

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

AMEREN ILLINOIS COMPANY)
d/b/a Ameren Illinois, Petitioner)
Smart Grid Advanced Metering) Docket No. 12-0244
Infrastructure Deployment Plan.)

DRAFT ORDER OF AMEREN ILLINOIS COMPANY

DATED: May 4, 2012

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I. INTRODUCTION

On January 3, 2012, Ameren Illinois Company d/b/a Ameren Illinois (AIC, Ameren Illinois or the Company) elected to become a “participating utility” in the State’s electric infrastructure investment program and accordingly filed with the Illinois Commerce Commission (ICC or the Commission) and requested approval of a performance-based formula rate tariff, Rate Modernization Action Plan-Pricing (“Rate MAP-P”) pursuant to Illinois’ Electric Infrastructure Modernization Act (EIMA), Sections 16-108.5 – 16-108.6 of the Illinois Public Utilities Act (PUA or the Act), initiating ICC Docket No. 12-0001.¹

By electing to participate in the State’s program, AIC’s electric operations must invest a minimum specified level of incremental capital expenditures over a 10-year period on distribution infrastructure improvements and “Smart Grid” electric system upgrades, including Advanced Metering Infrastructure (AMI). Pursuant to Section 16-108.6 of the Act, on March 30, 2012, AIC submitted a Verified Petition seeking Commission approval of the Company’s Smart Grid Advanced Metering Infrastructure Deployment Plan (AMI Plan or Plan), initiating the instant proceeding. Concurrent with and in support of its Verified Petition, the Company also submitted the direct testimony of Company witnesses J. Bruce Hollibaugh (Ameren Ex. 1.0) and Michael S. Abba (Ameren Ex. 2.0) as well as its AMI Plan (Ameren Ex. 1.1) and an AMI Cost/Benefit Analysis (Ameren Ex. 2.1, both Public and Confidential). In accordance with the approved case schedule, the Company also submitted the rebuttal testimony of Craig D. Nelson (Ameren Ex. 3.0R) and Mr. Abba (Ameren Ex. 4.0R).

The Staff of the Commission (Staff) participated in the proceeding. Petitions for leave to intervene were filed by the Citizens Utility Board (CUB), the Environmental Law & Policy Center (ELPC), and Comverge Inc. The People of the State of Illinois, by the Office of the State Attorney General, (AG) also entered an appearance.

Staff submitted the testimony of Dr. Eric P. Schlaf (ICC Staff Ex. 1.0), Dr. David Brightwell (ICC Staff Ex. 2.0) and James Zolnierrek (ICC Staff Ex. 3.0). CUB and ELPC jointly submitted the testimony of Miriam Horn (CUB/ELPC Ex. 1.0 2nd C). Neither Comverge, Inc. nor the AG submitted testimony in the proceeding.

Pursuant to proper legal notice, a pre-hearing conference was held on April 5, 2012 before a duly authorized Administrative Law Judge (ALJ) of the Commission at its

¹ Within 30 days thereafter, and in accordance with Section 16-108.5(f) of the Act, AIC also filed a Verified Petition for Approval of a Multi-Year Performance Metrics Plan (Metrics Plan) and Modernization Action Plan-Metrics Rider (Rider MAP-M), initiating ICC Docket No. 12-0089. A final decision by the Commission is still pending.

offices in Springfield, Illinois. The parties proceeded to set a schedule for testimony and evidentiary hearing. In addition, AIC's Motion for Protective Order was granted by the ALJ and the Protective Order was entered.

An evidentiary hearing was held in Springfield on April 26, 2012. Appearances were entered by counsel on behalf of AIC, Staff, CUB, ELPC, the AG and Comverge, Inc. At the conclusion of the hearing, the matter was marked "Heard and Taken." Briefs were filed on behalf of AIC, Staff, CUB/ELPC and the AG on May 3, 2012. A Proposed Order was served on the parties on [TBA].

II. NATURE OF AIC'S OPERATIONS

Ameren Illinois is engaged in the business of supplying electric power and energy throughout its service territory in the State of Illinois. Ameren Illinois is a "public utility" as defined in 220 ILCS 5/3-105, an "electric utility" as defined in 220 ILCS 5/16-102, and a "combination utility" and "participating utility" as defined in 220 ILCS 5/16-108.5(b).

III. OVERVIEW OF SECTION 16-108.6 OF THE PUBLIC UTILITIES ACT

On October 26, 2011, Illinois enacted "Smart Grid" legislation when it passed P.A. 97-616. On December 30, 2011, the legislation was amended by P.A. 97-646. Illinois' "Smart Grid" legislation is now codified as Sections 16-108.5 -16-108.8 of the PUA, and is known as the Electric Infrastructure Modernization Act (EIMA). In enacting EIMA, Illinois established a voluntary infrastructure investment program to encourage certain electric utilities to make significant capital investments to upgrade and modernize the State's electrical distribution network. For those electric utilities electing to participate in the program, a sizeable portion of the capital investment must be spent on Smart Grid electric system upgrades, including AMI.

On January 3, 2012, AIC elected to become a "participating utility" in the State's electric infrastructure investment program and petitioned the Commission to approve a performance-based formula rate (Rate MAP-P) to be annually updated to recover AIC's actual electric delivery services costs, including the costs associated with investments made as part of the infrastructure investment program. (Docket No. 12-0001.) By electing to participate in the State's program, the Company must invest a minimum of \$625 million of incremental capital expenditures over a 10-year period on distribution infrastructure improvements and Smart Grid electric system upgrades, including AMI. (Verified Petition, ¶ 3.)

The EIMA requires each "participating utility" in the State's infrastructure investment plan to file a Smart Grid Advanced Metering Infrastructure Deployment Plan with the Commission. As a "combination utility," as defined in Section 16-108.5(b), AIC was required by law to file its AMI Plan by April 1, 2012, approximately 3 months after it elected to become a participating utility. 220 ILCS 5/16-108.6(c).

In accordance with Section 16-108.6(c), AIC filed its AMI Plan after consultation with the Smart Grid Advisory Council (Council) – the legislatively sanctioned group of stakeholders that is charged with advising and working with participating utilities on the development and implementation of their AMI Plans. On March 27, 2012, the Council held its initial meeting. As part of that meeting, AIC presented a draft of its Plan to the Council. (Verified Petition, ¶ 5.)

