

**STATE OF ILLINOIS**

**ILLINOIS COMMERCE COMMISSION**

**Ameren Illinois Company** :  
**d/b/a Ameren Illinois** :  
: **16-0387**  
**Revenue-neutral tariff changes** :  
**related to rate design.** :

**PROPOSED ORDER**

**I. INTRODUCTION AND PROCEDURAL HISTORY**

On August 3, 2016, Ameren Illinois Company d/b/a Ameren Illinois (“AIC,” “Ameren,” or “Company”) filed revised tariff sheets (“Filed Rate Schedule Sheets”) with the Illinois Commerce Commission (“Commission”). The filing was made pursuant to Section 16-108.5(e) of the Illinois Public Utilities Act (“Act”) (220 ILCS 5/1-101 et seq.), which requires utilities with performance-based formula rates to file, at three year intervals, tariffs that propose revenue-neutral tariff changes or to re-file the existing tariffs without a change. The filing presents the Commission with an opportunity to consider revenue-neutral tariff changes related to rate design.

This proceeding is limited to considering revenue-neutral tariff changes to the allocation of delivery service costs among Ameren’s rate classes and possible changes to the rate design and rate components for Ameren in accordance with provisions of Section 16-108.5(e) of the Act. The Company proposes elimination of rate zone specific embedded cost of service studies (“ECOSS”) in favor of a consolidated cost study. It proposes a transition over three years to a uniform delivery service pricing across all rate zones for all charge types and customers, with two limited exceptions. The Company seeks to change the percent of residential and small general service revenue responsibility collected through fixed monthly charges. The Company proposes changes to the rate design for lighting customers. It proposes a change to the structure of the transformation capacity charge and to the cost basis and pricing of reactive demand charges for the large general service customers. The rate design approved will be effective starting with the January 2018 billing period. It will be applied to the revenue requirement in subsequent formula rate update cases filed pursuant to Section 16-108.5(d) of the Act, until such time as the Commission approves a different rate design.

On August 3, 2016, the Commission issued a Suspension Order which suspended the Filed Rate Schedule Sheets for the Commission to “enter upon a hearing concerning the propriety of the proposed revenue-neutral tariff changes related to rate design.” The Filed Rate Schedule Sheets were resuspended on November 22, 2016. Pursuant to notice duly given in accordance with the law and the rules and regulations of the Commission, a prehearing conference was held in this matter before a duly appointed

Administrative Law Judge (“ALJ”) on August 30, 2016 at the Commission offices in Springfield, Illinois. A schedule was set. The Citizens Utility Board (“CUB”), the Illinois Industrial Energy Consumers (“IIEC”), the Environmental Law & Policy Center (“ELPC”), and the Environmental Defense Fund (“EDF”) filed Petitions to Intervene which were granted. Staff of the Commission (“Staff”) and the Illinois Attorney General’s Office (“AG”) also participated in the proceeding.

An evidentiary hearing was held on November 30, 2016. Appearances at the hearing were entered on behalf of all parties. AIC presents the testimony of Steven M. Wills, its Director of Rates and Analysis; and Karen R. Althoff, Supervisor, Rates and Analysis. Staff presents the testimony of Cheri L. Harden, Rate Analyst in the Rates Department of the Financial Analysis Division. The AG presents the testimony of Scott J. Rubin, an attorney and consultant in the public utility industry. CUB and EDF jointly present the testimony of Dianne Munns, Senior Director of External Affairs, Clean Energy Program at EDF; and Jeff Zethmayr, Senior Policy Analyst at CUB. The IIEC presents the testimony of Robert R. Stephens, a consultant in the field of public utility regulation at Brubaker & Associates, Inc.

The record was marked “Heard and Taken” on January 5, 2017. Initial and Reply Briefs were filed. A Proposed Order (“PO”) was served on the parties.

## **II. BACKGROUND**

The cost recovery in the customer charge was a contested issue in Ameren's previous revenue-neutral rate design docket, Docket No. 13-0476, both during the main case and on rehearing. AIC proposed to recover a large percentage of the monthly revenue requirement from the monthly non-volumetric, i.e., fixed charges or customer charge, with a Straight Fixed Variable (“SFV”), rate design. The Company proposed increasing the revenues from the meter and customer charge 2.5%, from 44.8% to 47.3%, of the class revenue requirement. It proposed the increase as an incremental step towards a target of recovering 50% of its revenue requirement in fixed charges. AIC's proposal was consistent with the level of fixed recovery the Commission approved for Commonwealth Edison Company (“ComEd”) in Docket No. 10-0467. Staff supported the proposed increase. The AG supported a rate redesign through which the Company would recover approximately 28%, rather than 50%, of its revenue requirement through the non-volumetric charges.

In its March 19, 2014 Order (“Final Order”), the Commission found that the record supported a discontinuation of the gradual shift toward a greater SFV rate structure. The rationale for its decision included: (i) more equitable cost sharing within customer classes; (ii) rates that are consistent with the General Assembly’s intent to promote energy conservation; and (iii) the fact that the Company’s financial risk has been reduced as a result of its participation in Section 16-108.5 of the Act, known as the Energy Infrastructure Modernization Act (“EIMA”). The Commission acknowledged the merits of the AG's proposal to increase the volumetric charges and decrease the fixed charges for the DS-1 customer class. However, based on the record and concerns about the magnitude of the change and the potential to create rate shock for electric space heating customers, the Commission directed that Ameren maintain its then current percentage of cost

recovery through fixed charges (44.8%), with the expectation that the issue would be revisited in AIC's next electric rate design proceeding.

On May 7, 2014, the Commission granted the AG's request for rehearing to address policy issues related to its proposal. The AG supported its proposal that 28% of the revenue requirement be recovered through fixed charges. Staff proposed that the Company be allowed to recover 36% or approximately mid-point between the proposals, of the revenue requirement through fixed charges. Staff explained that its alternative could mitigate bill impacts for higher-use customers while still moving away from an SFV rate design. AIC took the position that the Final Order providing for the recovery of 44.8% of its revenue requirement through the customer charge should be affirmed.

In its September 30, 2014 Order ("Order on Rehearing"), the Commission adopted Staff's alternative proposal, finding that it would effectively commence the shift to a rate design that decreases the fixed charges and increases the variable volumetric charges, while protecting against the potential for significant bill impacts.

### **III. COST OF SERVICE STUDY**

#### **A. Uncontested or Resolved Issues**

##### **1. Use of a Single ECOSS**

AIC explains that three legacy utilities were reorganized and merged to form AIC in 2010. It states that its three Rate Zones correspond to the service territories of the legacy utilities. AIC asserts that although it has conducted separate cost of service studies for each of its rate zones for rate cases and rate redesign proceedings, since the merger, it has operated as a single utility. AIC maintains the rate zones have become increasingly irrelevant. AIC states, in this case, it developed a single ECOSS that applies to all classes across all of its rate zones, and proposes to use this single ECOSS as a target for its rates.

Staff states that AIC has blended the legacy utilities together, noting that 99% of AIC's customers are now in rate classes with uniform rates. Staff asserts that a single ECOSS will be efficient in designing cost-based rates and recommends the Commission approve the use of a single ECOSS. No party opposes the proposal.

The Commission finds the use of a single ECOSS is reasonable and efficient, and is approved.

##### **2. Allocation of General and Intangible AMI Plant**

In Docket No. 13-0476, the Commission ordered AIC to use the labor allocator for non-meter General & Intangible ("G&I") plant investments made as part of AIC's Advanced Metering Infrastructure ("AMI") Plan, and ordered the Company to reevaluate the allocator in its next rate design case in light of actual cost data regarding AMI. Final Order at 40-41. AIC indicates that after reevaluating the customer class allocator to be used for non-meter G&I plant associated with AMI, it found that the labor allocator should continue to be used. AIC states that its analysis in preparation for this case determined that a change to a customer allocator would have a negligible effect on the allocation of

costs across customer classes, in light of the implementation schedule and amortization period. Therefore, AIC does not propose the customer-related allocator in this case.

Staff agrees that the labor allocator should continue to be used for these investments. No party objected to continued use of the labor allocator.

The Commission finds use of the labor allocator for customer class cost assignment is reasonable, and is approved.

### **3. Classification of Other Revenues**

AIC proposes to alter the classification of Other Revenue in the ECOSS. The Company explains that Other Revenue arises from rental agreements for excess facilities, including: (i) duplicate on-site facilities; (ii) additional points of delivery; and (iii) equipment for customers' anticipated growth. AIC explains these facilities are recorded in Federal Energy Regulatory Commission ("FERC") plant accounts that are classified as demand-related in the ECOSS. In the past, AIC notes, Other Revenue had been a separate line item. AIC explains it proposes to classify Other Revenue as demand-related in its ECOSS, in a manner consistent with the excess facilities to which the revenue is related. AIC recommends that all other cost allocations approved in Docket No. 13-0476 should be retained.

Staff notes that under the proposed rate design methodology, costs classified as Demand-Related and costs classified as Other Revenue are treated identically. Staff indicates it does not object to this proposal as it will not result in a change in treatment of the costs. No party objects to this change to the ECOSS.

The Commission notes that no other changes to the previously approved cost allocations were proposed. The Commission finds Ameren's proposed change to the classification of Other Revenue is reasonable, and it is approved.

## **IV. ALLOCATION OF REVENUE REQUIREMENT**

### **A. Uncontested or Resolved Issues**

#### **1. Allocation Methodology – Rate Zone Allocators**

AIC proposes to abandon its current practice of allocating the revenue requirement among its rate zones based on the legacy utilities' plant balances, and instead utilize a single revenue requirement for setting rates. AIC explains that, historically, it has allocated the revenue requirement among rate zones based on the type of expenditure, in accordance with the Commission's Order in Docket No. 10-0517. (See Cent. Ill. Light Co., et al., Docket No. 10-0517 at 20-22 (March 15, 2011) For example, AIC states, distribution plant expenditures since September, 2010 have been allocated among the rate zones in proportion to the plant balances of the legacy utilities in September 2010.

AIC asserts that the distinctions between AIC's rate zones have decreased in relevance over the years since the merger of the legacy utilities. AIC says the Company is operated as a single utility, rather than a set of separate affiliate utilities. AIC states that the continued use of cost allocations based on the legacy utilities captures the true cost of service less accurately. AIC notes that when the projected plant additions in 2016

are considered, post-consolidation net plant constitutes 49.1% of AIC's total net plant investment. It says that, by the time the rate design approved in this proceeding goes into effect in January of 2018, the majority of existing net plant not yet retired will be post-consolidation.

Staff considers the proposal to use a single revenue requirement for rate design purposes in this proceeding to be appropriate rather than calculating three revenue requirements as the Company did in the last rate design docket. Staff indicates that the use of a single ECOSS will result in a single revenue requirement and recommends it be approved.

The Commission finds application of a single revenue requirement for rate development is appropriate and reasonable, and is approved.

## **B. Contested Issues**

### **1. Rate Mitigation**

#### **a. AIC's Position**

The Company explains that there are three steps in its rate design process. First, AIC determines the cost to serve the various customer classes, its revenue requirement, using an ECOSS. The second step is to determine how it will allocate the revenue requirement, i.e., the amount it will collect from customers in each rate class and rate zone. The last step is to adjust the existing charges to produce the revenues by class and rate zone resulting from the prior step, and to transition towards uniformity across rate zones.

AIC states that, in general, it proposes to allocate the revenue requirement to rate classes based on the cost to serve those classes, as established in the ECOSS. If the revenue requirement allocation exactly matched the ECOSS, AIC explains, it would collect revenues from each rate class and rate zone to match the Company's cost of serving them. However, AIC states, there are pre-existing interclass subsidies, which cause the rates charged to some classes to recover less than the cost to serve those classes. It explains that abrupt changes in rates, in order to exactly match the revenues from each class to the cost to serve it, could result in large increases in rates for some classes. AIC explains that the potential for this large increase caused the Commission, in the Company's last rate redesign case, Docket No. 13-0476, to approve parameters that mitigate increases in revenue requirement allocations. Overall, however, AIC states that the goal is to move rates so that, in time, rates charged to each class fully recover the cost to serve that class. AIC explains that the mitigation parameters are intended to accomplish this goal gradually, while avoiding rate shock.

AIC proposes to employ the mitigation parameters approved in Docket No. 13-0476 in determining the costs to be allocated to each class. It explains the mitigation parameters prevent costs from being allocated to a certain customer class if the allocation would result in rates that increase by more than: (i) 0.025¢ per kilowatt hour ("kWh"); (ii) 10%; or (iii) a constraint multiple of the system average increase based on a sliding scale starting at 1.5-times the system increase for overall increases less than 10%, and reduced

by 0.0125 for each percentage point of average system increase greater than 10%, but not less than a factor of 1.0.

AIC says that although IIEC agrees what the mitigation parameters are, it disputes when, in the process of developing rates, the mitigation parameters should be applied. AIC states it has applied the mitigation parameters approved in Docket No. 13-0476 during the cost allocation step (step two). AIC observes that IIEC argues the mitigation parameters should apply to the final rates to be charged to customers (i.e., after the third step), rather than to the amount of revenues the classes are allocated in the second step. AIC complains that IIEC never explained how it believes AIC should apply the mitigation parameters, i.e., whether they should be applied once during revenue allocation (step two) and again after the third step adjustments for uniformity (step three), or only once, after step three, the adjustments for uniformity.

AIC argues that IIEC's proposal to apply the mitigation parameters after the adjustments for uniformity would transform rate design into a circular, iterative process. Mr. Wills explains that IIEC's proposal would require that rates be further mitigated if AIC discovered, after adjustments for uniformity, that the rate for a class and zone exceeded the mitigation parameters. Under IIEC's proposal, AIC explains, the amount of revenue that caused the rate zone to exceed the mitigation parameter would have to be reallocated to other rate zones or classes. AIC states that in some circumstances, the revenues could be recovered from a different rate zone within the class, so as to avoid an inter-class subsidy.

AIC asserts that the vast majority of its customers are subject to rates that are uniform across rate zones, and the approved process for transitioning to uniformity requires that uniformity be maintained once it is reached. The Company states that in situations where two of the three rate zones have uniform charges, but the third rate zone exceeds mitigation parameters, the Company would have to return to the cost allocation step to find another rate class or classes to absorb the shortfall. It explains that, after rates were designed, if a single rate exceeded mitigation parameters, costs would have to be reallocated among classes and new rates would be designed. AIC states that it could not determine whether the new rates complied with the mitigation parameters until they were designed. It says under the process proposed by IIEC, if the new rates were not within the mitigation parameters, the process would begin again. The Company states that every step in the iterative process would have to be documented in order to support the validity of the end result. AIC asserts that IIEC did not offer a solution for, or even address, this complex process. Thus, AIC contends IIEC has not put forth an actionable proposal.

AIC asserts that the mitigation parameters should continue to be applied only during the cost allocation step, after which the uniformity process would be applied to derive the final rates. AIC states that, using this process, there would be no additional analysis applying the mitigation parameters and no iterative, circular process. AIC asserts that the uniformity process does not upset the purpose of the mitigation parameters, which were approved to end cross-class subsidies in the least period of time without causing rate shock.

AIC explains that the uniformity process likewise incorporates thresholds that prevent rate shock: the approved process for transitioning to uniformity allows changes to rates only if rates in two classes are within 10% of each other or have already crossed over. AIC explains that because the uniformity process relies on these thresholds to prevent rate shock, there is no need to apply the mitigation parameters again as the last step in the rate design process, as IIEC proposes.

AIC denies that IIEC's is the only correct interpretation of the Final Order in Docket No. 13-0476, which approved both the mitigation parameters and the process for transitioning to uniformity. (Final Order at 61-63) AIC contends that IIEC mischaracterizes the Final Order when it argues that it approved limitations on rate increases. According to AIC, the allocation methodology approved in Docket No. 13-0476 limited increases in revenues allocated to subclasses under certain circumstances. It maintains that it approved parameters to be used in the second step of AIC's rate design process. AIC points to the language in the Final Order noting the Company's diligence in identifying the inadequacies in the existing revenue allocation methodology and offering an approach to correct them, and finding that "AIC's proposed modification to the rate zone allocation factor is supported by the record." (Id.) AIC argues the language of the Final Order indicates that the mitigation parameters apply only to the cost allocation component of rate design, not final rates.

AIC concedes IIEC's assertion that the Final Order does not state that 'additional movement' to uniformity is authorized after the cost allocation. But, it observes that there is also no statement that the mitigation parameters are to be applied after the uniformity process as IIEC argues. The Company maintains that the evidence in Docket No. 13-0476 demonstrates that the parties expected movement to uniformity to occur after revenue allocation. Given the complexity in applying the mitigation parameters after the uniformity process, AIC argues that it is entirely reasonable to interpret and apply the Final Order as it has done. It says its method avoids the iterative process by applying the mitigation parameters during the allocation step, and then applying the uniformity process. AIC argues, the fact that IIEC did not understand the interplay of these processes until this proceeding does not make them improper.

