

**Q. Has the Commission previously ruled upon Mr. Stowe's proposal to allocate the cost of single- and dual-phase circuits to only secondary customers?**

**A.** Yes. In Commonwealth Edison Company's most recent rate case, Docket 10-0467, the Commission rejected Mr. Stowe's proposed treatment of single- and dual-phase primary costs. I am not aware of instances where the Company has previously separated the costs of primary voltage circuits in a way proposed by Mr. Stowe in this proceeding.

**Q. Has Ameren Illinois recently changed construction and operating practices related to use of single and multiphase distribution lines, which would warrant review of methodology and potentially a revision?**

**A.** No. The primary distribution system is built and operated much the same way throughout recent history.

**Q. Why has Ameren Illinois, and presumably other electric utilities, historically avoided separating the distribution costs of certain voltage levels and circuits by number of phases**?

A. Ameren Illinois's electric distribution network is very complex and sometimes construction practices and circuit configurations make cost allocation more difficult given data available to the cost analyst. The goal of a cost of service study is to match best known allocation methods with data available in order to most accurately assign costs to the appropriate rate class, with the information available to the cost analyst. A further goal is to continually strive to improve these methodologies. For the later reason, Mr. Stowe's attempt to refine the cost of service study is commended. Unfortunately, FERC accounts 364-367 contain mass accounted property units and reasonably identifying sub-functional costs for single-phase and dual-phase installations within these broad cost categories is a challenge.

**Q. Does Ameren Illinois have the data available to accurately determine the cost split between single phase vs. three phase circuits that Mr. Stowe pursues?**

A. No. Discussions with field engineering suggest that obtaining the true cost split of single-phase and three-phase circuits at each voltage level would take considerable work to identify what systems are in place and the costs of each system. In Ameren Illinois's case, the limited detailed information available to the Company makes it very challenging to allocate costs of distribution lines at the level of granularity that Mr. Stowe seeks.

**Q. But Mr. Stowe has been able to perform these calculations, why are these calculations not accurate?**

A. Mr. Stowe has developed an allocation methodology using data available to calculate the proportions of circuit miles by number of phases. He then applies these proportions to the total costs of primary voltage circuits. It is not possible with the information available to determine how accurate these allocations may be.

**Q. Do you have other concerns with Mr. Stowe's determination of single phase vs. three phase costs?**

A. Yes. After a cursory review of his workpapers, Mr. Stowe has included high voltage distribution lines (34.5kV and 69kV) in his calculations to determine the percentage of single vs. three phase primary costs. Ameren Illinois does not consider 34.5kV or 69 kV lines as primary voltage; inclusion of these distribution circuits surely will affect the results of Mr. Stowe's calculations.

**Q. Do you believe that the current Ameren Illinois approach is reasonable?**

**A.** Yes. It recognizes limitations in data available to the Company. Mr. Stowe's methodology is one-sided and adds an additional cost burden to the secondary customers who are allocated a substantial portion of the distribution system costs.[2]

**Q. Should the Commission accept Mr. Stowe's second proposed adjustment to Ameren Illinois's ECOSS models?**

**A.** No. The Commission should be certain that adjustments to the ECOSSs don't over allocate costs to any class. If the Commission was compelled to further separate and allocate

[2] Under Ameren Illinois initially filed AIC ECOSS, the secondary customers (DS1, DS2 and DS5) are allocated $4.1 billion out of $5 billion of electric plant in service, or 82%.

costs within Ameren Illinois's ECOSS models at the level of granularity sought by Mr. Stowe, then further study of the issue would be necessary.

### C. Stowe Issue 3

**Q. Before specifically addressing the third alleged deficiency., Mr. Stowe claims portions of your testimony are misleading and provides no additional transparency when compared to the ECOSSs provided in previous the previous case. How do you respond?**

**A.** I disagree. While the prior cost of service studies had columns with various voltages identified, these columns did not contain complete cost data by subclass.

**Q. How did you define a sub-class?**

**A.** As stated on lines 362-366 of my direct testimony, a subclass is a group of customers within a rate class who share a common characteristic; in this rate case, the characteristic is supply voltage. Subclasses were analyzed for DS-3 and DS-4 rate classes.

**Q. Do the prior studies provide Rate of Return, Revenue Requirement, or any other metric that measure these subclasses completely?**

**A.** No. While the rate class subtotal contained total cost of service for the rate classes (DS-3, DS-4, etc.), the costs within the rate class column didn't represent the entire group of customers. Costs within each column varied depending on the asset type. One example of this difference is the fact that the prior model had a column labeled DS-4 Secondary. The rate classes have Primary, High Voltage and 100+kV voltage levels as subclasses, not secondary. This column existed in prior models for use of allocating meter costs for all three subclasses of DS-4 who take metering service at secondary voltage. Another example is DS-4 Primary column. When looking at costs associated with meters, this column included the meter costs

associated with all DS-4 customers metered at primary voltage, regardless of whether they were supplied from Primary, High Voltage, or 100+kV Distribution lines. This could include customers taking service from each of the three subclasses. When looking at distribution plant accounts such as 364-367, the costs reflected in this column reflected allocations of customers having supply voltage of Primary voltage. Therefore, when you add these costs down the column, you are potentially adding allocated costs of multiple customer groups, rather than adding all costs related to one particular subclass of customers. Clearly, the modification made by Ameren Illinois has improved the ability of all parties to draw conclusions about cost of service for each particular subclass.