In accordance with Section 16-108.6(c), AIC did not file its AMI Plan until the

evaluation report in the Commission-approved AMI Pilot Program had been issued. On August 4, 2011, the evaluation report in the Commission-approved AMI Pilot program for Commonwealth Edison Company in ICC Docket No. 09-0263 was posted. AIC filed its AMI Plan with the Commission on March 30, 2012. (Verified Petition, ¶ 6.)

Section 16-108.6(c) requires AIC's AMI Plan to contain the following:

1. A Smart Grid AMI vision statement that is consistent with the goal of developing a cost-beneficial Smart Grid;
2. A statement of Smart Grid AMI strategy that includes a description of how the utility evaluates and prioritizes technology choices to create customer value, including a plan to enhance and enable customers' ability to take advantage of Smart Grid functions beginning at the time an account has billed successfully on the AMI network;
3. A deployment schedule and plan that includes deployment of AMI to all customers for a participating utility, other than a combination utility, and to 62% of all customers for a participating utility that is a combination utility;
4. Annual milestones and metrics for the purposes of measuring the success of the AMI Plan in enabling Smart Grid functions, and enhancing customers benefits from Smart Grid AMI; and
5. A plan for the consumer education to be implemented by the participating utility (hereinafter, the "Informational Requirements").

220 ILCS 5/16-108.6(c).

AIC's AMI Plan must also be consistent with the standards of the National Institute of Standard and Technology (NIST) for Smart Grid interoperability that are currently in effect; must include open standards and internet protocol to the maximum extent possible consistent with cyber security; must maximize, to the extent possible, a flexible smart meter platform that can accept remote device upgrades and contain sufficient internal memory capacity for additional storage capabilities, functions and services without the need for physical access to the meter; and must secure the privacy of personal information and establish the right of consumers to consent to the disclosure of personal energy information to third parties through electronic, web-based and other means in accordance with State and federal law and regulations regarding consumer privacy and protection of consumer data (hereinafter, the "Technical Criteria"). *Id.*

Section 16-108.6(c) further mandates, after notice and hearing, the Commission "shall, within 60 days of the filing of an AMI Plan, issue its order approving, or approving with modification, the AMI Plan, if the Commission finds that the AMI Plan contains the five Informational Requirements stated in Section 16-108.6(c) and further finds that "the implementation of the AMI Plan will be cost-beneficial consistent with the principles established through the Illinois Smart Grid Collaborative, giving weight to the results of any Commission-approved pilot designed to examine the benefits and cost of AMI Deployment." *Id.* To be considered "cost beneficial," the benefits of a participating utility's AMI Plan must exceed the costs of the Plan, as initially filed or subsequently modified by the Commission. Section 16-108.6(a). "This standard is met if the present value of the total cost of the [AMI Plan] exceeds the present value of the total benefits of

the [Plan].” *Id.* The total costs of the Plan “shall include all utility costs reasonably associated with the [AMI Plan].” *Id.* The total benefits “shall include the sum of the avoided electricity costs, including avoided utility operational costs, avoided consumer power, capacity, and energy costs, and avoided societal costs associated with the production and consumption of electricity, as well as other societal benefits....” *Id.*

Following Commission approval of an AMI plan, on April 1 of each year beginning in 2013, and after consultation with the Smart Grid Advisory Council, each participating utility shall submit a report regarding the progress it has made towards completing implementation of its AMI Plan. Section 16-108.6(e). This progress report shall include, among other things, any updates to the Plan. *Id.* The Commission shall have the authority to initiate an investigation regarding the utility’s progress in implementing the AMI Plan, and to enter an order, within 90 days of the utility’s filing of the annual report, requiring the utility to devise a corrective action plan, subject to Commission approval and oversight, to bring implementation back on schedule consistent with the AMI Plan. *Id.* Upon conclusion of the utility’s annual reporting obligations, the utility shall have a continuing obligation to provide information, upon request, to the Commission and Smart Grid Council regarding the AMI Plan. *Id.*

IV. AMEREN ILLINOIS AMI PLAN PROPOSAL

A. Information Requirements

1. Statement of Smart Grid AMI Vision

a. AIC Position

AIC states its AMI Plan presents the Company’s vision of having the capability of serving all customers with a cost-beneficial AMI, and serving 62% of electric customers by 2022. (Ameren Ex. 1.1, pp. 4-5.) AIC maintains its vision statement sets forth in broad terms the enhanced customer benefits and functionalities that it intends to deliver with its deployment of AMI. (*Id.*)

The Company notes Staff concurs the AMI Plan fulfills the requirement of Section 16-108.6(c)(1) in this regard. (ICC Staff Ex. 1.0, ll. 216-222.) AIC points out CUB/ELPC likewise concur the Plan fulfills the statutory requirement. (CUB/ELPC Ex. 1.0 2nd C, ll. 278-280.) AIC submits no other party disputed the adequacy of AIC’s vision statement. Accordingly, it concludes the Commission should find its AMI Plan compliant with Section 16-108.6(c)(1).

b. Staff Position

c. CUB/ELPC Position

d. AG Position

e. Commission Analysis and Conclusion

There is no apparent dispute amongst the parties regarding this component of AIC’s AMI Plan. Upon review of AIC’s AMI Plan and the other record evidence, the Commission finds the Plan contains a statement of AIC’s Smart Grid AMI vision and complies with Section 16-108.6(c)(1).

2. Statement of Smart Grid AMI Strategy

a. AIC Position

AIC asserts its AMI Plan explains AIC’s “strategy” for AMI deployment, including the planned stages to roll out AMI functionality, its intended approach to data communication with customers, its proposal to automate gas meters wherever the AMI network is installed for electric metering, its expectation that it will own the AMI components, its plan to engage leading AMI consultants and the targeted number of meters to be deployed within 10 and 15 years. (Ameren 1.1, pp. 4-7.) AIC states the AMI Plan “strategy” also includes AIC’s plan and progress in evaluating and selecting the AMI technology to create customer value, the data analytic solutions it intends to incorporate, the potential enhancements that will be considered, and its approach to program management. (*Id.*, pp. 7-11.) The Plan, AIC asserts, also describes the Company’s plan to leverage its considerable automated metering deployment and operating experience in deploying AMI. (*Id.*, pp. 5, 10.)