AIC disputes IIEC's assertion that "it would be highly unusual for the Commission to allow a non-contested rate design issue [i.e., uniformity] to disturb a rate moderation finding it made in regard to revenue allocation." (IIEC's IB at 8) AIC notes that IIEC cites nothing in support of that statement. AIC maintains that Commission practice dictates the opposite. It says that, in general, Commission orders follow a fairly linear process of designing rates. For example, AIC states, in general rate cases, the Commission first considers the utility's rate base, then its revenues and expenses, then its rate of return, to arrive at a total revenue requirement, before considering how that revenue requirement should be collected from customers. It asserts that, in the rate design portion of general rate cases and rate redesign cases, the Commission first allocates revenues, then considers rate design for each of the customer classes. AIC states that, pragmatically, each step must be completed before the next can be undertaken. It says rates cannot be designed unless costs have been allocated, and costs cannot be allocated until the revenue requirement is known. AIC states that the Final Order in Docket No. 13-0476

followed this same mathematical process: first, costs were allocated (and allocation mitigation parameters approved), and then rates were designed (using the approved uniformity criteria). AIC argues that logic and experience indicate that the mitigation parameters were intended to be applied during the cost allocation process, before rates were designed using the uniformity process.

AIC argues that the organization of the Docket No. 13-0476 Final Order supports its position. It states that the mitigation parameters appear under the header “Revenue Allocation” in the Final Order, indicating that they are intended to be a part of the cost allocation process. AIC notes a separate, later section of the Final Order titled “Rate Design” includes the uniformity process, which it says indicates that the uniformity process is to be applied in the design of final rates. It states that the mitigation parameters are not mentioned in the portion of the Final Order that addresses rate design. The Company says that the uniformity process is described as promoting “additional” movement toward uniformity, saying, presumably in addition to any movement resulting from the rate design process described in the preceding portions of the Final Order. In the absence of explicit guidance requiring the mitigation constraints to be applied after the uniformity process, AIC maintains it applied both, in the most logical order, so that it did not result in an absurdly complex iterative process.

AIC notes that IIEC also cites the Order in Docket Nos. 09-0306 et al., consolidated, for the proposition that “rate mitigation efforts should be looked at from the perspective of the bill total.” (Order, Docket No. 09-0396 et al., April 29, 2010, p. 295) AIC states IIEC appears to be arguing that the mitigation parameters should be applied to the final rate, the “bill total,” rather than to the amount of revenue allocated to a rate class, and that any increase above the rate dictated by applying the mitigation parameters will certainly result in rate shock. AIC asserts that IIEC has provided no evidence to support that conclusion. AIC argues that consideration of the increases resulting from the transition to uniformity from a “bill total” perspective reveals just how minor the increases are. AIC explains that of the three rates that remain to be transitioned, under AIC’s proposal, the DS-3 Primary rate would increase 3.5% per year in Zones I and II due to uniformity, with offsetting decreases in the Zone III rate; rates for DS-4 Primary customers in Zone III and DS-4 High Voltage customers in Zone II would increase \$0.001 per kilowatt-hour.

In response to Staff and IIEC's concerns about rate impacts, in addition to the mitigation parameters for cost allocation, AIC proposes to establish a \$/kilowatt (“kW”) ceiling on increases in pursuit of uniformity. Mr. Wills testifies that this additional safeguard will temper even minor increases.

#### **b. IIEC’s Position**

IIEC agrees with Ameren’s characterization of the mitigation parameters approved in Docket No. 13-0476 and does not object to Ameren’s proposed utilization of the same rate mitigation parameters in this case. However, Mr. Stephens raises concerns about the methodology AIC uses to apply the mitigation criteria. He notes the Company’s testimony that there will be additional systematic movement toward rate uniformity after the rate mitigation criteria have been applied. According to IIEC, movement toward

uniformity after application of the mitigation criteria could result in rate class or subclass increases that exceed the rate moderation criteria, adopted to ensure gradualism and avoidance of rate shock. IIEC concludes that Ameren has placed a greater importance on reaching uniform rates than on protecting customers through rate moderation.

IIEC argues that the mitigation parameters should be applied as the last step in the rate design process. Mr. Stephens observes Ameren's calculation that using the Commission's approved criteria will result in at least a 22% increase for the +100 kV DS-4 rate subclass (on average). He notes Mr. Wills' testimony acknowledging that a large overall rate increase compounded with movement toward uniformity could cause impacts that warrant additional consideration. He asserts that further movement toward uniform rates should not be pursued in any particular year to the extent that it causes revenues for the class or subclass to exceed the rate moderation constraints set forth in Docket No. 13-0476.

Mr. Stephens maintains that it is inappropriate for AIC to make adjustments for uniformity after the mitigation criteria have been applied. He says that the annual movement of rate class or subclass rates toward rate zone uniformity should be allowed, but should be limited to the constraints of the previously approved three-pronged rate moderation criteria. Mr. Stephens notes the Company's proposal to add a mitigation threshold that would cap the movement towards uniformity under certain circumstances. He opposes this additional criterion, saying the new proposal is unnecessary and will unduly add complexity to an already complex rate moderation approach. He maintains that the Commission already determined the maximum amount that rates should be allowed to increase in Docket No. 13-0476. He states that the better approach is to continue application of the rate moderation criteria previously established by the Commission, even if it means that an additional year or so is required to reach full rate zone uniformity. He emphasizes that uniformity should only be pursued consistent with the principles of gradualism and the avoidance of rate shock.

### **c. Staff's Position**

Staff supports AIC's revenue allocation methodology and mitigation proposal. Ms. Harden opines that, overall, the Company's proposed methodology of deliberate movement toward rate uniformity is reasonable and similar to that approved in Docket No. 13-0476.

In direct testimony, Ms. Harden recommended the Company address plans to mitigate the potential for large bill impacts which may result from combining a move to rate uniformity with an increase in the overall revenue requirement in future annual formula rate update cases. In her rebuttal testimony, she testifies that the Company's proposal to set a \$/kW cap would appropriately limit the impact of increases resulting from movement to rate uniformity.

Ms. Harden opines that the Company's proposal will continue the gradual transition to uniform rates while minimizing undue customer bill impacts. She finds the approach to be reasonable and recommends that the Commission approve it.

#### **d. Commission Analysis and Conclusion**

In its filing, AIC proposed to maintain the mitigation parameters that were adopted in Docket No. 13-0476. Staff finds the proposed methodology to be reasonable and notes the progress that has been made towards uniform rates using the mitigation parameters. There is no dispute among the parties as to the mitigation parameters. Staff and IIEC raise concerns about the potential for large bill impacts that could result if the Company's proposed move to uniformity is coupled with an increase in the revenue requirement over the next three years.

The Commission notes that it has approved the mitigation parameters for allocating the revenue requirement while transitioning rates to uniformity across rate zones based upon the principle of gradualism and to prevent rate shock. The Commission recognizes and shares the concerns about the potential for large rate impacts for certain rate classes and subclasses and discusses AIC's proposal to set ceilings for uniformity rate increases below.

The Commission approves the AIC proposal to maintain the mitigation parameters that were adopted in Docket No. 13-0476.

### **V. RATE DESIGN**

#### **A. Uncontested or Resolved Issues**

##### **1. Meter Charges – All Classes**

Ameren assesses a flat monthly meter charge to each customer in all rate classes, calculated to produce revenues equal to the costs associated with the meter functions of each class. As discussed below, there is a dispute in this case as to the portion of revenues that should be collected through fixed charges, the meter charge and the customer charge in combination.

There is no dispute among the parties regarding the dollar cost of meters in the DS-1 class. Likewise, there is no dispute among the parties as to the dollar amount of a cost-based meter charge in any other customer class. The Commission finds the meter charges to be reasonable and they are approved.

##### **2. Customer Charges – DS-3, DS-4, DS-5, and DS-6**

Customer charges are fixed, flat monthly amounts assessed to each customer. For the DS-3, DS-4 and DS-6 customer classes, AIC proposes to set customer charges equal to the combined cost of service for all three classes, differentiated between Primary, Secondary, High Voltage, and +100 kV Meter Voltage categories, and rounded to the nearest \$10. For DS-5 customers, AIC proposes to set customer charges equal to those developed for the DS-2 Secondary voltage category. The Company explains that the DS-2 Secondary customer charges are set at the amount necessary to raise the overall recovery of the meter and customer charges for all DS-2 customers to 40% of the total class revenue requirement excluding the Electric Distribution Tax.

No party disputes the proposed customer charges for the DS-3, DS-4, DS-5 and DS-6 customer classes. The Commission finds these charges are uncontested and they are approved.

### **3. Reactive Demand Charge – DS-4**

Ameren states that low power factors (or a high reactive demand relative to kW demand) can cause voltage problems on the distribution system. It charges customers in the DS-4 class that have supply line voltage of less than 100 kV the reactive demand charge to recover the resulting capacitor costs and to incentivize them to correct their power factors. AIC explains that improved power factors avoid the need to reinforce the system to accommodate heavy loading on the system.

Ms. Althoff says that the Company updated its analysis of capacitor bank replacement cost and found that the cost had increased from the \$0.29 per kVAR (a measure of reactive power) approved in Docket Nos. 09-0306, et al., to an average of \$0.380 per kVAR for primary voltage facilities and \$0.769 per kVAR for high voltage facilities. She states that AIC's reactive demand charges are currently set at \$0.27 per kVAR. Ms. Althoff opines that the current reactive demand charges do not incentivize customers to install equipment to correct their low power factors. She says customers appear content to continue paying the reactive demand charges without installing corrective equipment.

As a result, AIC proposes to increase its reactive demand charge to \$0.40 per kVAR, systematically over three years. Ms. Althoff indicates that because reactive demand charges offset distribution delivery charges, the increase in the reactive demand charge will result in lower distribution delivery charges, and will not increase the total that customers pay. She asserts that if the increase in the reactive demand charge incentivizes customers as intended, delivery service costs could decrease over time.

Staff agrees that implementing the higher charge may incentivize the customers to install equipment to correct poor power factors, and recommends the Commission approve AIC's proposal.

No party opposes the proposal. The Commission finds that the increase in reactive demand charges for DS-4 customers with supply voltages of less than 100 kV is reasonable and is approved.

### **4. Transformation Capacity Charge DS-3, DS-4, and DS-6**

AIC proposes to maintain the transformation capacity charge applied to all DS-3 and DS-6 customers, and those DS-4 customers taking service at voltages below 100 kV at its current level. No other party offered testimony on this proposal. The Commission finds that AIC's proposal to maintain the transformation capacity charges for DS-3, DS-4 and DS-6 is approved.

### **5. Transformation Capacity Charge DS-4 +100kV**

AIC explains that, in Docket No. 13-0476, the DS-4 +100 kV subclass in Rate Zone II received a separate transformation capacity charge from the remaining DS-4 customers

due to differences in usage in the +100 kV subclass and rate zone revenue allocations. AIC states the existence of this separate transformation capacity charge presents a challenge for achieving uniformity across the rate zones.

To resolve this issue, AIC proposes to calculate a transformation capacity charge for all DS-4 +100 kV customers and move customers in all rate zones toward that cost over three years. AIC explains its proposed transformation capacity charge was calculated based on the embedded cost of transformation service dedicated to DS-4 +100 kV customers, divided by the total annual kW transformation demand. AIC states this calculation produced an average cost of \$0.23 per kW. AIC explains that customers in Rate Zones I and III will see a reduction in transformation capacity charges from \$0.59 per kW to \$0.23 per kW, while customers in Rate Zone II will see an increase from \$0.15 per kW to \$0.23 per kW. AIC proposes to phase-in these changes over three years: in the first year, rates will move one-third of the way to \$0.23; in the second year, rates will move half the remaining distance; and in the third year, rates will be set at \$0.23.

In addition, AIC proposes to amend its tariff to require future DS-4 +100 kV customers to take service under Rider EFC – Excess Facilities Charges, which AIC believes will better reflect the cost-causation for transformation capacity. The Company explains that this proposal will limit the application of the +100kV transformation capacity rates to existing customers, and that future customers in the DS-4 +100 kV subclass will pay directly for the costs of transformation assets necessary to serve them pursuant to rental agreements as set forth in Rider EFC. AIC maintains that this is an appropriate solution because transformation service for these customers is typically provided by dedicated facilities that can relatively easily be tied to a specific cost-causing customer.

Having reviewed the calculations, Ms. Harden testifies that the proposal is appropriate. She asserts that the proposals will move existing customers toward rate uniformity while recognizing the unique facility needs of new customers going forward.

No party objects to the proposals. The Commission finds these proposals are reasonable and they are approved.

## **6. Treatment of EDT**

AIC states that, in Docket No. 13-0476, the Commission approved a methodology to gradually move charges related to the Electric Distribution Tax ("EDT") toward uniformity across the AIC service territory. AIC indicates that its charges for EDT are currently uniform within rate zones across all customer classes except DS-4. AIC does not propose any modifications to the treatment of EDT. AIC explains that if the current methodology continues in effect, all customer classes are expected to pay the same average EDT rate no later than January of 2020.

Ms. Harden agrees with the Company that the subsidies can be gradually eliminated, during the three-year rate design period, without the rate shock that might occur if the subsidies were eliminated more quickly.

No party objects to AIC's current treatment of EDT. The Commission finds it reasonable and AIC's proposed treatment of EDT is approved.

## **7. Distribution Delivery Charges – DS-3, DS-4, and DS-6**

AIC proposes a process for establishing distribution delivery charges for the DS-3, DS-4, and DS-6 customer classes. AIC explains that the process begins with the DS-4 class. For each supply voltage subclass within DS-4, AIC first assesses uniformity of the EDT cost recovery values. If the EDT cost recovery values are uniform with those for all other non-DS-4 customers, AIC states the uniformity will be maintained, and the DS-4 distribution delivery charges are adjusted to achieve the remaining revenue allocation target. If, alternatively, the EDT cost recovery values are uniform with the average cost established in the ECOSS to achieve the EDT revenue target, AIC states that uniformity will be retained, and the DS-4 distribution delivery charges are adjusted to achieve the remaining revenue allocation target.

AIC explains that, presently, the EDT cost recovery values for the +100 kV supply voltage subclass in Rate Zones I and III are not uniform with the other non-DS-4 customers nor the average EDT cost established in the ECOSS. AIC states that, until the +100 kV supply voltage subclass EDT cost recovery values are uniform with the average EDT cost value, the method for setting EDT cost recovery and distribution delivery charges depends on whether the rate change is a decrease or an increase. If the rate change is a decrease, AIC explains, the EDT cost recovery and distribution delivery charges are adjusted downward in equal percentages to achieve the revenue target. If the rate change is an increase, AIC states the EDT cost recovery is increased in each rate zone to reach the average cost established in the ECOSS, and, if additional revenue is required the distribution delivery charge is increased to achieve the revenue target.

AIC explains that after the EDT cost recovery values are determined, distribution delivery charges for DS-3 and DS-6 classes can be established. The Company states that the distribution delivery charges for DS-3 customers under 100 kV are changed by equal percentages to reach the revenue target for the class or subclass. For DS-3 +100 kV service, AIC explains, the distribution delivery charge is set based on the combined cost of service for demand-related components of the DS-3 and DS-4 +100 kV service, net of transformation charge revenue. For DS-6 customers, AIC states, charges change by equal percentages sufficient to reach the revenue target for the class or subclass.

No party objects to this proposal. The Commission finds the Company's proposal for establishing distribution delivery charges for the DS-3, DS-4, and DS-6 customer classes is reasonable and it is approved.

## **8. DS-5 Lighting Rates - Implementation of LED**

AIC states that it intends to begin replacing its current offerings of high pressure sodium, metal halide, mercury vapor, and incandescent lights with light emitting diode ("LED") fixture technology. Mr. Wills explains that the entire population of older technologies will likely be replaced within approximately 6 years, due to the short lifespan of the bulbs utilized in the old fixtures.

AIC asserts that a transition to LED technology is prudent because LED lights are considerably more energy efficient than other technologies, and would generate significant savings on the power supply portion of DS-5 customers' bills. AIC states LED

lights have a longer useful life, will require less maintenance over time, and offer environmental benefits in reduced emissions from electricity generation.

No party objects to this proposal. The Commission finds the Company's proposal reasonable, and it is approved.

### **9. Fixture Charges and Distribution Delivery Charges – DS-5**

Ameren's DS-5 lighting rates include fixture charges for Company owned lights, and customer and meter, as applicable, charges for customer owned lights. The Company says that all lighting accounts currently pay per kWh distribution delivery and EDT charges. It indicates that pricing for Rate Zones II and III is uniform, but pricing in Rate Zone I is lower than the other two zones due to legacy cost differentials between the former operating companies.

AIC proposes to alter its DS-5 rate design to reflect the fact that AIC will be replacing older technology and fixtures with LED fixtures. It proposes to revise the DS-5 tariff to reflect new fixture charges applicable to company-owned LED default fixtures. AIC indicates that it plans to initiate a proceeding seeking approval of the tariff revisions in the second quarter of 2017. At Staff's request, the Company provided example tariffs that reflect the expected revisions.

AIC proposes to include charges for distribution system recovery applicable to company-owned lighting into the fixture charges. AIC explains that the distribution delivery charge applicable to customer owned lights will retain its existing structure and initial price level.

After these changes, AIC proposes that all price components will be adjusted by an equal percentage to achieve the total DS-5 revenue target. AIC proposes that, over the next three years, DS-5 rates will be transitioned to uniformity using a three-step process whereby all prices within 10% of the Rate Zone II and III prices will be moved to uniformity immediately, and remaining charges will move one-third of the way to uniformity in the first year, one-half of the remaining way to uniformity in the second year, and fully to uniformity in the third year.