**Q. Mr. Stowe claims the assignment of substation costs is related to the issue regarding allocations based on supply and/or service voltage. Is he correct?**

**A.** No. Mr. Stowe's conclusion that these two are related is wrong. The fact that Mr. Stowe is able to identify specific costs of a customer group and compare them to booked costs is evidence the model is more transparent and accurate at the subclass level.

**Q. Should the Commission take exception to arguments made by Mr. Stowe related to supply voltage only allocations?**

**A.** No. Mr. Stowe's arguments attempt to muddy the water. Notwithstanding the above, I will move on to the actual issue raised by Mr. Stowe that can be resolved absent the supply and/or service voltage debate. It is one of assignment of costs to a subclass, not the allocation methods used in the study.

**Q. What is Mr. Stowe’s third claimed deficiency?**

**A.** Mr. Stowe claims AIC's ECOSS overstates the cost of serving the DS-4 100+ kV customers because it directly assigns nearly $9.5 million in net plant costs for equipment installed at 30 service points dedicated to serve this subclass that has a net plant value of approximately $3.7 million.

**Q. Is it true that Ameren Illinois directly assigned these costs in the initially filed AIC ECOSS?**

**A.** No. Ameren Illinois used an allocation methodology that determined relative percentages of substation costs for each of three categories of substation equipment, and then applied these percentages to test year costs.

**Q. Mr. Stowe argues that in some cases, it is appropriate to directly assign costs. Do you agree?**

**A.** Yes, I agree when costs are known and clearly used by a particular class of customers, direct assignment should be used.

**Q. If you agree that a direct assignment should have been made, why didn't you do this in the initial ECOSS filing?**

**A.** It was not apparent until the discovery phase of this case Ameren Illinois had the detailed records to perform this direct assignment. This discovery was made in response to a data request filed by IIEC. Once discovered, identification of dedicated facilities and associated costs took time and effort to collect and verify. This analysis required review of detailed schematic diagrams, discussions with numerous company employees familiar with the facilities, and review of plant accounting data booked to these facilities.

**Q. What is Mr. Stowe's recommended modification to AIC's electric ECOSS to correct for this claimed deficiency?**

**A.** Mr. Stowe modifies AIC's electric ECOSS to reduce the amount of costs that he claims are directly assigned until they reflect the actual net book value of the dedicated equipment.

**Q. Do you believe this approach is appropriate?**

**A.** Yes. I made similar adjustments to the Rate Zone ECOSSs but have not made these adjustments to the initially filed AIC ECOSS. I did not make the adjustment to the AIC ECOSS because the Commission has decided in the Accounting Petition Docket 10-0517, that three Rate Zone ECOSSs are preferred in this proceeding to the single AIC ECOSS.

**Q. Does the introduction of three revised Rate Zone ECOSSs cause any conflicts with your adjustments?**

**A.** No. Detailed plant and reserve costs are available by Rate Zone and directly assigned at the Rate Zone level. The sum of the adjustments across the Rate Zones equals the adjustments which would be made to the initially filed AIC ECOSS as modified by IIEC witness Stowe.

**Q. Should the Commission accept your modifications to the Rate Zone ECOSSs?**

**A.** Yes. The allocation of station equipment to 100+ kV customers is appropriate. I have made these modifications consistent with those proposed by Mr. Stowe.

**D. Other Stowe Issue**

**Q. Mr. Stowe also disagrees with AIC's CP allocation of the cost of primary lines and substations. He complains that, even though the Lighting class is unable to operate without**

**utilizing primary circuits and substations, it is nevertheless given free access to these facilities under AIC's methodology. What is your response?**

**A.** As Mr. Stowe notes, AIC was directed to use the CP allocator by the Commission in its Order in Docket. 09-0306 (Cons.). As Mr. Stowe also observes, the Commission's Order explicitly recognized that under this methodology DS-5 customers are not allocated costs of primary lines or substations due to the class's contribution to system peak demand. The Commission deemed this appropriate since DS-5 customers are rarely, if ever, considered in sizing primary lines and substations.

**Q. Has Mr. Stowe attempted to modify the ECOSS study?**

**A.** No. Mr. Stowe does not attempt to modify the electric ECOSS study. Nor does he offer any new evidence opposing the use of a CP allocator.

## V. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

**A.** Yes, it does.