AIC notes that Staff agrees the AMI Plan adequately addresses AIC’s Smart Grid AMI strategy. (ICC Staff Ex. 1.0, ll. 230-243.)

AIC understands CUB/ELPC to fault AIC because it “has not made up its mind about AMI technology or meter data management system technology (MDMS).” (CUB/ELPC Ex. 1.0 2nd C, ll. 291-292.) In response, AIC explains the fact that it has not yet made those decisions is understandable, given where the Company is in the process of evaluating and selecting the AMI vendors. (Ameren Ex. 4.0R, pp. 5-7.) AIC further maintains it is not essential for the Commission to possess this information now to approve the Plan. (Ameren Ex. 3.0R, pp. 4-6.) In the past few months, in addition to preparing the Plan itself and the supporting Cost/Benefit Analysis, AIC has evaluated data received from Request for Information, shortened the list of possible AMI vendors, and released thorough and detailed Request for Proposals (RFPs) to ensure that the vendors’ proposals and equipment meet AIC’s specifications and functionality. (*Id.*) AIC will continue to provide updates on this information in its annual reports to the Commission and keep stakeholders abreast of developments through consultation with the Smart Grid Advisory Council – the legally sanctioned group of stakeholders charged with advising and working with participating utilities on the development and implementation of the AMI Plan. (Ameren Ex. 3.0R, pp. 5-6; Ameren Ex. 4.0R, pp. 7-8.) Thus, it is AIC’s position that the Commission should find the AMI Plan adequately addresses AIC’s “strategy” in the deployment of AMI to its customers, consistent with Section 16-108.6(c)(2).

b. Staff Position

c. CUB/ELPC Position

d. Commission Analysis and Conclusion

Section 16-108.6(c) requires an AMI Plan to contain, “a statement of Smart Grid AMI strategy that includes a description of how the utility evaluates and prioritizes technology choices to create customer value, including a plan to enhance and enable customers’ ability to take advantage of Smart Grid functions beginning at the time an account has billed successfully on the AMI network.” Section 16-108.6(c)(2). This statutory language indicates to the Commission that the proper focus of this expedited docket is that the Company file a Plan that contains information consistent with Section

16-108.6(c)(2). We find the Company has done so. We note Staff's agreement in this regard. We reason that, if the legislature had wanted the Company to file a Plan meticulously detailing every facet of their strategy, as CUB/ELPC's recommendation implies, it would have said so and it would have allowed the Commission more than 60 days to review and approve the Plan. The Commission believes CUB/ELPC's recommendation requiring more detail is inappropriate for this proceeding and is therefore rejected.

The Commission also rejects the AG's recommendation that the Commission order AIC to adopt an AMI Plan that complies with the current Part 280 rules. The purpose of this proceeding is to determine whether AIC's AMI Plan presents a plan to deploy AMI to its customers that will ultimately result in more benefits than costs to AIC's electric customers. The purpose of this proceeding is not to ensure that the utility's deployment plan complies with the Commission's existing regulations to date, before AIC's deployment of AMI even begins. The Commission finds that it is reasonable for AIC to not assume the cost of a premise visit in its Plan and Cost/Benefit Analysis, based on the assumption that future regulations will allow for the full functionality of AMI, including the remove disconnect capability. This is consistent with the current status of the pending revisions to the Part 280 rules and the General Assembly's direction in EIMA (Section 16-108.5(f)) that utilities would be able to utilize full functionality of AMI with no requirement for personal on-site notification. (Ameren Ex. 4.0R, p.19.)

3. Deployment Schedule and Plan

a. AIC Position

AIC explains its AMI Plan lays out the Company's approach to ensure that 62% of its electric customers are serviced via AMI within the next 10 years by deploying an estimated 780,000 AMI-equipped electric meters starting in the fourth quarter of 2013. (Ameren Ex. 1.1, p. 13.) AIC explains the Plan also illustrates how AIC would continue deployment of AMI meters to provide AMI capability to serve all electric customers within a 15-year period. (*Id.*) The Cost/Benefit Analysis further assumes a roll out to its non-AMR served operating centers first, followed by AMR operating centers. (Ameren Ex. 2.1, p. 6.) AIC further asserts the Plan presents the Company's planned phased approach to deployment of the AMI network and meters (Ameren Ex. 1.1, pp. 13-14), the capabilities it expects its "smart" meters to have (*id.*, p. 12), a preliminary project schedule and key activities associated with the deployment (*id.*, pp. 14-18). The Plan also gives a status update on the progress made in considering potential AMI networks, evaluating initial vendor pricing received during the Request for Information (RFI) process, and putting together and releasing to vendors comprehensive Request for Proposals (RFPs) for the AMI and MDMS systems. (*Id.*, p. 11-12.)

AIC believes Staff agrees that the AMI Plan contains enough information on the planned deployment to satisfy the statutory requirement. Yet, AIC understands Staff to desire that the Plan contain more information – specifically, "firm" and "comprehensive" information on the identification of the AMI vendors and equipment and the sequence of deployment by operating center. (ICC Staff Ex. 1.0, ll. 37, 160.) In response to Staff's contention in this regard, AIC maintains that the Company has not yet finalized and incorporated these details into the Plan because of the current status of its evaluation of vendors and equipment. (Ameren Ex. 3.0R, pp. 4-6.) AIC believes that the fact that it has not yet finalized these details before it was required to file its Plan is not adequate grounds for the Commission's rejection of the Plan. AIC also points out that Staff does not advocate the Commission reject the Plan because AIC has not yet had the

opportunity to make these important decisions. AIC contends that, while the details championed by Staff are important, they are not required for the Commission to approve the AMI Plan. AIC highlights the fact that Staff concedes the law does not require a “comprehensive deployment schedule.” (Tr., p. 202, ll. 7-11.) AIC further points out that Staff agrees it is reasonable to assume that aspects of the Plan, including the deployment schedule, could change over time (Tr., p. 205, ll. 5-9), and Staff acknowledges that potential for change does not prevent the Commission from reviewing and approving the Plan in this proceeding (Tr., p. 203, ll. 18-22). AIC further notes that Staff concedes the missing information did not have much bearing on its opinion that AIC has the ability to maintain, operate and manage the AMI system, (Tr., p. 209, l. 3-10; p. 211, ll. 9-11), and that Staff’s review “didn’t throw up any red flags” about these characteristics. (Tr., p. 209, ll. 8-9.) AIC emphasizes Staff agrees the missing information is not required for the Commission to approve AIC’s AMI Plan. (Tr., p. 213, l. 19 – p. 214, l. 8.)