Ms. Harden states that there are other utilities that charge a fixed rate for lighting services. She opines that the change to a fixed rate is appropriate since the lights are not metered. Ms. Harden observes that Rate Zone I rates will be part of the deliberate movement to become uniform with Rates Zones II and III.

No party objects to AIC's proposals. The Commission finds the proposals reasonable and they are approved.

### **10. Meter Reassignment Charge (Rate Zone 1)**

AIC proposes that the meter reassignment fee applicable to certain DS-3 and DS-4 customers in Rate Zone I should be excluded from the overall transition to uniformity among rate zones. AIC states that in Rate Zone I, some customers that owned their own transformation equipment before 2007 have meters configured on the high side of the transformer, which gives rise to a unique cost of service. The Company explains that customers in other rate zones do not have meters configured in this manner, and so have

a different cost of service. To recognize the difference in cost of service between these customers, AIC states, it proposed to exclude the meter reassignment charges from the overall transition to uniformity.

No party opposed this proposal. The Commission finds this proposal reasonable and it is approved.

### **11. Pole Charges (Rate Zone 3)**

AIC also proposes that the DS-5 pole charges should be excluded from the overall transition to uniformity among rate zones. AIC explains that its DS-5 customers are, and have historically been, able to request certain types of lighting poles. AIC states its legacy utilities handled customer requests for poles beyond the standard offering differently: in what is now Rate Zones I and II, special poles were treated as excess facilities and required a rental agreement between the utility and the customer, while in Rate Zone III, some special poles were covered by an existing tariff charge. AIC maintains that this historical difference makes it impractical to achieve uniformity among the pole charges in the three rate zones. Therefore, AIC proposes to exempt the pole charges from the transition to uniformity.

No party opposes this proposal. The Commission finds the proposal reasonable and it is approved.

### **12. AIC Proposed Tariff Changes**

AIC proposes changes to several of its tariffs, which it states are necessary to implement AIC's other proposals in this proceeding. First, AIC proposes changes to the DS-4 tariff related to the proposal that future customers served at +100 kV supply voltage obtain transformation service through Rider EFC, beginning April 1, 2017. Second, AIC proposes an update to the DS-3 tariff in order to maintain consistency in wording between the DS-3 and DS-4 tariffs regarding transformation service. Third, AIC proposes changes to Rate MAP-P to remove references to class cost of service studies being performed at the rate zone level. Finally, AIC states that it plans to make a separate tariff filing in a separate proceeding, proposing changes to the DS-5 tariff that relate to proposals put forth in this proceeding.

Ms. Harden reviewed the proposed tariff changes and testifies that they correctly reflect the tariff changes that are necessary for its proposals. Staff recommends that the proposed tariff changes be approved.

No party objects to AIC's proposed changes to the tariffs. The Commission finds the proposals are reasonable and necessary, and they are approved.

#### **B. Contested Issues**

- 1. Customer Charge and Distribution Delivery Charge – DS-1 and DS-2**
  - a. AIC's Position**

In this proceeding, AIC proposes to increase the fixed charges from recovering 36.4% of the class revenue requirement to recovering 40%. The Company takes the position that the variable energy charge collects too high of an amount of demand-related costs. It asserts that the current residential rate design has a demand-related revenue problem: higher-use customers contribute more than their fair share of demand-related revenues. According to the Company, customers with similar demand-related costs, but varied consumption, do not contribute similar demand-related revenues. AIC states this rate inequity creates subsidies as the higher-use customers pay too much while the lower-use customers pay too little. AIC states, a change in rate design is necessary to curtail the inequity.

AIC asserts that the root of the revenue problem is the rate structure for the DS-1 and DS-2 classes. It states that the ECOSS separates delivery costs into three buckets: customer-related, energy-related and demand-related. AIC says that because there is not a separate charge to collect demand-related costs for these rate classes, costs must be collected through the fixed customer charge and the variable energy charge. The Company asserts that the current allocation of revenues between the fixed and variable components is not aligned with cost causation. According to Ameren, the record demonstrates that the existing rate design, for both the DS-1 and DS-2 classes, collects too high of a percentage of demand-related costs through the variable energy charge. It says that this disparity causes demand-related subsidies in that lower users are not contributing sufficient revenues to cover their respective demand-related costs.

AIC says the Commission faces a stark contrast in the proposals before it. The Company states that on the one hand, the Commission can choose consistency with the prior rate design order. That choice, AIC explains, means adopting the rate design of Staff, the AG, or CUB/EDF. AIC states that the path of consistency, however, ignores the new, quantified evidence in the record that demonstrates that both the current rate design and the proposals of Staff, the AG and CUB/EDF do not and will not produce cost-based rates. The Company argues their proposals would make the revenue problem worse. According to Ameren, the proposals that seek to increase the revenues recovered through the variable energy charge will increase the subsidy from higher users to lower users.

AIC states that the correct choice is for the Commission to adopt the Company's rate design. It asserts that the Company's rate design improves on the collection of DS-1 and DS-2 revenues by slightly increasing the amounts collected through the fixed customer charges. AIC insists that this path will adequately and fairly recover demand-related revenues from the customers who cause the demand-related costs. This path, AIC states, will also proactively implement an efficient pricing of the grid to address issues with the integration of innovative investments on the customer side of the meter, such as potential revenue erosion due to the adoption of distributed energy resources ("DER").

AIC notes that the General Assembly recently found that Illinois should encourage: "the adoption and deployment of cost-effective distributed energy resource technologies and devices, such as photovoltaics, which can encourage private investment in renewable energy resources....," citing Ill. P.A. 99-0906 (1)(a)(1). AIC believes that before significant DER investments are made, the Commission should approve a rate

design, which will ensure to the greatest degree possible, that regulatory changes do not result in outcomes materially different from those that investors intended and assumed. It contends that the residential rate design approved in this proceeding will inform the future investment decisions of Illinois residents. Ameren asserts that now is the time to proactively regulate to prepare for the future growth in customer generation investments.

According to the Company, the substantial weight of the evidence supports its contention that 40% of distribution delivery costs for the DS-1 and DS-2 classes must be collected through the fixed charges on customers' electric bills to produce cost-based rates. AIC states that this rate design will allow the fixed customer charge to reflect a portion, approximately 18% for the DS-1 class, of demand-related costs. AIC maintains that the change is necessary to collect revenues from DS-1 (and DS-2) customers in a manner consistent with their demand-related costs.

AIC states that Staff's, the AG's, and CUB/EDF's proposals, and even the current rate design approved in Docket No. 13-0476, are inferior alternatives that do not produce a cost-based solution. It asserts that the proposed customer charges reflect too small of a percentage of demand-related costs, or in the case of the AG's and CUB/EDF's proposals, no amount at all. AIC maintains that even Staff's proposal wrongly supports the eventual recovery of all demand-related costs through the energy charge. AIC states that a rate design that recovers all demand-related costs through the variable energy charge will exacerbate the revenue erosion from lower consumption due to technological advancements, and in the end, the customers who will not or cannot change their usage will be most affected.

Ameren asserts that the evidence proves that its rate design is the superior, cost-based proposal. It maintains that the record does not contain empirical evidence or a credible policy reason that justifies the recovery of all demand-related costs through the energy charge. According to AIC, cost causation, energy efficiency concerns, and bill impacts favor or otherwise support the adoption of AIC's rate design. The Company maintains that the other proposed rate designs ignore the established and unrefuted fact that a customer's demand is less varied (and more constant) than his or her consumption. If adopted, AIC states, these other rate designs would cause higher users in the DS-1 and DS-2 classes to pay a disproportionate share of the class's demand-related costs.

AIC insists that the subsidization of low-use customers by high-use customers must no longer be sanctioned. AIC maintains that the Commission should recognize that, in a two-part rate structure without a demand charge, a portion of demand-related costs must be recovered through the fixed customer charge to produce cost-based rates. AIC asserts that without a cost-based solution, the demand-related revenue problem will only worsen, as AIC's customers continue to lower their consumption and some even generate their own power. AIC states that the Commission must act now to end the subsidized DS-1 and DS-2 rates for lower use customers.

### **(i) The Record**

The Company asserts that this record is much different from the record in Docket No. 13-0476. AIC rejects the Staff/Intervenor arguments that the Commission should rule consistently with the Orders in that proceeding. AIC asserts that the more essential

principle is that of cost causation. AIC maintains that it is the principle of cost-based rates that should lead the Commission to approve AIC's rate design. AIC reasons that if the consistency principle was always the deciding factor, then the Commission would have never decreased the fixed customer charge in the last rate design case.

AIC notes, in that proceeding, the Commission requested "further analysis" and "a more robust, substantive record," if it were asked to revisit the methodology for recovering residential revenues through the fixed and variable components of the bill. AIC states it heeded that request and that the record in this case is more robust. AIC asserts that the new, quantitative evidence demonstrates that the Commission must change course. AIC reiterates that by slightly increasing the amount of revenues collected through the fixed customer charge, AIC's rate design produces DS-1 and DS-2 rates more closely aligned with the cost of service. AIC insists that an improvement in the collection of demand-related revenues warrants a decision that deviates from the prior order.

### **(ii) Cost-Based Delivery Rates**

AIC emphasizes that since the restructuring of electric rates, the Commission repeatedly has reinforced the principle of cost causation: a customer's rate must have a basis in the cost to deliver service. AIC notes that the Act articulates this principle, citing Section 16-108(c), which provides, "Charges for delivery services shall be cost based, and shall allow the electric utility to recover the costs of providing delivery services through its charges to its delivery service customers that use the facilities and services associated with such costs." AIC says that the challenge for the Commission is how to best design the fixed and variable charges for DS-1 and DS-2 rates to fairly recover demand-related costs from the customers who cause them, when the two-part rate structure for these classes does not contain a demand charge.

AIC avers that the importance of cost-based rates to the collection of revenues cannot be overstated. It emphasizes that without a cost basis, a class, subclass or group of customers will pay more than its fair share of delivery service costs. AIC notes that the Commission historically has sought to move rates closer to costs. AIC states that the Commission favors the elimination of inter-class and intra-class subsidies, and it does not want customers to pay more than their cost of delivery service. AIC states that it is confident that the Commission recognizes that rates not grounded in a cost basis can cause a utility to incur a revenue shortfall, or collect the shortfall from other customers. AIC maintains that the Commission's decision on this issue must seek an end to subsidized DS-1 and DS-2 rates for lower use customers.

AIC notes the Commission conclusion in the Order on Rehearing in Docket No. 13-0476, that it was adopting a residential rate design for electric delivery rates that it believed had a greater emphasis on cost causation. AIC asserts that the evidence submitted in this proceeding requires the Commission to revisit that decision. The Company maintains that the current DS-1 rate design does not result in cost-based delivery rates. It explains that the higher use residential customers are paying too much, and the lower use customers are paying too little. AIC maintains that a change in rate design is necessary to eliminate this subsidy.

AIC states that although the current residential rate design for delivery rates has a two-part rate structure, the ECOSS, which functions as a guide to ratemaking, classifies delivery costs into three buckets: customer-related, energy-related and demand-related. AIC states that the challenge for residential rate design is how best to collect the third bucket of costs, the demand-related costs in the two-part rate structure, so that the revenues from the customer's bill offset his or her share of delivery costs. AIC claims that the existing rate design does not adhere to cost causation in the recovery of demand-related costs. The Company says the rate design is not allocating enough demand-related costs to the fixed customer charge. AIC proposes a higher percentage of fixed cost recovery to better reflect customer demand. AIC maintains that the other parties' proposals exacerbate the problem because they seek to further reduce or eliminate the amount of demand-related costs collected through fixed charges.

AIC emphasizes that the Commission is not being asked to rule on the appropriateness of residential demand charges in this case. It explains that although other rate classifications (DS-3, DS-4 and DS-6) have a three-part rate structure with demand charges that more easily map the costs classified in the ECOSS, no party to this proceeding has proposed a transition to a three-part rate structure for the DS-1 or DS-2 class. Instead, AIC states, the Commission is being asked to replicate the effect of a residential demand charge, as best as possible, with the two rate components available.

Ameren says this would send a price signal that aligns with the cost causation for demand-related costs. The Company states that in Docket No. 13-0476, the implicit assumption was that the variable energy charge adequately represents a usage-based price signal for demand-related costs in the two-part rate structure. But, AIC states, that assumption is mistaken. The Company states that the separate classification of demand-related and energy-related costs in the ECOSS is telling. It explains that two residences of similar size in the same neighborhood and construction vintage may place a similar demand on the system, but have very different energy consumption based on the behavior and lifestyle of the individual end-users. It asserts that while there is variation in the electric end uses present from house to house, there is much more variability in the frequency and duration of the operation of those end uses that are driven by lifestyle and behavior differences.

AIC maintains that an energy charge, by itself, is not an adequate substitute for a demand charge to ensure that demand-related costs are fairly allocated and collected from the customers who cause them. The Company states its empirical analysis of actual customer demand and energy consumption, based on 2014 and 2015 load research data, demonstrates that residential energy consumption is more variable than demand. AIC explains that the randomly selected, statistically representative samples of AIC residential customers showed variations in monthly consumption greater than the variations in monthly demand. AIC asserts that the ComEd customer data offered by CUB/EDF, once corrected to exclude outliers, supports the same finding i.e., a higher level of variability associated with energy versus demand. Ameren says that no other witness in this case has offered quantitative evidence to refute this finding. Indeed, AIC states, the consensus of the expert witnesses in this proceeding is that energy consumption is more varied than demand.

The Company asserts that the evidence proves that monthly energy consumption varies more than demand. AIC then reasons that residential revenues from energy charges vary too much from customer to customer to be reflective of demand. AIC explains that if revenues from energy charges are not reflective of demand-related costs, then collecting all DS-1 demand-related costs through the variable energy charge, in a two-part rate structure, cannot produce cost-based residential delivery rates. AIC insists that the logic in this reasoning is beyond reproach. AIC disputes the Staff, AG, and CUB/EDF claim that their rate design proposals move rates “closer” to the results of the ECOSS and that AIC’s rate design proposal is “at odds” with the ECOSS. The Company asserts that, in the absence of a demand charge, a portion of demand-related costs must be collected through the fixed customer charge for the DS-1 and DS-2 classes. AIC avers that the lowering of fixed charges approved by the Commission in Docket No. 13-0476 must be reversed.

AIC disputes claims that its rate design considers demand-related costs “less important” and “de-emphasizes demand.” The Company argues that, on the contrary, the Staff and Intervenor proposals send a price signal that variations in demand are less important than variations in usage, and de-emphasize demand.

The Company maintains that increasing revenues collected through the fixed charge tells the customer that a higher level of costs incurred by the utility in providing service is considered constant, independent of usage. AIC complains that no reasonable, alternative price signal has been proposed. AIC asserts that increasing the revenues collected through the fixed customer charge sends the right price signal, regardless of whether the individual customer is aware of the rationale for the change. It repeats that pushing all demand-related costs into the variable energy charge sends the wrong price signal. AIC explains that including all the demand related costs in the variable energy charge tells the customer that their individual demand does not matter. AIC insists that the differences in demand affect the cost of service and should be recognized.

Ameren criticizes the analysis presented by Mr. Ruben in direct testimony. It states that the most serious flaw with the AG’s direct case analysis is that Mr. Rubin, relied on hypothetical costs that do not reflect or even remotely resemble, AIC’s actual costs. The Company argues that Mr. Ruben's analysis was completely discredited by Mr. Wills' rebuttal testimony. AIC explains that Mr. Rubin's hypothetical costs are based on a mismatch between 2015 unit costs and 2014 coincident peak (“CP”) demands. Mr. Wills asserts that application of the unit cost per kW of demand from one year to loads from another year will not, and did not, produce a reasonable reflection of the cost to serve those specific demands. AIC states that the mix of the infrastructure investments implied by Mr. Rubin’s math is not consistent with the infrastructure that AIC has built to deliver service. AIC complains that Mr. Rubin did not address its criticisms of his study in rebuttal.

AIC states that just because demand and energy are both measures of “usage” does not mean that any variable charge available is the best option for collecting all demand-related costs. It asserts that the premise that demand is precisely correlated with energy consumption is faulty. If that were true, AIC maintains, usage and demand would always move exactly together. AIC says that it provided a hypothetical of two households, not to analyze the specific characteristics and behavior of the residents, but

to establish context for the drivers of demand and energy and insight into aggregate customer behaviors. AIC asserts that there is no disputing that load factors exist. AIC insists load factor differences impact the cost of service in a manner that makes variable energy charges alone fail to adequately and fairly allocate the demand-related costs.

AIC argues that the CUB/EDF contention is that, since there is “no other version of [a] variable rate,” demand-related costs must be collected through the energy charge. Yet, AIC argues, CUB/EDF admit that their own analysis proves that AIC’s rate design performs well “at reflecting cost causation with revenue allocation.” AIC states that it performs so well in fact that it has the “most customers with less than 5% deviation.” AIC explains that the 6.3% spread at the lowest level of deviation is compelling evidence that AIC’s proposal is closer to the cost of service for more customers. AIC maintains that it is not an all or nothing proposition, as the other parties suggest. AIC states, after reviewing this analysis, CUB/EDF suggest that cost causation is not the main goal to consider.