AIC also notes the reference in Section 16-108.6 to a “10-year period” causes Staff to question whether the Commission may approve an AMI Plan in which deployment to AIC’s electric customers extends beyond 10 years. In response, AIC contends the Commission’s authority is clear: Section 16-108.6 requires Ameren Illinois to deploy AMI to at least 62% of its electric customers within 10 years, but does not preclude the Commission from approving a plan for a broader deployment over a longer period. AIC also points out the Commission’s oversight of an AMI plan can continue beyond the 10-year period formula electric delivery rates may be in effect. AIC argues to conclude that the Commission has the authority to approve a plan for deployment to 62% of customers over 10 years – but has no authority to approve a plan to deploy AMI to the remaining 38% of customers during the next five years – does not make much sense. AIC concludes, the statute specifies what AIC must do within 10 years, but does not limit the Commission’s authority to approve a plan encompassing a longer period needed to achieve full deployment across a combination utility’s “entire service territory.”

In response to CUB/ELPC’s complaint that the Plan does not present “nearly enough detail,” (CUB/ELPC Ex. 1.0, 2nd C, l. 347), AIC contends those details are not needed now. As stated in response to Staff, AIC asserts it continues to make progress in finalizing the details surrounding the deployment of the AMI network and meters, and has a plan in place to contract with AMI vendors, select AMI equipment and determine the exact sequence of deployment by the end of 2012. (Ameren Ex. 4.0R, pp. 4-8.) The Company points out that Staff concedes these are important milestones that should not be taken lightly and that require time and resources to evaluate. (Tr., pp. 206-207.) AIC maintains it will continue to apprise both the Commission in its annual reports and interested stakeholders through consultation with the Smart Grid Advisory Council on the Company’s progress in developing a more “comprehensive” and “firm” deployment schedule. AIC contends the Commission will have the opportunity to address issues or concerns about the deployment schedule in a proceeding following the submission of AIC’s annual report. (Tr., p. 204, l. 1 – p. 205, l. 3.) AIC concludes the Commission should find its AMI Plan adequately addresses AIC’s deployment plan and schedule, consistent with Section 16-108.6(c)(3).

- b. Staff Position**
- c. CUB/ELPC Position**
- d. AG Position**
- e. Commission Analysis and Conclusion**

The Commission agrees with AIC's position that it has presented a "deployment schedule and plan" to deploy AMI to 62% of its electric customers within 10 years, and 100% within 15 years to reach the entirety of its service territory, and finds that this deployment schedule and plan satisfies the informational requirement in Section 16-108.6(c)(3). The Commission also agrees that it has the authority to approve an AMI Plan that contemplates full deployment to all of AIC's electric customers over a period longer than 10 years. To conclude that the General Assembly gave the Commission the authority to approve a plan for deployment to 62% of customers over 10 years – but no authority to approve a plan to deploy AMI to the remaining 38% of customers during the next five years – does not make much sense. EIMA participating utilities – whether they are combination utilities or otherwise – are required to submit plans to deploy AMI to their "entire service territory." To the extent full deployment is expected to take longer than 10 years, nothing in the statute that prevents the Commission from approving a plan to achieve 100% deployment over whatever period is necessary to execute the deployment. Indeed, the Commission notes that the Section 16-108.6(e) expressly recognizes that any AMI Plan may be extended beyond 10 years by a corrective action plan, and that the utility continues to have an obligation to provide the Commission and Smart Grid Advisory Council with information about the AMI Plan, upon request, even after it has been completed. This implies that the Commission's oversight over an AMI Plan does not terminate at year 10. Thus, the Commission finds it is well within its authority to approve deployment to 62% in 10 years, and defer consideration of deployment to the remaining 38% to some later time.

The Commission emphasizes that the AMI deployment will require investment of hundreds of millions of dollars over more than a decade. At first blush, it would seem to the Commission that the scope of this undertaking is disproportionate to the time allotted to the Commission to review the plan for its execution. The Commission concludes the legislature must have contemplated this, which explains why it established a process to keep things simple by requiring limited information with the initial plan – most of which is distilled in the five short subsections contained in Section 16-108.6. The Commission has only 60 days from the filing of the AMI Plan to determine whether it contains the statutorily required information and that implementation will be cost-beneficial. The Commission states there can be no doubt that the legislature expects the Commission to review AMI implementation on an ongoing basis. A "progress report" must be filed in April of each year (assuming there is an approved plan). Once submitted, the Commission has and 90 days to conduct the proceeding to investigate the utility's progress. The Commission recognizes that it will have more time to review an AMI plan progress reports, each and every year, than the time allotted to review the initial plan.

The Commission believes this ongoing review process already built into the law appeases any concerns that approval of the AMI plan will "compromise" the Commission's ability to review details and decisions that have not yet been made. The Commission notes AIC is not requesting approval, or pre-approval, of any yet-to-be-decided details. Even after details and decisions are made, the Smart Grid Advisory Council may recommend to the utilities changes to the plan throughout the deployment process. The Commission also points out that the Company may also decide to make changes on its own. However, on April 1 of each year, AIC must describe those changes, explain its progress made toward meeting the metrics and milestones identified in the plan, and discuss "any updates to the AMI Plan." Thus, the Commission believes the statute plainly contemplates, and accommodates, a continued evolution of the AMI Plan throughout the deployment process.

The Commission also finds that a failsafe exists in the event the AMI plan gets off

track. After filing each annual report, the Commission has the ability “either upon complaint or its own initiative . . . to enter upon an investigation regarding the utility’s progress in implementing the AMI Plan” The Commission may also require AIC to “devise a corrective action plan, subject to Commission approval and oversight, to bring implementation back on schedule consistent with the AMI Plan.” The Commission’s ongoing oversight of AIC’s progress in implementing the Plan and authority to require AIC to take corrective action will not be “compromised” in any way simply because AIC is not yet in a position to finalize certain details concerning the deployment.