AIC disputes CUB/EDF’s complaint that, under AIC’s proposal, “customers have marginally less influence on the long-run scale of the utility.” AIC states this is not true. AIC asserts that the Company’s rate design proposal appropriately reflects the cost of service in bills and promotes more efficient utilization of the system infrastructure. AIC states that there may be other ratemaking mechanisms available, such as a residential demand charge, which are more effective in sending the correct price signal to promote reductions in long-run cost. But, AIC asserts, its proposal is the best option available in this case to ensure that bills are most reflective of cost.

### **(iii) Quantitative Evidence**

AIC states that the undisputed evidence in the record proves that consumption is considerably more varied from customer to customer than demand. AIC concludes that if consumption varies more than demand, then revenues from energy (i.e., consumption) charges are not reflective of demand-related costs, and collecting all demand-related costs through the variable energy charge cannot produce cost-based rates. AIC maintains that some portion of demand-related costs must be collected through the fixed customer charge to produce bill impacts and utility revenues more consistent with demand. AIC states that allocating a portion of demand-related costs to the fixed customer charge will temper variability and produce bill impacts and utility revenues more consistent with the nature of residential demands. The question, AIC states, is not whether, but how large of a portion, of demand-related costs should be included in the customer charge.

AIC asserts that the ECOSS does not mandate that only customer-related costs can be reflected in the customer charge, particularly when only two rate elements exist to collect three classifications of costs. Absent a demand charge, AIC explains, the options are a continuum from 100% recovery in the customer charge, to 100% recovery in the energy charge, and anywhere in-between. AIC states that the empirical evidence shows that the most optimal cost-based solution lies somewhere in the middle, i.e., the allocation of a portion of demand-related costs to each charge. AIC maintains that the customer data shows that a residential rate design with a slightly higher percentage of delivery costs

allocated to the fixed customer charge does a better job of mimicking the bill impacts of a demand charge.

To determine the amount of demand-related costs to allocate to the customer charge, AIC states it has synthesized an amount of revenue or bill variability reflective of the actual variability exhibited by customer demand. Using the randomly selected, statistically representative samples of customers, based on 2014 and 2015 load research data, AIC states, it designed a hypothetical summer demand charge and derived sample summer bills. For comparison, it explains, it calculated a second set of sample summer bills, with different percentages of fixed costs collected in the customer charge. AIC states that the analysis shows that the percentage of fixed cost recovery in the customer charge most aligned with demand charge recovery is 40%. AIC points out that the AG's own analysis, once corrected and recasted, further supports the finding that the Company's proposal to collect 40% of the revenue requirement in fixed charges most closely aligns bills with the cost of service. AIC insists that the quantitative evidence demonstrates that Staff's and Intervenors' proposals to reduce the amount of demand-related costs in the customer charge move rates further away from cost.

AIC disputes the AG and CUB/EDF criticism that the sample for its analysis is too small. Ameren states that the sample is a well-designed representative sample, capable of producing class level estimates, with the appropriate margin of error and confidence level. AIC explains that the crux of its proposal is that variations in energy and demand need to be understood and analyzed to determine the right mix of fixed and variable charges to collect demand-related costs in a two-part rate structure. AIC states that the analysis of how much of each charge should be used to collect demand-related costs is a quintessential load research question. Moreover, the Company asserts, once Mr. Rubin's analysis is corrected, the results show that AIC's proposal to collect 40% of the revenue requirement in fixed charges fares the best out of the rate design proposals made in this case. AIC states that the statistical measures in evidence show that its proposal is the closest to reflecting the actual cost of serving customers, of any rate design proposed in this case.

AIC insists that for the DS-1 class, the percentage of the revenue requirement recovered in fixed charges must increase slightly from the current level of 36.4%. The 40% increase of fixed charges, allocates only a portion of demand-related costs, approximately 18%, to the fixed customer charge and the remainder, approximately 82%, to the variable energy charge. The Company maintains that it is not an all or nothing proposition. It asserts that the demand-related costs can and should be allocated between the fixed and variable portions of the bill.

Under its proposal, the Company says, the large majority of demand-related costs are still included in the variable energy charge; customers who place more demand on the system will still pay more of the costs. AIC explains that the 18% of demand-related costs allocated to the customer charge, however, will cause the total resulting revenues to reflect a similar amount of variability to customer demand; the higher use customers will not subsidize lower use customers. AIC denies the other parties' claim that lowering the customer charge, in a two-part rate structure, moves rates closer to the results of the ECOSS. AIC insists that the only cost-based design is the Company's proposal.

AIC asserts that the record evidence demonstrates that the percentage of fixed cost recovery most closely aligned with demand charge recovery is 40%. AIC states the Company's analysis supports this finding. It asserts, the AG's analysis, once corrected, supports this finding as well. AIC concludes that 18% of demand-related costs, not 0% as the other parties suggest, should be allocated to the fixed customer charge to produce cost-based rates for the DS-1 class.

#### **(iv) Energy Efficiency Incentive**

The Company dismisses Staff's and Intervenors' suggestion that a lower fixed customer charge, if approved, would further encourage energy efficiency. AIC asserts that the empirical evidence demonstrates that AIC's proposal has only a negligible impact on energy efficiency. AIC concedes that the Commission believed that the current rate design was consistent with the General Assembly's intent to promote energy conservation in Docket No. 13-0476. But, AIC insists the weight of the evidence strongly suggests that belief was mistaken; the promotion of energy conservation is not a justifiable basis for lowering the customer charge.

AIC asserts that a two-part rate design, where all demand-related costs are pushed into a variable energy charge, provides the same price signal every hour of the month and year and that it is too strong of a signal. AIC explains that under the current rate design and Staff's and Intervenors' proposals, at any given hour, the customer has the same incentive to reduce both peak load and consumption. AIC emphasizes that this scenario does nothing to promote better system utilization, higher load factors and lower unit costs. AIC states that distribution system costs do not change in any time horizon due to changes during low usage or off-peak time periods. AIC reasons that a price signal that places too much emphasis on the energy charge in a manner not grounded in cost, however, may promote load reductions at times that are easier for customers to achieve, with little impact on peak periods. AIC says that the result of such a price signal may be poorer load factors, more periods of under-utilized system capacity, and higher unit costs over time. AIC insists that this price signal does not promote efficient pricing of the cost and benefits of future grid investments, including the integration of DER.

AIC states that the record in this proceeding does not contain any evidence that supports the suggestion that adoption of its proposal, creates a disincentive for energy efficiency or any other technology. AIC provides a number of rationales to support its position that it would be inappropriate to adopt a rate design that deviates from cost to favor energy efficiency. First, the Company explains, a higher variable charge is not necessary to encourage customers to conserve energy to obtain bill savings. AIC notes that most demand-related costs (82%) are still included in the variable billing unit, under AIC's proposal. It concludes that customers still have considerable opportunity to control their bill based on the variable charges in delivery rates, power supply and other riders. Second, AIC maintains, putting too much emphasis on the energy charge potentially gives DS-1 customers the ability to lower their bill to a level that is lower than the cost of service. AIC submits that this scenario leaves a shortfall of revenues that must be collected from other residential customers. Third, the Company asserts that the role that the distribution system must play in rapidly integrating new and innovative energy-related technologies makes delivery rates a poor choice for subsidies. AIC states that there must be efficient

pricing of the grid to allow technologies to compete on a level playing field and deliver the expected benefits in a cost-effective manner. Fourth, the Company asserts that the economic case for energy efficiency is already compelling; further incentives embedded in delivery service rates are not necessary. Fifth, it says, utility energy efficiency programs offer an opportunity to adjust incentives as needed to encourage participation, if bill savings are an insufficient incentive. Lastly, AIC states that the role of the distribution system in integrating new and innovative technologies makes delivery rates a poor choice for energy efficiency subsidies. AIC insists that this would not promote the efficient pricing of the costs and benefits of future grid investments, including the integration of DER.

AIC states that the record demonstrates that the quantifiable impact of the Company's proposed rate design on the incentive for using energy efficiently is insignificant. It submits evidence that its proposal would extend participant payback of the average energy efficiency measure by less than a month. AIC explains that the change from the current rate design to AIC's proposal reduces the variable price signal reflected on the customer's total energy bill by less than two percent. AIC maintains that this small change in the total of variable charges translates into a negligible impact on the economic value of energy efficiency investments. AIC states that the change in rate design under AIC's proposal would extend the expected participant payback of the average energy efficiency measures by approximately 8 days. When compared to the AG's proposal of 26.4% of costs in the customer charge (the proposal furthest removed from AIC's in this case), the Company states that the expected participant payback is extended, on average, to 28 days. AIC argues that there is no evidence that shows that these minor differences would materially affect customer participation. AIC insists that there is also no evidence that the differences in the rate design proposals will induce significant enough behavior changes among any customers to reduce usage.

AIC states that these figures demonstrate the pragmatic reality that any proposal to design residential delivery rates to theoretically support energy efficiency will not have a material effect. The Company notes that neither Ms. Harden nor Mr. Rubin disputed the accuracy of AIC's payback calculations, and they offered no opinion on the effect of any change in delivery rates on customer payback of and participation in energy efficiency programs. AIC argues that Mr. Zethmayr also concedes that he has not performed his own analysis of AIC's energy efficiency portfolio. The Company says that Staff and Intervenors have not shown that their proposals or the current rate design will lead to or has led to either a reduction in energy usage or an increase in energy efficiency. AIC concludes that there is no factual basis to the suggestion that AIC's rate design somehow will make residential customers more inefficient and conserve less. As such, AIC maintains the goal of energy efficiency should not determine the appropriate DS-1 rate design. In addition, AIC suggests, this scenario creates a price signal that promotes load reductions at times that make little impact on peak periods.

AIC avers that allocation of 82% of demand-related costs to the energy charge and 18% to the customer charge is the superior cost-based rate design proposed in this proceeding. This fact alone, AIC maintains, regardless of other policy considerations, is sufficient to warrant adoption of AIC's proposal.

**(v) Undue Bill Impacts**

AIC states that any revenue-neutral change to rate design inherently will benefit some customers at the expense of others. AIC asserts that the overarching goal is to make sure that the change produces impacts that move bills closer to the cost of service in a manner that does not result in rate shock. AIC states that the Company's proposed rate design, which increases the fixed charge revenues to 40% of total class revenues, would modestly reduce the disparity between customers who cause similar demand-related costs. AIC explains that for the hypothetical examples of the large family (15,000 kWh) and the single professional (7,500 kWh), who cause similar demand-related costs on the system, the annual estimated bill impacts of AIC's proposal are minimal: an \$8 savings (for the family) and a \$4 increase (for the professional). The Company states that although lower use customers likely will see an increase to delivery bills under its proposal, this is because they are not currently paying their fair share of demand-related costs. Ameren insists that the impact of its proposal will not exceed approximately \$1.50 per month for any residential customer.

AIC states that in addition, by lowering the amount of costs recovered through the variable energy charge, its proposal provides justified price relief for winter space heating bills and summer cooling bills. AIC asserts that the overwhelming majority of space heating customers, for whom the Commission was concerned in Docket No. 13-0476, fare better under its proposal. AIC emphasizes that increasing the revenues collected in the variable energy charge, as proposed by Staff and Intervenors, only increases the seasonal bill pressures on the higher use space heating and summer cooling customers. AIC argues that the evidence shows that its proposal moves rate design closer to cost without causing rate shock. It states the bill impacts on a dollar basis for higher use customers are much more extreme under the AG's and CUB/EDF's proposals to recover all demand-related costs through the energy charge.

Ameren dismisses the claim that Staff's proposal would provide stability in rates. It asserts that the significant reduction in revenues collected through fixed charges, which Staff proposes, would cause customer bill impacts. AIC states that if the Commission (or Staff) wanted rate stability, it would adopt (or propose) the status quo (36.4% fixed cost recovery).

AIC agrees that its proposal would raise the annual bills of low-use customers, who tend to have lower peak demand, while lowering the bills of customers with the highest peak demand. AIC explains that is because the existing rate design currently subsidizes the rates of lower-use customers. AIC asserts that it is allocating demand related costs to customers who place higher demand on the system. The Company explains that its proposal is trying to reset the balance. It states that the higher users in the DS-1 and DS-2 classes are bearing responsibility for too large of a share of demand-related costs already. In response to the suggestion that other ratemaking tools could be used to protect high-use customers, like space heat customers, AIC says, any ratemaking solution that gives space heat customers rate relief would shift revenue responsibility to other customers.

AIC states it provided evidence of the bill impacts that lower-use customers would face, if the Commission adopted its proposal. It states that the impact of AIC's proposal will not exceed approximately \$1.50 per month for any residential customers. AIC contends that its proposal accomplishes the goal to make sure that the change in rate design produces impacts that move bills closer to the cost of service in a manner that does not result in rate shock.

Ameren asserts that neither the claim that its proposal will have a disproportionate impact on low-income communities, nor that the Commission will have "no idea how low-use customers" will be affected are supported by the record. AIC points out that CUB/EDF's own analysis of ComEd customer data shows inconsistencies across different subgroups of the low-income population studies, and inconsistencies across the entire population of low-income customers between years. AIC states that the data, even if it were applicable to AIC's service territory, shows an inconclusive or extremely weak relationship between income and usage. AIC maintains that the conclusion that low-income customers may broadly benefit from a lower fixed charge is not supported. AIC submits that there is no evidence that any of the rate designs would result in systematic improvement in low-income customers' situations. AIC adds that the record, however, contains estimated impacts by usage, and even the impacts experienced under its design by most lower-use customers would be minimal.

AIC criticizes the AG's analysis which shows bill impacts on a percentage basis rather than an absolute dollar basis. AIC argues that the absolute dollar values are informative. AIC states that the lowest-use customer's bill (95th percentile) decreases \$45 per year under the AG's proposal, but increases only \$16 per year under AIC's proposal. AIC states that the highest-use customer's bill increases \$53 per year under the AG's proposal, but decreases only \$19 per year for AIC's proposal. AIC denies the AG's claim that the least severe rate impacts for space heating customers occur under the AG's proposal. AIC insists that the overwhelming majority of space heating customers fare better under the Company's proposal and that the potential for summer cooling bill complaints would also be lessened. AIC denies that its analysis is missing impacts of atypical small-use and large-use customers. The Company asserts that it provides the full distribution of bill impacts on an absolute dollar basis for the population of AIC customers with 12 monthly bills in 2015. AIC concludes that the Company proposal does not cause rate shock.

#### **(vi) Proactive Rate Design**

AIC states that the changing nature of the grid continually influences the relationship of the cost of serving different groups of customers and the recovery of revenues from them, depending on the technologies adopted and deployed. The Company asserts that its residential rate design addresses these innovative changes proactively. It states that it does not want to discourage the adoption of any specific technology, through its customer charge proposal. AIC states that the design ensures efficient pricing of the grid to allow technologies to compete on a level playing field and to be integrated in a manner that reflects both the costs and benefits that they bring to the system. AIC insists that the consequences of failing to consider rate design changes proactively in the face of technological innovation and adoption can be quite severe. It

asserts that a reactive change in regulation (e.g., new net metering structure) can erode the value of customers' energy-related investments.

AIC believes that the residential rate design approved in this proceeding will inform the future investment decisions of Illinois customers. AIC explains that the most obvious example is investment in DER. AIC reasons that under two-part rates, DER can reduce and shift recovery of costs under variable charges by significantly reducing usage. AIC maintains that any reduction in revenue due to the deployment of DER, not offset by a related decrease in costs, inevitably will result in higher rates for all customers the next time rates are reset. AIC states that if the Commission approves a change in rates to recover more costs through a variable rate, more costs may be shifted from DER customers to non-DER customers. AIC explains that customers considering investments in DER may evaluate the payback period under the assumption that reduced usage will result in a greater reduction in overall utility bills. AIC submits that a future change in rate design, such as the adoption of a demand charge or a higher fixed charge, to reduce the impact of the shifting of costs onto non-DER customers, can invalidate the economic analysis supporting the customer's investment in DER technology.

AIC argues the Commission should approve a rate design, before significant DER investments are made. It asserts this would ensure to the greatest degree possible that regulatory changes do not result in outcomes materially different from the outcomes that investors intended and assumed. AIC explains that by only slightly increasing the recovery of costs through the fixed charge for DS-1 customers, AIC's proposed rate design avoids exacerbating potential DER cost shifts and indicates to customers considering DER investments that fewer distribution system costs may be avoided through DER adoption. In contrast, AIC points out that Staff's and Intervenors' rate designs will increase the cross-subsidies resulting from the shifting of more costs onto non-DER customers.

The Company argues that in a regulatory framework with net metering, where only customer-related costs are included in the customer charge, revenues from DER customers will not cover their cost of service. In that circumstance, Ameren asserts, DER customers would continue to contribute meaningfully to the demand on the system. But it says if they were billed under net metering with no demand-related costs included in the customer charge, there is the potential that they would pay no demand-related costs. The Company states that neither Staff nor the Intervenors have challenged this finding. AIC insists only its rate design proposal produces the appropriate economic signals for future DER investment.