For these reasons, and in light of AMI’s Plan and the record evidence, the Commission finds AIC’s AMI Plan adequately addresses AIC’s deployment plan and schedule, and is compliant with Section 16-108.6(c)(3). The Commission notes that Staff is in apparent agreement that AIC’s AMI Plan contains the information required under Section 16-108.6(c)(3), but felt compelled to bring what it considers “weaknesses” in the Plan to the Commission’s attention. The Commission appreciates Staff’s attention to detail in its review of the AMI Plan, especially given that the review was conducted on an expedited timeframe. The Commission, however, does not consider these details and decisions that have yet to be finalized as “weaknesses” in AIC’s approach to deploying AMI to its electric customers. They are simply important details and decisions that are in the progress of being made. The Commission, Staff and other interested stakeholders will be kept abreast of these details and decisions and will have an opportunity to review them at a later date. Staff and CUB/ELPC’s proposals that more details must be included now to gain Commission approval are therefore rejected.

The Commission also rejects AG’s proposal that the Commission order AIC to refile its AMI Plan to incorporate reliability data as well as past AMR deployment. As noted above, AIC currently assumes that AMI deployment will occur first in non-AMR areas, but that the exact deployment schedule by operating center will be worked out with the selected vendors. The Commission does not see a need to delay approval of AIC’s AMI Plan until that detail is resolved; nor does the Commission believe that the statutory scheme of EIMA contemplates a refiling of the Plan (and a restarting of this 60 day review proceeding) to accommodate the resolution of that level of detail. The Commission also notes that AIC’s performance under its reliability metrics is not the subject of this proceeding, and is not dependent exclusively on its deployment of AMI.

4. Annual Milestones and Metrics

a. AIC Position

AIC asserts its AMI Plan sets forth the milestones and metrics that will be used to measure the success of the AMI deployment in enabling Smart Grid functions and enhancing consumer benefits from AMI. (Ameren Ex. 1.1, p. 19.) AIC explains the Plan includes the AMI-related metrics defined in Section 16-108.5(f) that will assist in evaluating the Plan’s success in realizing direct customer benefits in reduced consumption on inactive meters and reduced uncollectible/bad debt expense, as well as measure any reduction in estimated bills. (*Id.*) AIC states the Plan also includes a number of milestones that AIC intends to report on its annual reports to the Commission by each April 1st concerning the Company’s progress in implementing the Plan. (*Id.*, pp. 19, 39.)

AIC points out that Staff agrees the AMI Plan adequately addresses the statutory requirement that the Plan contain information on the Company’s proposed annual milestones and metrics. (ICC Staff Ex. 1.0, ll. 258-270.)

In response to both Staff and CUB/ELPC's proposals that AIC consider additional metrics and milestones (ICC Staff Ex. 1.0, II. 271-276; CUB/ELPC Ex. 1.0 2nd C, pp. 20-21), AIC states it intends to consider other meaningful methods for measuring and reporting of criteria related to the AMI deployment in its annual reports to the Commission, and will entertain such proposals in its ongoing interaction with stakeholders and the Smart Grid Advisory Council. But, AIC states, the proposals presented by Staff and CUB/ELPC are too vague and undeveloped to fully vet in this 60-day proceeding and include in the AMI Plan at this time. (Ameren Ex. 4.0R, pp. 8-9, pp. 29-32.) Specifically, AIC contends it is not clear why each proposed metric is AMI-related, what the baselines for each metric would be, how performance under each metric would be measured, or what the impact, if any, would be for failure to perform. (*Id.*) AIC welcomes further dialogue with stakeholders on these issues.

AIC find it ironic CUB/ELPC defend their position by referring to a California procedure where Smart Grid implementation is still in play. (CUB/ELPC Ex. 1 2nd C, p. 20.) AIC notes, although that procedure began in 2008, even now, the issue of metrics and baselines has yet to be finalized. (Tr., pp. 193-194.) Moreover, AIC points out that CUB/ELPC witness Ms. Horn supported her claims regarding the pending California proceeding by relying upon a *draft* filing made by the California utilities in 2010, which it points out is not controlling. (CUB/ELPC Ex. 1.4.) AIC explains that a proposed decision was recently issued and in response, two of the three utilities have raised issues regarding the decision and its application to the metrics, and have even placed some of the metrics in question due to the passing of time and regulatory uncertainty. (Tr., pp. 190-193.) AIC does not understand why CUB/ELPC are critical of its AMI Plan simply because details such as vendor selection are not finalized in light of the fact over four years have passed in the California proceeding, and the California Commission has not finalized their Smart Grid-related metrics.

AIC concludes it cannot agree to include any of Staff or CUB/ELPC's proposed additional metrics and milestones in its AMI Plan at this time. AIC contends the appropriate forum for adequate consideration of those proposals would be in ongoing consultations with the Smart Grid Advisory Council, not in an expedited Commission proceeding. AIC urges the Commission to find AIC's AMI Plan contains the required information on annual metrics and milestones, and to reject the modifications the Plan to include the additional metrics and milestones proposed by Staff and CUB/ELPC.

- b. Staff Position**
- c. CUB/ELPC Position**
- d. AG Position**
- e. Converge Position**
- f. Commission Analysis and Conclusion**

The Commission agrees with AIC that the appropriate forum for adequate consideration of Staff and CUB/ELPC's proposed additional metrics and milestones would be in consultations with the Smart Grid Advisory Council, not in the instant expedited Commission proceeding. The Commission believes consideration of those proposals here would forestall the expedited process established by Section 16-108.6, much as the California proceeding on which CUB/ELPC relies (although, we note, that extrajurisdictional proceeding is not relevant here) appears to have been forestalled.

The Commission further notes that it will have the opportunity to review AIC's progress in implementing the AMI Plan on an annual basis. The review will help to ensure that AIC's deployment of AMI is successful in realizing full AMI functionality, operational and customer benefits and other potential enhancements that may materialize. Accordingly, the Commission rejects Staff and CUB/ELPC's proposals to the extent that they propose a modification to the AMI Plan to incorporate additional metrics and milestones. Section 16-108.6(c) simply requires that the AMI Plan contain information on the Company's proposed annual milestones and metrics. Based on our review of the Plan at issue here and the other record evidence, the Commission finds AIC's AMI Plan adequately addresses that statutory requirement. The Commission encourages AIC and all interested stakeholder to continue the dialogue, outside of this proceeding, on appropriate measurements of the AMI Plan's success.

5. Consumer Education

a. AIC Position

AIC explains its AMI Plan sets forth the Company's goals, objectives and key message components that represent the framework of its plan to educate its customers and other stakeholders about the functionality and benefits of AMI. (Ameren Ex. 1.1, pp. 19-20.) AIC asserts the Plan also identifies the categories of stakeholders and segments of customers that will be the audience for AIC's messaging. (*Id.*, pp. 20-21.) Lastly, AIC states the Plan contains the phases of implementation and vehicles of communications that AIC intends to use in promoting awareness of AMI to consumers and addressing the questions that are raised. (*Id.*, pp. 21-24.) AIC also points out, in response to Staff's direct testimony, AIC explained how it derived its initial budget for consumer education and communications. (Ameren Ex. 4.0R, pp. 9-11.)

AIC points notes Staff agrees the AMI Plan adequately addresses the statutory requirement that it contain the AIC's plan for consumer education. (ICC Staff Ex. 1.0, ll. 281-289.)

In response to CUB/ELPC's contention the Company has not yet developed a "comprehensive final communication plan," (CUB/ELPC Ex. 1.0 2nd C, ll. 462-463), AIC asserts, Section 16-108.6(c) does not require a "comprehensive final" plan for consumer education to gain Commission approval. Thus, AIC maintains, CUB/ELPC's criticisms are not credible because the AMI Plan need not present the Company's "comprehensive final" education plan at this stage in the process. (Ameren Ex. 4.0R, pp. 32-33.) AIC states CUB/ELPC's criticisms that the Peak Time Rebate and other dynamic pricing rate structures are not fully developed are similarly premature and will be the subject of a subsequent filing with the Commission. (*Id.*, pp. 33-34, 36, 40-41.) AIC takes the position the AMI Plan adequately addresses AIC's plan for consumer education to warrant Commission approval.

b. Staff Position

c. CUB/ELPC Position

d. AG Position

e. Commission Analysis and Conclusion

The Commission again must reason, if the legislature had wanted the Company

to file a Plan meticulously detailing every facet of their strategy, it would have allowed for more than a mere 60 days for review and approval of the Plan. The statute states that the Plan must contain, “a plan for the consumer education to be implemented by the utility.” Section 16-108.6(c)(5). No more. The Commission agrees with AIC in this regard and finds that AIC has done what the EIMA requires. Upon review of the AMI Plan and the record evidence, the Commission finds the AMI Plan adequately addresses AIC’s plan for consumer education, consistent with Section 16-108.6(c)(5). The Commission notes that, as with any other facet of the AMI Plan, the Commission will have the opportunity to review updates to the Plan in AIC’s annual reports regarding progress in implementation of the AMI Plan, and will have the opportunity to assess AIC’s spending on consumer education in annual updates to its formula rates.

B. Technical Criteria

1. NIST (NIST) Standards for Smart Grid Interoperability

a. AIC Position

AIC believes its AMI Plan sufficiently outlines AIC’s commitment to designing an AMI system that follows the standards for interoperability established by NIST. (Ameren Ex. 1.1, pp. 25-33 (Sec. 9.1).) As Company witness Mr. Hollibaugh testified, AIC developed its Plan to be in accordance with the current NIST standards and/or guidelines for Smart Grid interoperability. (Ameren Ex. 1.0, p. 8.) AIC further maintains the AMI Plan contains very detailed Interoperability and Cyber Security sections, which outline the Company’s adherence to NIST and other interoperability and cyber security standards. (Ameren Ex. 4.0R, p. 36.) AIC points out that, in addition, its AMI and MDM RFPs clearly require vendors to meet NIST standards, and it explains it does not intend to choose a vendor that does not adhere to NIST standards. (Ameren Ex. 4.0R, p. 36.) AIC recognizes, realistically, some of the vendors’ solutions may still have functions that are so compelling that losing interoperability in one area could be outweighed by a benefit in another. (*Id.*, pp. 36-37.) The Company states it expects that these will be rare. (*Id.*) Nevertheless, it asserts that it will continue to be diligent in selecting products and solutions that balance functional requirements with long term supportability and reliability based on the NIST standards. (*Id.*, p. 37.)

Finally, AIC points out neither Staff nor the intervening parties have offered evidence that AIC does not intend to follow NIST standards or that the Plan is somehow inconsistent with those standards. In fact, AIC notes that Staff agrees the Company’s AMI Plan sufficiently outlines AIC’s commitment to designing an AMI system that follows the standards for interoperability established by NIST. (ICC Staff Ex. 1.0, ll. 322-333.) Thus, the Company concludes the Commission should find AIC’s AMI Plan “fully consistent” with the NIST standards in effect at the time the Plan was filed.

b. Staff Position

c. CUB/ELPC Position

d. AG Position

e. Commission Analysis and Conclusion

The Commission believes AIC’s AMI Plan sufficiently outlines AIC’s commitment to designing an AMI system that follows the standards for interoperability established by

NIST. Staff agrees. There is no record evidence the Company does not intend to follow NIST standards and no party disputes the Plan is consistent with those standards. The Commission therefore finds AIC's AMI Plan is fully consistent with the NIST standards in effect at the time the Plan was filed.

2. Cyber Security

a. AIC Position

AIC asserts its AMI Plan sufficiently outlines the Company's approach to developing policies and procedures for cyber security to identify and mitigate cyber security risks, implement cyber security standards based on industry best practices and regulatory guidelines, and evaluate AMI vendors and equipment that provide AMI solutions that meet the minimum security requirements outlined in the Plan. (Ameren Ex. 1.1, pp. 33-37.) Specifically, AIC witness Mr. Hollibaugh testified that the Company developed standards and protocols, consistent with cyber security measures, and which provide for a flexible smart meter platform that can accept remote device upgrades with sufficient internal memory capacity for additional storage capabilities, functions and services without the need for physical access to the meter. (Ameren Ex. 1.0, p. 8).