The Company states that the arguments, that its proposal to shift costs from DER to non-DER customers is premature and arguments that emphasize the current pace of installation of private solar generation and DER investments, overlook the value of preemptive regulatory action. AIC claims that a reactive change in regulation (e.g., new net metering structure) can erode the value of private investment. AIC explains that a regulatory framework with net metering and only customer-related costs in the customer charge produces revenues for DER customers that will not cover their cost of service. AIC asserts that its proposal is not at odds with the promotion of DER investment, but that it is trying to deal with that investment in an equitable manner. AIC maintains that

the other parties' proposals do not produce the appropriate price signals for future DER investment, and for this additional reason, should not be adopted.

### **(vii) Transition to Demand Charges**

AIC states that, as no party has proposed a three-part rate for DS-1 and DS-2 customers, the bill impacts associated with movement to a hypothetical demand rate do not need to be resolved in this case. The Company says the Commission can assess the details of that type of rate structure in a subsequent proceeding, if and when it is proposed. However, AIC offers that one benefit of its proposal in this proceeding is that the design creates the potential for an easier change to a three-part rate, which would include demand charges, if that structure is ever approved. AIC insists that by adjusting the two-part rate structure to send a price signal that more closely aligns demand-related revenues with demand-related costs, the Commission will replicate the effect of a residential demand charge as best as possible with the rate components available. AIC states that designing a two-part rate likely to produce the smallest possible bill impacts relative to a demand charge would smooth the future transition to an actual residential demand charge.

AIC denies that Staff's proposed DS-1 rate design would provide a more stable customer charge and less change if a demand charge were implemented. AIC states that the opposite is true. The Company says that its proposal of a 40% fixed charge falls squarely in the middle of the range for the DS-1 class for at least the last seven years; every other proposal seeks to significantly reduce the fixed charge percentage. If rate stability was an overriding concern, AIC argues, the other parties would propose the status quo (36.4%). Ameren states, if cost-based pricing means that demand-related costs are collected partially in the customer charge and partially in the energy charge, removing more costs from the customer charge will necessarily increase the potential for cross-subsidies. AIC insists that only its proposal lessens that possibility.

AIC says that no party disputes the notion that a demand charge inherently would do a better job, than either a customer or energy charge, at reflecting demand-related costs in rates. But, the Company states, because the creation of demand charges is not under consideration in this proceeding; the Commission must work within the constraints of the two-part rate structure. AIC explains that if a demand charge was implemented, there would be a reduction in the fixed customer charge, if any demand costs were still collected through it. But for every rate design proposal here, AIC states implementation of a demand charge would result in a reduction in the variable energy charge to remove demand-related costs. The Company asserts that the record demonstrates that if DS-1 and DS-2 demand charges eventually come to pass, the bill impacts of moving to demand charges likely will be the smallest under its proposal.

AIC asserts that the assumption that, in the future, the Commission will approve residential demand charges is not the cornerstone of its proposal. The Company denies that its justification for its proposal to shift demand charges to the customer charge is to transition toward the eventual adoption of demand charges. AIC maintains that it is asking the Commission to approve a rate design that will produce cost-based rates. Ameren reiterates that the principle of cost causation, by itself, supports the adoption of its design.

Thus, AIC reasons, it is not necessary to know the details or bill effects of a future demand charge or how customers will understand and respond to demand charges.

**b. Staff's Position**

**(i) DS-1**

Staff recommends decreasing the fixed-cost recovery in the customer and meter charge for DS-1 from the current 36.4% to 30%. Staff asserts that its proposal would move closer to the results of the ECOSS. It states decreasing the fixed-cost recovery is consistent with the Commission's conclusions in the last rate design case. In Staff's view, this change would send the proper price signal to customers, provide stability in rates, and help eliminate cross subsidies.

Staff asserts that the Company's analysis is flawed and its proposal would move away from the results of the ECOSS. It notes that Ameren's rate design proposal for DS-1 is based on the data of 224 residential customers. Staff says the Company used the load research data from an analysis of these customers to propose a rate structure for collection of demand charges through the current rate design of customer and distribution delivery charges. Staff states that the Company proposes increasing the fixed costs in the customer and meter charge from the current 36.4% to 40% for the three years of this rate design docket for DS-1, based on the hypothetical summer demand charge Mr. Will's developed from data.

Staff disagrees with the Company's rationale that increasing the amount of demand-related costs recovered through the customer charge would more closely mimic a bill that includes a separate demand charge. Staff asserts that AIC's proposal would not send a demand-related price signal to customers because customers would be unaware that the bill is intended to mimic a demand charge. Staff maintains that recovering more costs through the customer charge, which is fixed and does not vary from customer to customer, and fewer costs through a distribution delivery charge, which varies from customer to customer, would send a price signal indicating that varying costs such as usage and demand charges are less important than those that do not change from customer to customer. In Staff's view, a price signal which de-emphasizes demand could actually hinder the eventual implementation of demand charges.

Staff challenges Ameren's argument that targeting a residential rate design that is likely to produce the smallest possible bill impacts relative to a demand charge may smooth the transition to an actual residential demand charge in the future. Staff maintains that smoothing the transition to demand charges is irrelevant when Ameren has not committed to proposing residential demand charges. Staff notes Mr. Will's testimony that AIC would be able to contemplate the possibility of transitioning to residential demand charges once its AMI deployment is complete.

Staff criticizes the Company's bill impact analysis, saying there are too many unknowns for the analysis to be a justification for changing the rate design. Staff explains that, even if Ameren were to propose demand charges in the future, the actual bill impact of implementing those charges would vary from customer to customer depending on how a customer's usage compares to that customer's demand. Staff says the bill impact would

also depend on how well customers understand and respond to demand charges. It reiterates that these are unknowns at this time. Staff says that the Company's analysis assumes that customer behavior would not change, although one argument for demand charges is the hope that such charges would motivate customers to change their behavior and adopt more energy-efficient practices.

Staff notes that in Docket No. 13-0476, the Commission found policy reasons for adopting a rate design with greater emphasis on traditional ratemaking principles like cost causation. Staff observes that the Commission found that the rate design it adopted encouraged residential customers to reduce energy usage and increase energy efficiency. Staff submits that the Commission discontinued the shift toward a greater SFV rate structure, finding the shift would move away from the results of the COSS.

**(ii) DS-2**

Staff recommends decreasing the fixed-cost recovery in the customer and meter charge for DS-2 customers from the current 33.2% to 28%. Staff asserts that, as with the DS-1 rates, this recommendation would move closer to the results of the ECOSS. Staff says that the Company recommends changing the cap of the fixed-cost recovery from 50% to 40% while maintaining the current rate design. Staff explains that the Company's recommendation for DS-2 is based on the same idea as its proposal for DS-1: to maintain a rate design that can transition to incorporate demand charges in the future. Staff maintains that cost-based rates send the proper price signals to customers, can provide stability in rates, and help to eliminate cross-subsidies.

Staff states that although the DS-2 rates have a similar rate design to DS-1, the last rate design docket set an automatic increase of 2.5% fixed-cost recovery per year with a cap of 50% of the revenue requirement to be derived from the DS-2 customer and meter charges. Staff explains that, based on the last rate design docket, the fixed charges for DS-2 would move to 35.7% from the proposed rates of the Company's current formula rate update and move to 38.2% after the results from the 2017 formula rate update are implemented. Staff notes that inherent in its recommendation is elimination of the current automatic annual 2.5% increase. Staff asserts that the automatic increases serve only to further move rates away from the results of the ECOSS. Instead, Staff recommends fixed-cost recovery be set and remain at 28% for the three-years the rate plan will be in effect. Staff reiterates that the automatic increase to DS-2 should be discontinued.

**c. AG's Position**

**(i) Docket No. 13-0476**

The AG asserts that the Commission's directives in its Final Order and Order on Rehearing in Docket No. 13-0476 have a direct and profound bearing on this case. It notes that Ameren had proposed a rate design, which would have meant that 50% of the utility's revenue requirement for residential customers would have been recovered through fixed charges. The AG recounts that Mr. Rubin, testifying on behalf of the AG, had recommended that approximately 28% of the utility's costs be recovered through the meter and customer charges. The AG notes the Commission rejected Ameren's proposal

and a similar proposal in the ComEd rate design, Docket No. 13-0387. The AG observes that the Commission adopted the AG's recommendation to move away from SFV rates because the high percentages of fixed costs associated with such rates: (i) are not consistent with cost causation; (ii) frustrate the General Assembly's goals that persons use less energy and invest more in energy efficiency; and (iii) that ComEd's and Ameren's respective financial risks have been alleviated because of the annual formula rate update process, with reconciliations and return-on-equity "collar" guarantees, authorized by Section 16-108.5 of the Act.

The AG notes that the Commission also rejected Mr. Rubin's recommendation because of concerns about rate shock for space heating customers. The AG says that on rehearing, the AG and Ameren argued their respective positions best reflected cost causation. The AG observes the Commission decision on rehearing reiterated its decision to move away from SFV rates and, due to lingering concerns about rate impacts on high-use customers, adopted a Staff alternative that moved the percentage of fixed costs halfway between the AG's and AIC's respective proposals. The AG asserts that the clear takeaway from the Commission's Final Order and Order on Rehearing is that the Commission endorsed the AG's recommendation that fixed costs represent a lower percentage of DS-1 customers' bills.

**(ii) Consistency with Docket No. 13-0476**

The AG states that in this proceeding Mr. Rubin recommends a rate design that would recover about 26.4% of costs to serve residential customers through the fixed meter and customer charges. The AG avers that Mr. Rubin's recommendation is consistent with the objectives the Commission endorsed in the 2013 case. It explains that the meter and customer charges are derived from the customer-related costs shown in Ameren's ECOSS and are thus cost-based. The AG maintains that by basing his charges on actual costs, Mr. Rubin's proposed level of fixed-charge recovery does not inappropriately discourage energy conservation and investments in energy efficiency.

The AG opines that Staff's recommendation also complies with the Commission's Orders in Docket No. 13-0476. Mr. Rubin states his proposed customer and meter charges are fully justified. But, he recommends, in the event the Commission adopts Ms. Harden's proposal, that the Commission adopt a rate design whereby the fixed cost percentage decreases over the next three years so that the charge is cost-based when AIC submits its next Section 16-108.5(e) rate design filing. He explains that the Commission could set the fixed charge percentage at 30% in the first year, 28.5% in the second year, and 27% in the third year the rate design established in this case is in effect.

The AG notes that Mr. Zethmayr also relies upon the Commission's Orders in Docket No. 13-0476 and concurs with its conclusion that lower fixed charges promote energy conservation and energy efficiency investment. The AG adds that Mr. Zethmayr recommends that the Commission set fixed cost recovery at 28% of total costs, the level the AG recommended in the 2013 case.

The AG asserts that while all other parties submit proposals that move closer to the results of ECOSS, Ameren's recommendation moves farther away. The AG opines that AIC's proposal to collect 40% of its residential customer costs through fixed meter

and customer charges directly contradicts the Commission policy sanctioned in its orders in Docket No. 13-0476. The AG argues that for that reason alone, Ameren's proposal does not warrant consideration in this case.

### **(iii) Demand Rate Analysis**

The AG challenges the Company's interpretation of the Docket No. 13-0476 Orders. In particular, it notes Mr. Wills' opinion that the Orders assume that, "because demand and energy are both a type of customer 'usage' measure, the energy charge adequately represents a 'usage' based price signal for demand-related costs." (Ameren Ex. 1.0, 28) The AG says that, based on that understanding, Mr. Wills' rate design is similar to a demand charge, using a two part rate design to allocate demand-related costs to the energy and customer charges. The AG agrees with Ms. Harden that Mr. Wills' proposal would result in summer bills that would imitate the impact of the hypothetical bills, for many customers, if a demand charge was implemented.

The AG states that while Ameren's proposed DS-1 rate design is supposed to mimic a demand rate, there is in fact no demand rate in place. Thus, it asserts, whatever the purported benefits of a demand-based rate, it is impossible for customers to realize such benefits. The AG concurs with Staff's conclusion that the hypothetical demand charge would not send price signals about demand because the customer would not be aware of it, but would send a price signal indicating that varying costs such as usage and demand charges are less important than those that do not change from customer to customer.

Citing AG Cross Exhibit 1, the AG says Mr. Wills admitted that "a volumetric (energy) charge does not provide an incentive to specifically reduce peak usage" and that "reductions in energy consumption from customers where the hour was not closest to the highest-usage hour of the month would not result in savings of delivery service charges other than Electric Distribution Tax charge savings."

Responding to Ameren's assertion that its proposal would smooth the future transition to an actual residential demand charge, the AG notes that Ameren has not committed to proposing demand charges in the future. The AG says that Mr. Wills acknowledges that Ameren may never recommend that demand charges be imposed. It states that even if AIC were to propose demand charge-based rates, there is no guarantee that the Commission would approve them. The AG asserts that it is presumptive to provide for a "transition" to a future that may never occur.

The AG notes Mr. Wills' characterization of the pace of innovation of energy-related technologies, as rapid, continual and unavoidable. In response to the Company's assertions that residential demand charges are becoming a viable option and reference to ongoing discussions in states that have had considerable penetration of private solar generation, the AG asserts that AIC's examples of states with "considerable penetration" include California, Arizona, Hawaii, and Nevada, where residential solar net generation ranges from 80 to around 400 to around 3,000 gigawatt-hours ("GWh") annually. The AG contrasts Ameren, which says it currently has 411 residential customers and 132 commercial customers with private solar generation, which it does not consider to be considerable penetration. The AG asserts that the 5.7 megawatts of distributed solar

generation capacity in Ameren's territory, if they ran at full capacity all day long and all year long, would produce around 50 GWh annually. The AG says that notwithstanding the alleged ongoing discussion in other states related to residential demand rates, Ameren admitted in discovery that it is not aware of any utility in the United States with compulsory or default demand rates for residential customers.

The AG notes Mr. Wills' suggestion that that too strong of a variable price signal may promote DER, rates place all demand-related costs into an energy charge, resulting in a shift of distribution costs to other customers. The AG asserts that this is an unfounded concern about the longstanding principle of cost-based rates. It states that the Company admitted that, under the status quo DS-1 rate design, net metered DER has been growing in Ameren's service territory by less than 100 customers and 100 megawatts annually in recent years, leading to an alleged cost shift that the Company considers "immaterial" in any event. The AG observes that Mr. Wills does not have any opinion as to what would be the optimal pace of DER installation in Ameren's service area. The AG asserts this lack of opinion undermines Mr. Wills' insinuation that the growth of DER is something that Illinoisans and the Commission should fear.

Mr. Rubin criticizes the AIC proposal, saying it does not change the rate design to make cost recovery fairer to all customers. He states that the Company's proposal moves residential customers further away from the cost of service. The AG asserts that this is in contradiction of the Orders in Docket No. 13-0476. Mr. Rubin states that Ameren provided no analysis or evidence showing that its proposal establishes or promotes cost-based rates. He concludes that AIC's proposal frustrates that objective by moving residential rates further away from the cost of service.

Mr. Rubin also takes issue with Mr. Wills basing his cost recovery proposal on an analysis of 224 residential customers for whom AIC had a year of demand data. Mr. Rubin rejects the premise that 224 customers fairly represent approximately one million customers. He complains moreover that the Company's analysis focused on one way of designing demand rates, ignoring the myriad other ways in which such rates could be designed. Mr. Rubin says, for example, that demand rates could vary by season; they could be constant in each month, and so on. Mr. Rubin notes that Mr. Wills offers only one example: a demand rate that varies by season with the summer rate being 39% higher than the non-summer demand rate. Mr. Rubin complains that Mr. Wills makes no effort to explain that his preferred demand rate design reflects the cost of serving residential customers, which is the fundamental criterion that should be used in assessing the propriety of a proposed rate design.

Based upon the data for the 224 customers, Mr. Rubin presents eight rate designs for collecting the cost of service. The AG explains that he used the rebuttal revenue requirement in Ameren's most recent formula rate update case, Docket No. 16-0262. Under that assumption, Mr. Rubin asserts that approximately \$128,422 would be collected from the 224 customers. The eight rate designs are designed to collect a similar level of revenues. Mr. Rubin's rate designs are:

- Annual: collects customer-related costs through the customer charge and meter charge; collects demand-related costs through a rate of \$6.61 per kW applied to each month's peak demand;
- Summer +25%: collects customer-related costs through the customer charge and meter charge; collects demand-related costs through demand charges that are 25% higher in the summer months (June through September) than in the remaining months;
- Summer +50%: same as Summer +25% except that the summer demand rate is 50% higher than the non-summer rate;
- Summer +100%: Same as Summer +25% except that the summer demand rate is 100% higher than the non-summer rate;
- 40.0% Fixed: collects 40% of revenues through the customer and meter charges; remaining costs are collected through per-kWh charges that are proportionate to present rates;
- 36.4% Fixed: collects 36.4% of revenues through the customer and meter charges; this is the status quo residential rate design approved by the Commission in Docket No. 13-0476;
- 26.4% Fixed: collects 26.4% of revenues (the percentage of fixed costs in AIC's ECOSS) through the customer and meter charges; remaining costs are collected through per-kWh charges that are proportionate to present rates; and
- Summer Incline: same as 26.4% Fixed, except that an inclining block rate is used in the summer months, with usage in excess of 800 kWh per month being charged 25% more than the rate for the first 800 kWh.