AIC points out no party has presented any evidence in this proceeding that the Plan does not adequately address AIC's approach to cyber security, and Staff agreed AMI Plan sufficiently outlines the Company's approach to developing policies and procedures for cyber security to identify and mitigate cyber security risks, implement cyber security standards based on industry best practices and regulatory guidelines, and evaluate AMI vendors and equipment that provide AMI solutions that meet the minimum security requirements outlined in the Plan. (ICC Staff Ex. 1.0, ll. 334-352.) The Company thus concludes Commission should find the Plan "contains open standards and internet protocol to the maximum extent possible consistent with cyber security."

b. Staff Position

c. CUB/ELPC Position

d. AG Position

e. Commission Analysis and Conclusion

No party submitted testimony in this proceeding disputing that AIC's AMI Plan sufficiently outlines the AIC's approach to developing policies and procedures for cyber security to identify and mitigate cyber security risks, implement cyber security standards based on industry best practices and regulatory guidelines, and evaluate AMI vendors and equipment that provide AMI solutions that meet the minimum security requirements outlined in the Plan. Based on its review of the Plan, the Commission agrees with that assessment. Therefore, the Commission finds AIC's AMI Plan contains open standards and internet protocol to the maximum extent possible consistent with cyber security.

3. Privacy of Customer Personal Information

a. AIC Position

According to AIC, the AMI Plan recognizes that implementation of AMI will allow AIC to more effectively collect and utilize customer data. (Ameren Ex. 1.1, p. 37.) The

Company explains the AMI Plan, however, also recognizes that advancements in the collection and utilization of customer data do not change existing consumer privacy regulations. AIC explains the AMI Plan sufficiently outlines what data will be collected, how that data will be used, and the limitations on disclosure of that data without customer consent. (Ameren Ex. 1.1, p. 38.)

AIC points out that Staff agrees (ICC Staff Ex. 1.0, II. 354-361), and no party has presented any evidence in this proceeding that the Plan does not adequately address AIC's approach to protecting the privacy of customers' personal information. The Company concludes the Commission should find the Plan "secure[s]" the privacy of customers' personal information and provides them the opportunity to consent to disclosure of that information in accordance with State and federal law and regulations regarding consumer privacy and protection of consumer data.

b. Staff Position

c. CUB/ELPC Position

d. Commission Analysis and Conclusion

No party submitted evidence disputing AIC's AMI Plan sufficiently outlines what data will be collected, how that data will be used, and the limitations on disclosure of that data without customer consent. Based on its review of the Plan, the Commission agrees with that assessment. The Commission therefore finds the Plan secures the privacy of customers' personal information and provides them the opportunity to consent to disclosure of that information in accordance with State and federal law and regulations regarding consumer privacy and protection of consumer data.

C. Cost Beneficial Requirement

The law provides that, after notice and hearing, within 60 days of the filing of the AMI Plan, the Commission "shall . . . issue its order approving, or approving with modification" the Plan, if the Commission finds (i) the Plan contains the informational requirements and (ii) "implementation of the AMI Plan will be cost-beneficial consistent with the principles established through the Illinois Smart Grid Collaborative, giving weight to the results of any Commission-approved pilot designed to examine the benefits and costs of AMI deployment." Section 16-108.6(c). A plan is "cost beneficial" "if the present value of the total benefits" of the plan "exceeds the present value of the total costs" of the plan. Section 16-108.6(a). The "total costs" of the plan include "all utility costs reasonably associated" with the plan. *Id.* The "total benefits" include "avoided utility operational costs, avoided consumer power, capacity, and energy costs, and avoided societal costs associated with the production and consumption of electricity," as well as other societal benefits. *Id.* Assuming the participating utility can demonstrate that its plan produces a positive net benefit for its electric customers (and contains the informational requirements), the Commission does not have the discretion to reject a plan.

1. AIC Position

AIC asserts the Cost/Benefit Analysis (Ameren Ex. 2.1) provided with the AMI Plan demonstrates that AIC expects to be able to implement and deploy AMI to 62% of its electric customers over a 10-year period, and 100% of electric customers over a 15-year period, in a manner that will be cost beneficial to the Company's electric customers. AIC explains the Cost/Benefit Analysis outlines in detail the expected costs

and benefits of AMI. The Company further explains capital costs for installation of AMI meters and communication network were developed using average vendor pricing. (Ameren Ex. 2.0, p. 8; Ameren Ex. 2.1, p. 12.) Costs for IT systems and integration hardware were projected. (Ameren 2.1, pp. 13-14.) Ongoing operational and maintenance expense to support these systems were calculated. (*Id.*, pp. 15-16.) And direct operational and customer benefits were identified and quantified. (*Id.*, pp. 16-27.) The overall results of this evaluation are positive. The net present value – or total annual discounted net customer benefit – for the Company’s “Base Case” proposal (100% electric over 15 years with gas meter automation) is \$153 million over the 20-year measurement period. (Ameren Ex. 2.0, ll. 120-126; Ameren Ex. 2.1, p. 31.) AIC asserts, even if AIC stopped at year 10 and discontinuing deployment of AMI to its remaining electric customers and further automation of gas meters beyond the initial 10-year period, the net present value of the “Base Case” at year 10 would still remain positive based on its Analysis. (Ameren 2.1, p. 36.) AIC further contends, if it were assumed the Company did not go forward with automating gas meters whatsoever, the deployment of AMI to 100% of electric customers over a 15-year period still results in a net present value. (Ameren Ex. 2.0, ll. 253-260; Ameren Ex. 2.1, p. 36.)

AIC notes no party takes issue with the categories and calculations of costs and benefits in the Cost/Benefit Analysis. (Ameren Ex. 4.0R, ll. 307-313; 702-704.) It also notes no party takes issue with the positive net present values calculated for the “Base Case” at years 15 and 10, or the positive net present value for 100% Electric only AMI over 15 years. AIC further points out that Staff recognizes the “Base Case” presented in AIC’s AMI Plan – deploying AMI to 100% of electric customers (62% receiving meters within 10 years, the remaining receiving meters with 15 years) and automating gas meters in areas where the AMI network is deployed – is cost beneficial for electric customers. (ICC Staff Ex. 2.0, p. 2 & Table 1.)