After determining that each of his eight hypothetical rate designs collected revenues close to the \$128,422 figure, Mr. Rubin calculated the amount of revenues each of the 224 customers would pay under each of the eight rate designs as well each customer's contributions to the cost of serving the residential class.

The AG states that the results of his analysis demonstrate that the hypothetical rate designs based on energy consumption (kWh) do a better job of achieving cost causation goals than do demand-based rate designs (kW). Mr. Rubin asserts that of the rate designs based on energy consumption (kWh), those rate designs that reflect the ECOSS, which he says are those designs with fixed costs near 26.4%, are the best performers. Mr. Rubin notes that because the sample size is so small, each customer

represents approximately 4,000 customers. Thus, he says, a difference of five customers would mean that 20,000 customers are better (or worse) off under a particular rate design.

Mr. Rubin performed three statistical analyses on his eight hypothetical rate designs to further assess how well each rate design collects costs from the 224 customers relative to the costs of serving each customer. The AG asserts that the statistical analyses show that the rate designs based on consumption (kWh) do a better job of collecting revenues closer to the cost of serving each of the 224 customers than do the rate designs using a demand charge.

The AG says that Mr. Rubin reviewed the rate impacts of the various rate designs and found that rate designs using a demand rate (kW) have far more negative rate impacts than consumption-based (kWh) rate designs. Mr. Rubin asserts that the results show that demand-based rates would result in rate decreases of more than 40% and in rate increases of more than 55% in certain scenarios. He maintains that consumption-based rate designs have far less extreme impacts on customer rates. He states that, of the consumption-based rate designs he examined, the proposal to collect 26.4% of the costs to serve residential customers through the fixed meter and customer charge had the least extreme impacts. Mr. Rubin states that, under that proposal, no customer would see a rate change of more than 5% and lower-use customers would get rate decreases.

The AG says that, in light of the Commission's concerns in the Docket No. 13-0476 Orders, Mr. Rubin looked at the rate impacts of his eight hypothetical rate designs on space heating customers. The AG notes that space heating customers are not identified in Mr. Wills' 224 customer sample, but states that Mr. Rubin looked at usage patterns and identified 27 customers as likely being space heating customers. The AG asserts that the results demonstrate that the rate impacts of demand-based rates are far more extreme than the rate impacts under consumption-based rates. It says that under those rates, certain of the likely space heating customers would see rate decreases of almost 40% while others would see annual rate increases of more than 50%. The AG maintains that the least severe rate impacts for likely space heating customers are under the consumption-based design where fixed costs are set consistent with the results of Ameren's ECOSS. The AG maintains, in that scenario, no likely space heating customer would see a rate increase of more than 5%.

Mr. Rubin challenges the Company's criticisms of the AG's analysis. He indicates that to replicate the AG's analysis, Mr. Wills relied upon 2015 usage data from 190 customers, taken from an Ameren load research study with a margin of error of  $\pm 10\%$  at a 90% confidence interval. He states that while Mr. Wills used this information to compare costs to revenues for these 190 customers, Mr. Wills did not perform a bill impact study of Mr. Rubin's eight hypothetical rate designs.

Mr. Rubin finds the small sample size Mr. Wills used in the analysis to be problematic. He states that the source from which Mr. Wills took his sample, a load research study, also raises concerns. Mr. Rubin explains that a load research study is designed to describe the usage characteristics of a customer class. In his view, a small sample size with a large margin of error may be appropriate for a load research study because such an analysis does not have to be precise or have to consider atypical customers. But, he maintains, when designing rates, it is imperative that the bill impacts

on atypical customers are considered. Mr. Rubin asserts that bill impacts on small-use and large-use customers will determine whether particular rate designs are acceptable or not acceptable. Thus, he opines, Mr. Wills' analysis is missing crucial information.

To demonstrate the importance of this point, Mr. Rubin compares the billing data for all of 2012, which he used for his testimony in Docket No. 13-0476 and the load research sample Mr. Wills included in his analysis. Mr. Rubin provides a graph of residential consumption for the 2012 data and Mr. Wills' 190-customer sample. Mr. Rubin asserts that his graph shows that the 190-customer sample does a reasonable job of replicating usage for about 90% of all residential customers, customers from the 5th through the 95th percentiles, although it apparently underrepresents the number of high-use customers.

Mr. Rubin asserts that the graph shows that Mr. Wills' 190-customer sample completely fails to consider any customers at the extremes, i.e., customers below the 5th percentile and customers above the 95th percentile. Mr. Rubin notes that in Mr. Wills' sample, the lowest-use customer used 1,223 kWh per year whereas in the 2012 data, more than 7,700 customers used less than 1,000 kWh. He states that, similarly, the highest-use customer in Mr. Wills' sample used 41,628 kWh, while in the 2012 data, more than 2,000 customers used more than 45,000 kWh. Mr. Rubin reiterates that while customers at the extreme may not be important for load research purposes, they are crucial when designing rates.

To illustrate the importance of considering customers at extreme usage levels in designing rates, Mr. Rubin analyzed the bill impacts on such customers under his proposed rate design, which would recover 26.4% of residential customer costs through fixed charges, and Ameren's rate design proposal which would recover 40% of such costs as fixed charges. Using the 2012 usage data, Mr. Rubin found that customers using between 250 and 750 kWh would experience a 21% rate decrease under his rate design - annual delivery service bills would drop from \$211 to \$166 annually. He indicates that such customers would experience a 13% rate increase under Ameren's proposed rate design - bills would go from \$211 to \$238 annually.

Mr. Rubin found that for high-use customers, the results are reversed. Under Mr. Rubin's proposed rate design a customer using 45,000 kWh would see a 9% increase - the annual bill would go from \$1,792 to \$1,952. Under Ameren's recommendation, high-use customers rates would decrease by 5% - delivery service bills would drop from \$1,792 to \$1,695.

Mr. Rubin asserts that Mr. Wills' workpapers confirm Mr. Rubin's rate impact results. He says his proposal to collect 26.4% of residential revenues through fixed charges has the least extreme bill impact of the rate designs examined, with no customer receiving a rate increase of more than 7%. Mr. Rubin states that all other options include some customers receiving rate increases of at least 10%. The demand-based rate options show the most extreme results, with some customers receiving 40% rate decreases while others receiving increases of 100% or greater.

The AG concludes that Mr. Rubin's analyses show that demand-based rates do a far worse job of collecting costs from cost causers than do consumption-based rates. The

AG reiterates that demand-based rates have far more extreme rate impacts than do consumption-based rates. The AG emphasizes that this is true for the likely space heating customers as well as the non-space heating customers in Mr. Wills' sample of 224 customers. The AG insists that Ameren's rate design proposal should be rejected. It asserts the Company's proposal is not consistent with the Commission's directives in its Docket No. 13-0476 Orders. The AG argues that the Company's proposal is premised on an assumption that demand rates will be proposed and adopted at some point in the future, which may never occur. The AG opines that the Staff and CUB/EDF proposals are consistent with the Commission's directives to move away from higher fixed costs for AIC's customers. The AG maintains that Mr. Rubin's proposal to collect 26.4% of residential customer costs through fixed charges best reflects the Company's ECOSS. The AG concludes that its proposal is, thus, most consistent with the cost causation principles the Commission endorsed in Docket No. 13-0476 and should be adopted.

**d. CUB/EDF's Position**

**(i) Ameren's Analysis**

CUB/EDF assert the Company's position that customer demand is essentially homogeneous to volume usage does not hold up to scrutiny. CUB/EDF criticize the AIC analysis because it used a small sample of customers. CUB/EDF complain that the analysis ignores the variation in customer demand and the relationship between volumetric usage and peak demand, as well as the difference between CP and non-coincident peak ("NCP") usage. CUB/EDF assert that using a hypothetical future demand charge as a reference point to compare bill impacts at different fixed charge levels is misleading and unconvincing. CUB/EDF maintain that accepting the bill impacts of the proposed fixed charge increase as a transition to mitigate rate shock from a shift to demand charges would only be reasonable if the Commission had already approved eventual implementation of demand charges, along with its attendant bill impacts. CUB/EDG emphasize that the Commission has not approved a future demand charge rate design, and no state utilities commission approved mandatory residential demand charges.

CUB/EDF assert that AIC's conclusion that peak usage is less variable than total monthly volumetric usage is flawed. CUB/EDF state that the only support the Company offers for its claim that fixed charges more appropriately capture demand-related costs than volumetric charges is data derived from a sampling of 224 customers and the Company's observation that appliance stock is fairly homogeneous from customer to customer. CUB/EDF challenge Mr. Wills' assertion that there is a "substantially" lower coefficient of variation for customers' monthly peak demand than for their monthly volumetric usage and the resulting conclusion that flat, fixed charges are a closer representation of the customer-to-customer variation in demand related cost causation than volumetric charges.

CUB/EDF identify two main problems with the study. CUB/EDF criticize the 224 customer sample, noting that Ameren serves over a million residential customers and that the study analyzed less than half of one hundredth of a percent of this customer base. CUB/EDF are critical of the Company's analysis because it supplies one coefficient of

variation measure for both variables for the whole year, despite seasonal differences in usage. CUB/EDF state that if the analysis combined all of the conversations into one computation rather than looking at monthly coefficients of variation, this could have produced a distorted result.

Mr. Zethmayr presents evidence that the coefficients of variation for volumetric usage and demand are very similar on a monthly basis. He analyzed residential usage data from ComEd customers in two sample sizes – first, using 2014 billing data for 100,000 anonymous customers and second using 2015 billing data for 655,000 anonymous customers. He states that the 2014 analysis compared customer bills from the 2013 Commission-approved ComEd rate design to four different demand charge designs with variable levels of fixed charge recovery. Mr. Zethmayr indicates that the other rate design used customers' CP values, comparing customer usage levels at the total system peak hours; the others used NCP values based on the maximum kilowatt delivered ("MKD") methodology, which measures the highest level of usage a customer reaches during non-holiday weekdays during a given month.

Mr. Zethmayr says his research showed that, while controlling for customer subclass, consuming 100 more kWh in a given month is associated with an increase in peak MKD assessment of between 0.31 and 0.48 kW. He asserts that on a percentage basis, 100 kWh and 0.31 – 0.48 kW represent similar levels of variation from the mean. He states that when these levels of variation are translated into demand charge bill effects, the relationship becomes very clear. Mr. Zethmayr explains that when ComEd's 2015 volume usage rates are replaced with demand charges and there is no change to the fixed charge level, the model produced a difference of 100 kWh and 0.31-0.48 kW of peak MKD resulting in very similar monthly bill differences. He said his research suggests that volume usage is a more appropriate proxy for demand-related costs than a fixed charge, because on average, a difference in volume usage is associated with an equivalently sized, and equivalently priced, difference in demand.

Based on this research, Mr. Zethmayr concludes that volumetric usage and demand are closely correlated on a monthly basis, especially when customers are segmented between multi-family/single-family premises and space heat/non-space heat premises. He concedes that his analysis used data from the ComEd service territory, but maintains that any circumstantial differences that may exist between ComEd and Ameren customers would be smaller than the considerable difference in confidence intervals between these two analyses.

CUB/EDF assert that there are problems with AIC bolstering its conclusions regarding usage and demand based on its hypothetical of two households with very different usage characteristics having the same level of peak demand. CUB/EDF explain that according to this hypothetical, although a large family, with young children and a stay-at-home parent, has much larger volume usage than the single professional, who works long hours during the week, the two households have the same level of peak demand, thus incurring the same level of cost to the delivery system.

CUB/EDF question the premise, asserting there is a statistically significant relationship between volume and peak demand which means that it is unlikely that these two households would have the same level of peak demand. Mr. Zethmayr states that

the large hypothetical family, with much higher volume usage, would likely have a significantly higher peak usage than the single professional, relative to the existing variation in peak demand. He adds that if demand charges replace volumetric charges with no change in fixed charge recovery level, the difference in the two households' delivery bills would likely be similar to what it is today, depending on the demand charge design.

CUB/EDF note that the Company's scenario ignores the timing of the two households' peaks, which has an effect on system costs. CUB/EDF state that even if the two households had the same demand, the same demand would not mean they incurred the same costs to the delivery system. CUB/EDF explain that the young professional's peak usage is likely to occur outside of the system's peak hours. CUB/EDF assume that working "long hours" means starting their day very early in the morning, and getting home from work in the late evening, possibly having already eaten dinner. By contrast, CUB/EDF say, delivery system weekday peaks tend to occur in the mid-to-late morning and early evening, as the greatest number of customers are starting their day and getting home from work. CUB/EDF reason that the young professional's peak demand would occur during the off-peak period, when the marginal cost to the system is much lower. CUB/EDF conclude that this customer's CP, is likely to be significantly lower than that of the large family. CUB/EDF assert that many electricity economists consider this as a better measure of a customer's contribution to delivery system costs than NCP. CUB/EDF maintain that even if the hypothetical customers had the same NCP as the scenario describes, the large family with higher usage would still be responsible for a greater proportion of demand related costs than the young professional, and would be responsible for a greater share of cost recovery.

CUB/EDF assert that Ameren overstates the difference in variation between demand and usage. CUB/EDF state that Mr. Wills presents the coefficient of variation for consumption at 18% higher than demand, but according to Mr. Zethmayr, when the values are disaggregated by month, the two values are generally closer than that, and track with each other on a seasonal basis. Mr. Zethmayr asserts that, by providing one annual comparison, Mr. Wills overstates the difference between demand and consumption variation.

## **(ii) Demand Charge Impacts**

CUB/EDF dismiss Ameren's demand charge comparison asserting that the small sample limits its value in predicting the impacts of any transition to higher demand charges. CUB/EDF challenge the Company's argument that fixed charge recovery of 40% of the revenue requirement best represents demand charge recovery, noting the argument is based primarily on the percentage of customers with annual bill effects of less than plus-or-minus \$50. CUB/EDF assert that when the percentages are converted into the raw number of customers in the study, the difference in the number of customers affected by the two rate designs is at most, eleven individual customers. CUB/EDF maintain that because of the small number of customers represented, there are too few individual observations to draw conclusions about the Company's total customer base. CUB/EDF state that with a study of only 224 customers to begin with, it is unlikely any

result could be conclusive. CUB/EDF note that Ameren's comparison metric does not include information as to which customers experience which bill effects.

CUB/EDF find the Company's argument that raising fixed costs will mimic the bill effects of a demand charge is flawed. CUB/EDF note that AIC's analysis is based on the billing differences between a hypothetical demand charge design and the current design with several different levels of fixed charge recovery. CUB/EDF assert that a hypothetical demand charge design is not an appropriate benchmark for comparison because it has not been approved by the Commission. CUB/EDF state a demand charge would entail its own suite of bill effects above and beyond those resulting from the Company's proposed rate design, which themselves would require detailed consideration before acceptance. CUB/EDF complain that the Company includes no details about these total bill effects from the hypothetical demand rate. CUB/EDF say the Company provides no details at all about the hypothetical demand charge design, except for the size and distribution of its billing differences from various fixed/volumetric designs.

CUB/EDF assert that the primary bill effect of a shift to demand charges is to increase the annual bills of customers with low load factors, and lower the bills of customers with high load factors. CUB/EDF explain that load factor is the ratio of average usage to peak usage; a high load factor is one where peak usage is closer to average usage. CUB/EDF assert that its analysis shows that the customers who would be paying more under the existing rate design than they would under a demand rate likely have better, i.e., lower, load factors than the customers who would pay less. CUB/EDF say this result runs counter both to the goals of instituting a type of demand charge in the first place and to Ameren's arguments that raising a fixed charge is necessary to recover demand-related costs.

CUB/EDF emphasize that the distribution and magnitude of the bill effects are highly dependent on the details of the demand charge design. Mr. Zethmayr looked at three different NCP demand charges and one CP demand charge, and found the magnitude of bill effects from the NCP designs to be more muted. He indicates that even within a "NCP" design, the impacts vary based on when the NCP is assessed. He explains that comparing NCP demand charges based on average daily peaks for the whole month rather than on a customer's highest single daily peak caused the same distribution of bill effects but with lower magnitude effects at the extreme tails of that distribution. CUB/EDF observe that the Commission has no information on what type of demand charge could be or should be instituted in the future. Thus, CUB/EDF conclude there is no basis for assuming Ameren's proposal to increase its fixed charges now is necessary or appropriate.

### **(iii) Adverse Rate Impacts**

Mr. Zethmayr's analysis shows that low-income customers in the ComEd service territory tend to have lower usage and higher load factors than the general population. He says that this suggests that the majority of low-income customers in the Company's service territory likely fall into the lower-use portion of customers who would see their bills go up with higher fixed charges. CUB/EDF state that these customers are particularly vulnerable to rate shocks because they already pay a much larger proportion of their

overall income on utility bills, rate shocks have a particularly large effect on their household budgets. CUB/EDF emphasize that the \$1.50 per month increase posited by Mr. Wills may sound insignificant, but for low- or fixed-income customers who must budget every dollar they spend, a hike in their fixed customer charge represents money they cannot save for other household uses.

CUB/EDF state that although AIC's presentation of annual bill effects for customers at various usage levels seems, at first glance, to indicate that few low-use customers would see an increase and that higher use customers would see decreases, the tables do not indicate how many customers each reference usage level represents. CUB/EDF note that the only reference level showing an increase in bills is the lowest level, at 5000 kWh per year, where customers would see their bills go up \$4 a year. CUB/EDF emphasize that rate design is a zero-sum game. CUB/EDF say that despite an overall 1.1% decrease in residential cost recovery, if the other customers in the tables are seeing savings as high as \$82 per year, that transfer has to come from somewhere. CUB/EDF assert that without some indication of the percentiles these usage levels represent, the Commission has no idea how low-use customers are affected, and cannot evaluate the appropriateness of the proposal from a bill impact perspective.

CUB/EDF maintain that management of the fixed charge is not an appropriate tool for protecting space heat customers as Ameren would suggest. CUB/EDF describe fixed charges as a blunt instrument that affects all customers equally, regardless of any consumption decisions they may make. CUB/EDF submit that Ameren could propose other ratemaking tools to protect space heat customers from excessive bill impacts. CUB/EDF suggest, for example, if space heat customers are put into a separately allocated rate class within the DS-1 segment, the Company could apply lower volumetric rates that would more appropriately match those customers' annual usage patterns. CUB/EDF explain that in this way, space-heat customers with lower usage relative to other space-heat customers would see lower bills, and the class as a whole would be protected from extreme rate shock. CUB/EDF say that another example would be making use of the existing declining-block rate for non-summer months, which has the effect of lowering the average volumetric rate for high-use customers. CUB/EDF state that if the Company wishes to protect space heat customers without defining a separate rate class for them, it could increase the difference between the two rates.

#### **(iv) Benefits of a Lower Fixed Charge**

CUB/EDF recommend lowering Ameren's fixed charge because assigning demand related costs according to their actual allocation among customers allows the rate design to recover customer-related costs at the level of their actual share of system costs. CUB/EDF reiterate Staff's and the AG's arguments supporting a decrease to the fixed charge. Mr. Zethmayr found that lowering fixed charge recovery increased the share of customers seeing savings on an annual basis, particularly low-use and low-income customers. He states, raising the fixed charge would raise the bills of lower use customers, without regard for customer load factor. Mr. Zethmayr asserts that this sends the wrong price signal to consumers by reducing the incentive to conserve or improve load shape. He states that raising the fixed charge moves the Company's rate design further from the principle of cost-causation, not towards it.

CUB/EDF assert that shifting residential cost recovery from fixed charges to variable rates incentivizes customers to use less electricity, which in turn lowers the overall cost of electricity over time by decreasing both costly peak generation and the scale of future grid investments. CUB/EDF opine that energy conservation will likely also play a role in helping Illinois achieve any carbon reduction goals. CUB/EDF state that for consumers, lower fixed charges allow for greater control over electricity bills, an important consideration for low-income communities. CUB/EDF argue that as more of the Company's customers are connected to AMI, lower fixed charges amplify the degree to which customers can benefit from the innovative efficiency technologies and alternative pricing programs that AMI makes possible.

CUB/EDF say, based on the Company's most recent ECOSSE from Ameren's most recent formula rate update case, Docket No. 16-0262, the metering and customer related costs allocated to all residential customers add up to only 19% of the total revenue requirement. CUB/EDF note the reason the Commission gave for rejecting the AG's rate design in its Order on Rehearing from Ameren's last rate design investigation was that the magnitude of bill impacts that would have resulted from such a large reduction of the 44.8% fixed charge recovery. CUB/EDF state that in the Orders from Docket No. 13-0476, the Commission recognized legitimate policy reasons for adopting a rate design that better followed the principle of cost causation and encouraged residential energy efficiency. CUB/EDF assert that in this docket, the benefits of the 28% fixed charge design still hold true in comparison to the current rate design: better recognition of cost causation, with a higher incentive for customers to reduce consumption. At the same time, it states, the bill impacts of transitioning to a 28% rate design have effectively been cut in half.

Mr. Zethmayr presents his own proposed rate design. It begins with the same total residential revenue requirement as the Company's proposal, including the 1.1% decrease from the total recovery proposed in Docket No. 16-0262. Mr. Zethmayr kept the metering charge and Rate Zone-specific EDT recovery rates the same as the Company's proposal. He calculated what total fixed charge recovery would be at 28% of total recovery, minus "other" revenues, and subtracted metering revenue to arrive at a total customer charge recovery value. To find the new variable charges, he subtracted the new fixed charge level subtracted from the total recovery level, less "other" revenues, and then subtracted EDT recovery, which equals the total recovery amount to be recovered through volumetric delivery charges. To keep the relationship between the different \$/kWh delivery rates constant, a proportion of total recovery for each type of kWh under the proposed design was calculated, applied to the new total delivery value, and divided by their respective numbers of projected kWh delivered. He states that the resulting rate design keeps the 1.1% reduction in total residential recovery, holds metering and EDT charges from the Company's proposal constant, and shifts customer charge recovery into \$/kWh delivery rates that have the same tiered structure as the Company's proposed rates, and are identical between Rate Zones.

Mr. Zethmayr states that Mr. Wills responds with several different analyses comparing individual cost of service to revenue recovery through various rate designs in an attempt to justify a 40% fixed charge. Mr. Zethmayr maintains that Mr. Wills' analysis,

however, belies his very point that a higher fixed charge is any better a reflection of individual demand cost than either the status quo fixed charge level (36.4%) or a level matching the ratio of customer- and meter-related charges in the Company's ECOSS.

Mr. Zethmayr compared Mr. Wills' distribution analysis of the status quo, the Company's proposal in the instant case, and Mr. Rubin's proposed design. He maintains that Mr. Wills' own analysis demonstrates that the Company's proposal does no better than the current rate design in matching individual bills with their costs of service.

CUB/EDF assert that regardless of the quantitative difference in the relationship between individual cost and revenues between the proposed rate designs, the Commission should also consider the policy arguments to be made for lowering the fixed charge as a movement towards, not away from, cost-based rates. CUB/EDF maintain that customer- and meter-related charges are constant from customer to customer, explaining that one customer incurs the same amount of cost for the utility as another, regardless of how they make use of the electric grid. CUB/EDF say a customer has no control over how much the utility must spend to take care of the services covered under these functionalizations. CUB/EDF argue that variable charges, fundamentally, cover those portions of utility services that customers can choose to consume. CUB/EDF assert that regardless of whether the variable usage is measured in kW or kWh, it should be billed according to the proportion of embedded costs that are incurred by a customer's actual usage. CUB/EDF say that without this distinction, customers have marginally less influence on the long-run scale of the utility going forward.

#### **(v) Prospective Rate Designs**

CUB/EDF observe Mr. Wills' testimony that the optimum rate design for residential customers is a three-part rate design featuring a demand charge. CUB/EDF state that, although the Company does not propose the use of a demand charge in this case, it proposes to recover a higher proportion of costs through a fixed monthly charge in order to produce results similar to the results that would occur under a demand charge. CUB/EDF protest, stating that Ameren overlooks the many serious questions surrounding the use of demand charges in the residential sector. CUB/EDF assert that any mechanism to transition to such a charge is premature.

CUB/EDF claim that Ameren is proposing to raise fixed charges to solve a problem that does not exist yet. Ms. Munns testifies that she is not aware of AIC experiencing any changes that would necessitate such a rate design change now. She notes that Mr. Wills refers to an ongoing national discussion about residential demand rates. But, she says, as he acknowledges, that dialogue is largely occurring in states with considerable penetration of rooftop solar generation installations, leading to a debate about cost shifting. Ms. Munns says that Mr. Wills specifically mentions other states, but does not indicate the proposed rate design changes are justified by changes occurring in the AIC service territory.

CUB/EDF agree that a national conversation on rate design in a world where utilities confront high levels of distributed energy resource penetration is beginning. Ms. Munns notes that the National Association of Regulatory Utility Commissioners

("NARUC") has recognized the increasing importance that rate design issues have on policy development across the states, most notably as it applies to DER.

Ms. Munns indicates that change is expected in Ameren's customer usage as a result of DER and falling prices. But, she says, as the NARUC manual points out, the adoption rates of various new technologies will occur at different paces and will vary across the country depending on customer base and geographic region. Ms. Munns agrees with Mr. Wills, that it will be more appropriate to contemplate a transition to demand rates after completion of the AMI meters. She says that reforms that are not well thought out could set policies and implement rate designs that have unintended consequences. She states that contrary to the suggestion that demand charges are becoming a viable option for electric utilities today, there is ongoing, vigorous contention surrounding the use of demand charges for the residential class.

Ms. Munns notes the pages of discussion that the NARUC manual devotes to design issues surrounding demand charges as evidence of the many questions policy experts nationally have around their design and implementation of demand charges for residential customers. CUB/EDF say that Ameren's support for a future demand charge appears to be that the Company currently has demand charges for three rate classes (DS-3, DS-4, and DS-6) and that the metering functionality for application of demand charges to DS-1 residential customers is currently being deployed. Ms. Munns points out that there are many unknowns and much uncertainty surrounding the use of demand charges on classes other than commercial and industrial ("C&I"), mainly regarding customer impacts. She says, for example, "A Review of Alternative Rate Designs," Rocky Mountain Institute, May 2016 ("Review"), found that the impact of demand charges on C&I customers cannot be extrapolated to mass-market sectors because the behavior and decision-making processes of C&I customers are significantly different. CUB/EDF say that according to the Review, empirical data on impacts of residential charges on customers' energy usage and adoption of distributed energy resources is lacking. Therefore, CUB/EDF assert, conclusions about the transferability of demand charges to the residential sector (or the inevitability of demand charges once metering is deployed) should not be accepted by this Commission.

Ms. Munns disagrees with Mr. Wills' assumption that the short-run demand-related costs of the distribution system are all fixed in nature. She asserts that his conclusion ignores the many decisions to be made in crafting a demand charge. Ms. Munns asserts that there has been no opportunity to discuss the details of demand charge design and there is no consensus that AIC's design decisions are appropriate. Ms. Munns recommends the Commission follow the recommendations contained in the NARUC manual to make sure that the implications of any rate design changes are considered based on the unique circumstances of each jurisdiction. She asserts that it would be premature to make a rate design change based on the expectation or anticipation that demand charges will be instituted in the future and in the manner proposed by Ameren. She states that once Ameren has meters in place to provide more specific data, the Company can make a proposal and there can be reasoned discussion about it. Given the potential unintended consequences, such as potentially discouraging customers from

investing in distributed energy resources, or making investments in DER, any changes in rate design must be based on evidence of how they will impact each utility's customers.

Ms. Munns testifies that Ameren's proposal does not send a price signal that aligns with cost causation for demand related costs. She maintains that AIC's proposal would, in fact, send signals to customers that are in conflict with previously stated goals of encouraging residential customers to reduce energy usage and increase energy efficiency. Ms. Munns recommends that the Commission should not make any change without further study and investigation as to how such a change would further the goals of the Commission.

CUB/EDF assert that increases in the fixed charge portion of the bill and associated decreases in the variable charge would mute the price signal for energy efficiency. CUB/EDF do not agree that an increase to the fixed charge from 36% to 40% is too small to affect a price signal. CUB/EDF maintain that Mr. Wills' arguments conflate the determination of cost effectiveness of a measure within an efficiency program with the customer's motivation and incentive to respond to price signals for energy use. CUB/EDF state that an increase in the fixed charge would create consequences for incremental utility investment and for the environment. CUB/EDF explain that the increase would reduce the economic incentive for careful customer energy management practices and investment in energy efficiency measures by increasing pay-back periods.

CUB/EDF maintain that an increase to fixed charges at this time does nothing to advance the transition to demand charges and will negatively impact low income customers and energy efficiency measures. CUB/EDF assert that the record does not suggest whether Ameren is attempting to incent customers to manage peak load or even acknowledge peak load reduction as a goal. CUB/EDF warn that Ameren's proposal could result in uneconomic or inefficient price signals and incent additional usage. CUB/EDF say that lowering the fixed charges and raising the volumetric rates may send a more efficient price signal.

CUB/EDF reiterate that the fixed charge portion should be decreased from its present level, not increased. CUB/EDF emphasize that cost causation is only one of the goals to be pursued through rate design. CUB/EDF maintain that with fixed charges already too high, increasing the fixed charge would exacerbate the negative effects it has on customer behavior. CUB/EDF assert that the Commission should deny AIC's proposal, in order to take the opportunity to set goals for rate design, explore how different designs can achieve cost recovery, and assess the impact of different rate designs, while attending to other social and policy objectives. CUB/EDF assert that the Company's rationale for raising fixed charges now is essentially to prepare customers for future rate design changes down the line.

#### **e. Commission Analysis and Conclusion**

As in the prior revenue-neutral rate design docket, the parties are in disagreement as to the allocation of the residential class revenue requirement between the fixed customer charge and the volumetric charge. Each of the parties asserts that their proposal is consistent with cost causation and would move rates closer to the ECOS. Ameren asserts that there is a demand-related revenue problem and proposes that the

revenue requirement allocation to the customer charge should be increased to reflect demand charges. Staff, the AG, and CUB/EDF propose that the revenue requirement allocated to the customer charge should be decreased, by varying amounts. The parties address the need for and the effect of moving some demand-related costs to the customer charge. They discuss potential rate impacts, and the effect of the proposals on environmental efficiency.

AIC explains that while the ECOSS separates delivery charges into customer-related, energy-related, and demand-related categories, rates are designed with two categories: the customer charge and the variable energy charge. The Company contends that, as currently designed, the rates collect too high of a percentage of demand-related costs through the variable energy charge and over-collect demand-related costs from the higher-use customers. The Company asserts that because demand charges are not as variable as the volumetric charge, a portion of demand charges should be collected in the customer charge. It emphasizes that increasing the amounts collected through the fixed customer charges, to reflect some demand-related costs, would smooth the transition to a residential demand charge. AIC says that demand rates are not being proposed, but that the rates should be re-designed to collect revenues from DS-1 and DS-2 customers consistent with their demand-related costs. AIC argues that the Commission should proactively implement a rate design to address innovative investments such as DER, which have the potential to erode revenue.

Staff proposes decreases to the allocation of the revenue requirement to the customer charge: a decrease from the current 36.4% to 30% for the DS-1 class and a decrease from the current 33.2% to 28% for the DS-2 class. Staff asserts that decreasing the fixed recovery charge is consistent with the decision in Docket No. 13-0476 and with the ECOSS. Staff challenges the Company's assertions that its proposal would smooth the transition to demand charges, noting that Ameren has not proposed or committed to propose demand charges. Staff criticizes the Company's bill impact analysis, saying there are too many unknowns for the analysis to justify a rate change.

The AG proposes, as it did in Docket No. 13-0476, that fixed customer charges should recover about 26.4% of the residential class' revenue requirement, consistent with the customer related costs in the ECOSS. The AG suggests that if the Commission adopts Staff's proposal to set fixed customer charges at 30%, it should incrementally decrease the allocation over the three years the adopted rate design is in effect. The AG asserts that lower fixed charges promotes energy conservation. It protests that demand charges are not in effect and asserts the Commission should not set a rate design to transition to demand rates which may never be in effect. Based upon its analyses, the AG maintains that rate designs using a demand rate have more negative rate impacts, even on space heating customers, than consumption based rates.

CUB/EDF propose lowering the allocation of the revenue requirement to be collected through the fixed customer charge. CUB/EDF suggest that allocation of 28% of the revenue requirement to the customer charge recognizes cost causation and provides a higher incentive for customers to reduce consumption. CUB/EDF dispute AIC's assertion that demand charges are not as variable as the volumetric charge and its conclusion that demand charges should be included in the customer charge. CUB/EDF

maintain that there is no justification for higher fixed charges now based on theoretical rate design changes. CUB/EDF emphasize that neither the Commission nor any state utilities commission have approved mandatory residential demand charges. CUB/EDF assert that the primary bill impact of a shift to demand charges is to increase the annual bills of customers with low load factors, and lower the bills of customers with high load factors. CUB/EDF argue that the rate impacts of the proposed change would fall most heavily on the low usage customers who already pay a much larger proportion of their overall income on utility bills and assert that rate shocks have a particularly large effect on their household budgets.

The Commission has carefully reviewed the record evidence, compared the analyses presented, and considered the arguments. The Commission finds the record does not support the proposal to shift the recovery of demand-related costs to the fixed customer charge. The Commission shares concerns about the potential impacts on the rates of lower usage customers and on the goal of increasing environmental efficiency. In light of the parties agreement that demand rates for residential customers would not be appropriate in the Ameren service territory at this time, the Commission does not find it appropriate to adopt a rate design in order to transition to or to limit rate impacts in the event demand rates are proposed in the future. The Commission finds that the evidence does not support increasing the portion of the revenue requirement allocated to the fixed customer charge for the DS-1 and DS-2 classes. The Commission finds that Staff's proposal to decrease the fixed-cost recovery in the customer and meter charge for DS-1 from the current 36.4% to 30% would send the proper price signal to customers, provide stability in rates and help to eliminate cross-subsidies. The Commission finds fixed cost recovery for the DS-2 class should be set and remain at 28% for the three-years the rate plan will be in effect.

## **2. Transition to Rate Uniformity**

### **a. AIC's Position**

AIC states that at the time of the merger of the three legacy utilities, it established rate zones that followed the historical boundaries of the legacy utilities and reflected the varying levels of embedded plant investment and expense among the legacy utilities. In the years since the merger, AIC states it has operated as a single utility and the distinction between its service territories has become increasingly artificial.

AIC notes, in recognition of the fact that the distinctions between rate zones were becoming obsolete, the Commission approved a process to transition AIC's rates to uniformity across rate zones in Docket No. 13-0476. Ameren indicates that 99% of its electric customers are in classes where rates are uniform across rate zones and 89.2% of its revenues are derived from charges that are uniform across rate zones. AIC notes that in 2016, the entire DS-1, DS-2, and DS-6 classes were charged uniform rates. AIC asserts only a few charges must still transition to uniformity: fixture and distribution delivery charges for DS-5 customers in Rate Zone I; distribution delivery charges for DS-3 customers served at primary voltage in Rate Zone III; DS-4 customers served at primary voltage; and DS-4 customers served at high supply voltage in Rate Zone II.

AIC proposes to transition each of these remaining non-uniform classes to uniformity over the course of the next three years. It proposes that in any situation where rates in each rate zone are within 10% of the class-average price, the rates in all rate zones will become uniform immediately. In all other situations, AIC proposes the transition to uniformity will occur in three steps, over three years. It explains that in the first year, charges in non-uniform zones will be moved one-third of the way to uniformity; in the second year, charges in those rate zones will be moved halfway from their then-current level toward uniformity; and in the third year, the charges in those zones will be made completely uniform. Under this proposal, AIC states that when it files its next rate redesign case three years from now, all rates for all customers are expected to be uniform.

AIC notes that IIEC expressed concern that the transition to uniformity might cause rates in the non-uniform classes to increase in amounts that exceed the rate mitigation criteria approved in Docket No. 13-0476. In response to the concerns raised by Staff and IIEC, AIC proposes an additional safeguard to protect customers against excessive increases in rates as a result of the transition to uniformity. It proposes a \$/kW ceiling for each of the three classes that have distribution delivery charges in transition to uniformity.

Mr. Wills states that three of the Rate Zone II subclasses (DS-3 Primary, DS-4 Primary, and DS-4 High Voltage) have distribution delivery charges that still need to become uniform. He explains that after the steps as originally proposed (performing the ECOSS, allocating costs, and adjusting the rates), the Company proposes that if the rate increase calculated for the proposed distribution delivery charges less the prior (or currently in effect) distribution delivery charges rate exceeds the established threshold, the movement to uniformity will be scaled back proportionally until either the increase equals the threshold value or no movement to uniformity has occurred. AIC proposes thresholds of \$0.208/kW for the DS-3 Primary subclass; \$1.209/kW for the DS-4 Primary subclass; and \$0.586k/W for the DS-4 High Voltage subclass. Mr. Wills explains the process for determining the values of the class specific thresholds. He states that the 2018 illustrative rates in this proceeding were premised on the revenue requirement in Ameren's most recent formula rate update case, Docket No. 16-0262, and implicitly assumed a zero overall rate increase. He states that the cap should accommodate the possibility of some system average increase before limiting uniformity, so he increased each value by 10%. Mr. Wills asserts that any overall rate increase that would drive the subclass specific rate to increase more than this value would be mitigated. AIC acknowledges that rate uniformity may be modestly delayed as a result of this additional safeguard, but maintains that the delay would be less pronounced than under IIEC's approach.

AIC notes IIEC's response that the additional safeguard is unnecessary and likely to unduly add complexity to an already complex rate moderation approach and its preference to constrain movement to uniformity within the existing mitigation parameters. AIC agrees that it is generally preferable to avoid unnecessary complexity. But, AIC explains that the complexity in its proposal is limited to a small subset of customers and situations, reiterating that approximately 99% of its customers are subject to rates that are uniform across rate zones. The Company adds that as rates become uniform, the "complex" calculations will no longer be necessary.

AIC disagrees with IIEC's characterization that the Company is proposing an additional mitigation criterion. AIC distinguishes this additional safeguard from the mitigation parameters in the revenue allocation phase. AIC emphasizes that it is not proposing to change or add any revenue allocation mitigation parameters. Instead, AIC explains, it proposes to change the manner in which rates will transition to uniformity over the coming years.

AIC contends its additional safeguard reasonably balances the competing considerations of efficiency in operations and regulatory oversight, against the principle of gradualism. AIC explains that there are three charges remaining that must transition to uniformity. For the DS-3 Primary subclass, AIC states, rates in Rate Zones I and II must increase 3.5% per year while rates in Rate Zone III must decrease by a similar proportion in order to reach uniformity. For the other two charges, DS-4 Primary in Rate Zone III and DS-4 High Voltage in Rate Zone II, AIC states its initial proposed method for transitioning to uniformity would require annual increases of approximately \$0.001/kWh above the rate dictated by the rate mitigation criteria. Mr. Wills opines that these incremental increases would not introduce rate shock. The Company asserts that the ceiling on rate increases that it proposes as an additional safeguard, would dampen even those modest increases.

AIC challenges IIEC's argument that authorization for its uniformity methodology ended because it did not present rate zone-specific cost of service studies in this case. AIC explains that although the uniformity transition process the Commission approved in Docket No. 13-0476 was predicated on the results of rate-zone-specific cost of service studies, for this proceeding the Company developed a single cost of service study that applies to all classes across all of its rate zones. AIC notes IIEC did not oppose its proposal to use a single cost of service study, and Staff supported it.

AIC explains that the change to a single cost of service study was the impetus for the revised uniformity methodology AIC proposes in this case. AIC states its current proposal is not dependent on zone-specific cost of service studies. The Company says that with a single cost of service study, it will not be possible to continue to use the uniformity transition process adopted in Docket No. 13-0476. Instead, AIC proposes a uniformity methodology that relies on fractional movement toward the result of the single cost of service study for the class. AIC states the fact that it has eliminated the redundant cost of service studies is not a reason that AIC's authorization to transition to uniformity should expire. AIC explains that it has proposed a method to continue the transition to uniformity, in light of the change in the cost of service study methodology.

AIC maintains its proposal is reasonable and measured, and will realize goals AIC has shared with the Commission over the many years since AIC was formed. AIC states that the rate mitigation criteria the Commission adopted in Docket No. 13-0476, coupled with its proposal for a ceiling on rate increases result in a reasonable transition to uniformity consistent with the public policy goals of gradualism and avoidance of rate shock.

#### **b. Staff's Position**

This issue is uncontested between Staff and the Company. Staff agrees that the Company's proposal to place a ceiling on rate increases for the charges that are still transitioning to uniformity would appropriately limit the impact of the resulting increases. Staff recommends the Commission approve the Company proposal.

**c. IIEC's Position**

IIEC opposes the Company's proposal to move rates to uniformity within the three year period that the rate design resulting from this case will be in effect. IIEC states that there is no deadline for reaching uniformity. It asserts that an extension of an additional year or more is appropriate to avoid rate shock. IIEC asserts that Ameren's move to uniform rates will not be complete by its proposed deadline, as it proposes to add a fourth prong to the test as described above and to continue some non-uniformity indefinitely.

IIEC states there is a fundamental problem with Ameren's application of the moderation constraints. It notes Ameren's proposed process for determining delivery service charges provides for additional systemic movement after the mitigation steps have been performed. It notes that the process anticipates that "[f]inal rates may reflect a larger or smaller rate change in a particular rate zone than the revenue allocation target applicable to the class or subclass due to additional movement toward rate zone uniformity as a later step in the pricing process." (See Ameren Ex. 1.1, page 2) IIEC states that application of the rate moderation criteria is one of the "steps above" that will be performed before there is additional systematic movement toward rate uniformity. IIEC concludes that as a result of this process Ameren's application of the rate moderation constraints results in only a partial moderation of rates. It maintains that this "additional movement" to rate uniformity diminishes the effects of the rate moderation constraints approved in Docket No. 13-0476.

IIEC takes issue with the subsequent additional movement allowed for in Ameren's interpretation of the Commission's direction for application of rate moderation constraints. IIEC disputes AIC's implication that the Company's exhibit explaining its process is quoted in the Final Order. IIEC says that while the Final Order discusses the methodology for setting uniform charges across rate zones it does not quote that particular passage. IIEC maintains that there is absolutely no statement, in the Final Order, that "additional movement" is authorized after the revenue allocation and initial pricing is complete.

IIEC emphasizes that it was in the Rate Design section, not the rate moderation or the revenue allocation section, of its Final Order, that the Commission noted that no party objected to this rate design proposal. IIEC contends there was no objection because no party viewed the uniformity methodology as an invitation to violate the Commission's rate moderation criteria and potentially introduce rate shock. IIEC emphasizes that the part of the Final Order referenced by Ameren was categorized as a rate design matter and not a revenue allocation matter. IIEC argues that this is significant given the normal sequence of rate cases. IIEC asserts that it would be highly unusual for the Commission to allow a non-contested rate design issue to disturb a rate moderation finding it made in regard to revenue allocation. IIEC states that would be akin to the Commission saying that it is firmly committed to gradualism and avoidance of rate shock and this is how rates should be determined in order to ensure gradualism and prevent rate shock, but once moderated

rates have been determined, it is alright to add on additional costs beyond the mitigation levels previously approved by the Commission.

IIEC believes it is instructive to look at the Final Order in Docket No. 09-0306. It says, in that docket, the Commission faced a similar rate mitigation issue exception proposed by Ameren. In Docket No. 09-0306, parties argued the appropriateness of the inclusion of EDT charges (aka PURA tax) in the rate mitigation proposal. IIEC states that, similar to its position in the current proceeding, Ameren argued that the EDT charges should be added after the proposed rate mitigation constraints. IIEC and Staff argued that the EDT allocation should be considered in the rate mitigation calculation. The Order held:

It is widely held ratemaking policy that rates should be designed to reflect cost causation, maintain gradualism, and avoid rate shock. Given the history concerning AIU's rates and the change in the PURA tax allocation, among other conclusions in this Order, the rate impact on all of AIU's rate classes is of great importance to the Commission. One of the Commission's first observations on this issue pertains to AIU's exclusion of the PURA tax from its rate mitigation proposal. *While AIU's reasons for excluding the PURA tax in its proposal are understood, the Commission can not accept them.* As argued by Staff and IIEC, the Commission can not agree that customers are not concerned about their bill total as long as increases in individual components are arguably reasonable. Examples may be offered on both sides of the argument, but the fact remains that when it comes time to pay a bill, a customer's budget, whether it be a residential or industrial customer, is impacted by the bill total regardless of the reasonableness of the bill's components. Accordingly, rate mitigation efforts should be looked at from the perspective of the bill total.

(Order, Docket No. 09-0306, April 29, 2010 at 295, emphasis added)

IIEC asserts that the Commission could use the same language in this docket, removing the reference to the PURA tax and inserting "transition to rate uniformity" and essentially describe IIEC's position here. IIEC emphasizes the Commission assertion that "it is widely held ratemaking policy that rates should be designed to reflect cost causation, maintain gradualism, and avoid rate shock." IIEC asserts that Ameren's position in this proceeding risks increases in excess of those that were determined to be necessary to avoid rate shock. IIEC discounts Ameren's argument that movement to uniformity has its own threshold (within 10% of the uniform rate) designed to prevent rate shock as an outcome. It asserts that by Ameren's logic, any level of increase above the Commission's rate moderation criteria for avoiding rate shock is allowable, as long as it meets some other, unrelated constraint.

IIEC maintains that Ameren's reliance on the Commission's Final Order as justification for violating the rate moderation in this case is misplaced. It notes that in the Final Order, the Commission stated:

It [Ameren] explains that additional uniform pricing among the same classes of customers in differing rate zones will be allowed *when individually calculated cost of service results for a class in a rate zone* is within 10% of the combined average of one or two additional rate zones. AIC specifies that uniformity will be allowed: (i) in a customer class in two or more rate zones, if *each rate zone's individually calculated cost of service* (excluding the EDT) and prices are within 10% of the combined average of one or two additional rate zones; or (ii) if charges across rate zones 'cross-over' one another, meaning when the pricing ranges overlap one another.

(Order, Docket No. 13-0476, March 19, 2014 at 63, emphasis added)

IIEC argues that it is clear that the additional movement toward cost of service was conditioned on results of "individually calculated cost of service results," as mentioned twice in the passage above. IIEC asserts that because Ameren has chosen to use a single cost of service study, it cannot be determined if "individually calculated cost of service results for a class in a rate zone is within 10% of the combined average of one or two additional rate zones." IIEC concludes that, even assuming, arguendo, that exceeding the rate moderation criteria was authorized in Docket No. 13-0476, such authorization ended with Ameren's discontinuance of rate zone-specific cost of service studies in this case. IIEC asserts that Ameren's proposal is not fully consistent with the Commission's decision in Docket No. 13-0476.

#### **d. Commission Analysis and Conclusion**

The Commission notes that no party has expressed opposition to the idea that AIC's rates should be uniform across rate zones. The Commission has long been of the opinion that AIC's rates should eventually become uniform. In this case, AIC presents a single cost of service study and proposes a revised process for transitioning rates to uniformity across rate zones. AIC proposes that, in any situation where rates in each rate zone are within 10% of the class-average price, the rates in all rate zones will become uniform immediately. In all other situations, it proposes to implement the transition in three steps, over three years: in the first year, charges in non-uniform zones will be moved one-third of the way to uniformity; in the second year, charges in those rate zones will be moved halfway from their then-current level toward uniformity; in the third year, the charges in those zones will be made completely uniform.

In response to concerns raised by Staff and IIEC, Ameren proposes, as an additional safeguard, to temper the movement toward uniformity if the difference between the current distribution delivery charge and the proposed distribution delivery charge would exceed the following ceilings: for the DS-3 Primary subclass, \$0.208/kW; for the DS-4 Primary subclass, \$1.209/kW; for the DS-4 High Voltage subclass, \$0.586/kW. The Company proposes that if rate increases would exceed these ceilings, the movement to

uniformity will be scaled back until the difference in charges equals the ceiling, or until no movement to uniformity has occurred.

Staff states that the Company's proposed ceiling on rate increases caused by the transition to uniformity would appropriately limit the impact of the increases. IIEC raises concerns that the Company's methodology would result in only a partial moderation of rates. It maintains that allowance of additional movement to rate uniformity would diminish the effects of the rate moderation constraints.

The Commission remains firmly committed to gradualism and avoidance of rate shock. The evidence does not support that the methodology that Ameren proposes would result in inappropriate rate increases or rate shock. The Commission finds that, in addition to the mitigation parameters for the allocation process, the cents-per-kilowatt ceilings AIC proposes are an appropriate safeguard to protect customers from rate shock resulting from the transition to uniformity. The Commission finds that although the ceilings may slightly delay the transition to uniformity, this delay is reasonable, in light of the additional safeguards they afford against rate shock. The Commission finds AIC's proposed methodology for the transition to uniformity to be reasonable and it is approved.

## **VI. FINDINGS AND ORDERING PARAGRAPHS**

The Commission, having considered the record and being fully advised in the premises, is of the opinion and finds that:

- (1) Ameren Illinois Company d/b/a Ameren Illinois is an Illinois corporation engaged in the distribution and sale of electricity to the public in Illinois, and is a public utility as defined in Section 3-105 of the Act;
- (2) the Commission has jurisdiction over the parties hereto and the subject matter herein;
- (3) the findings of fact and conclusions of law reached by the Commission in this Order are supported by the record and are hereby adopted as findings of fact and conclusions of law;
- (5) the determinations regarding cost of service, revenue allocations, rate design, and terms and conditions of service contained in earlier sections of this Order are reasonable for purposes of this proceeding; the tariffs filed by Ameren Illinois Company d/b/a Ameren Illinois should incorporate the rates, revenue allocations, rate design, and terms and conditions set forth and referred to herein;
- (6) Ameren Illinois Company d/b/a Ameren Illinois is directed to make a compliance filing consistent with the conclusions herein within five (5) business days of the entry of this Order. Staff has seven (7) business days after Ameren Illinois Company d/b/a Ameren Illinois has made the filing to review the filing to confirm compliance; and
- (7) all motions, petitions, objections, and other matters in this proceeding which remain unresolved should be disposed of consistent with the conclusions herein.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that the proposed tariff sheets filed by Ameren Illinois Company d/b/a Ameren Illinois on August 3, 2016, are hereby permanently cancelled and annulled.

IT IS FURTHER ORDERED that Ameren Illinois Company d/b/a Ameren Illinois is authorized to file new tariff sheets with supporting work papers in accordance with the Findings and Conclusions of this Order, applicable to electric services furnished on and after the effective date of said tariff sheets.

IT IS FURTHER ORDERED that all motions, petitions, objections, and other matters in this proceeding which remain unresolved are disposed of consistent with the conclusions herein.

IT IS FURTHER ORDERED that subject to the provisions of Section 10-113 of the Act and 83 Ill. Adm. Code 200.880, this Order is final; it is not subject to the Administrative Review Law.

DATED:

January 24, 2017

BRIEFS ON EXCEPTIONS DUE:

February 2, 2017

Jan Von Qualen,  
Administrative Law Judge