AIC recognizes that Staff takes issue with the fact that deployment of AMI to 62% of AIC’s electric customers over 10 years (without automation of gas meters and without continued deployment to the remaining 38% of AIC’s electric customers in the subsequent five years) is not cost beneficial to electric customers (ICC Staff Ex. 2.0, ll. 29-30 & Table 1), and it does not dispute this is true. AIC responds, however, that that is not the plan the Company has presented to the Commission for approval. (Ameren Ex. 4.0R, p. 13.) Rather, the Company asserts, AIC has presented a plan for Commission approval that deploys electric AMI across its entire service territory over a 15-year period – a scenario that Staff recognizes *is* cost beneficial to electric customers, *even if* AIC did not move forward with automating gas meters. (ICC Staff Ex. 2.0, ll. 32-34 & Table 1.)

AIC believes Staff offers a strained interpretation of Section 16-108.6 that the Commission is barred from approving an AMI Plan with a deployment schedule exceeding 10 years. (ICC Staff Ex. 2.0, ll. 326-333.) The Company argues the plain language of the Act supports a different, more reasonable and flexible interpretation: Section 16-108.6(c) requires a combination utility to submit a plan that contains a deployment schedule and plan that includes deployment to 62% of all electric customers, but it does not restrict a utility from proposing (or the Commission approving) additional deployment beyond the 10-year period. (Ameren Ex. 3.0R, p. 10.) In other words, the statute specifies what AIC must do within 10 years, but does not limit the Commission’s authority to approve a plan with a longer deployment period to achieve full deployment across the “entire service territory.” AIC argues it does not make sense that the General Assembly intended to require AIC to deploy AMI to 62% of its electric customers over 10 years – and then just stop. The Company contends a more reasonable reading of the law is that AIC must plan for deployment to 62% of its electric customers by year 10, and then it can continue to deploy AMI to the remainder of its customers in

subsequent years. (Ameren Ex. 3.0R, p. 12.) Indeed, AIC points out, the law recognizes the Commission can continue to monitor any AMI Plan after year 10, and provides that the utility has a continuing obligation, beyond year 10, to report, upon request, to the Commission and Smart Grid Advisory Council on the AMI Plan. (*Id.*)

AIC further notes Staff's hesitation to embrace a plan that includes automation of gas meters (i) without an unconditional commitment from AIC and (ii) without a demonstration that automation of gas meters is cost beneficial to gas customers. (See *generally* ICC Staff Ex. 2.0, pp. 11-15.) In response, AIC asserts neither is a requirement under EIMA, and neither should be a concern for the Commission in this proceeding. The Company explains, as a participating utility in EIMA, AIC must make substantial capital investments over the 10 years in the distribution grid. A substantial part of AIC's planned investment is to be spent on Smart Grid electric upgrades, including AMI. In turn, the General Assembly has authorized the recovery of these significant, incremental capital costs through a performance-based rate for electric delivery costs that must be updated annually to reflect AIC's actual electric costs for the prior year and its projected electric plant investment for the current year. AIC contends the purpose of this docket and the point of the AMI Plan is to demonstrate that AIC's electric operations can deploy AMI and make these significant, incremental AMI investments in a manner cost beneficial to AIC's electric customers. The Company argues the purpose of this docket is not to calculate what the net benefit to gas customers might be from the automation of gas meters.

AIC notes that no gas costs or benefits related to the automation of gas meters have been included in the analysis of whether implementation of the AMI Plan is cost beneficial to electric customers – the Cost/Benefit Analysis only measures the costs and benefits that would be attributed to AIC's electric operations and customers. AIC explains it will weigh cost recovery options and available capital to fund these incremental gas investments, and notes the Commission will review the prudence and reasonableness of these incremental gas costs, outside of EIMA and the performance-based formula rate process. The Company contends the Commission does not require – and should not require - an unconditional commitment to automate gas meters and a showing that automation of gas meters is cost beneficial to gas customers to approve the AMI Plan. (Ameren Ex. 3.0R, pp. 7-9; Ameren Ex. 4.0R, pp. 14-15.) In response to AG's contention that the Cost/Benefit Analysis assumes that IT and AMI network costs would be allocated to AIC's gas operations if gas meters were automated, AIC points out that a 15-year deployment of AMI (without the automation of gas meters) still results in a positive net benefit. In other words, even if AIC did not automate any gas meters in the next 15 years, the quantifiable operational and customer benefits would still exceed the utility costs to implement AMI.

Staff's analyses, AIC argues, showing that various scenarios are more or less cost effective than others under various assumptions may be of theoretical interest, but are of no practical significance. Staff does not dispute that AIC's discount rate is appropriate for the type of customer-perspective cost benefit analysis called for under the law. (ICC Staff Ex. 2.0, pp. 4-5.) AIC notes, in fact, its discount rate is within Staff's proposed range, although it argues the upper end of Staff's range is artificially inflated because neither AIC's weighted average cost of capital (WACC) nor Staff's proxies for the customer rates (e.g., credit card interest and stock market returns) are appropriate for evaluating the customer's, rather than the utility's, cost of money. (Ameren Ex. 3.0R, pp. 12-16.) (AIC asserts the bottom of Staff's range is artificially inflated as well and does not account for other examples of a customer perspective cost of money such as the Commission-approved interest rate paid on customer deposits, which is currently zero.) AIC points out that, Staff witness Dr. Brightwell, in defending

his discount rate, refers to a federal regulation that he says calls for a range of 3-10%, “since the government represents society.” (ICC Staff Ex. 2.0, I. 100.) AIC argues, upon closer examination, however, these facts became clear: the regulation is used to calculate a life cycle cost analysis for federal buildings—hardly the totality of “society”, uses a ceiling and floor of 3-10% range but no reasoning is given, and most importantly, concludes the discount rate is under 3%. (Tr., pp. 244-244.) AIC concludes, in the end, Staff does not make any recommendations for a particular discount rate, or basis for the rate, for the electric cost-benefit analysis. AIC points out Staff’s own analysis shows that both the Plan’s “Base Case” (100% Electric over 15 years with gas meter automation) and Electric-only deployment scenarios produce a positive net value with discount rates that exceed what AIC used. (ICC Staff Ex. 2.0, Table 1.)

AIC argues Staff’s other analyses – examining downward adjustments to AIC’s dynamic pricing growth rates and the additional costs of a future site visit before disconnecting service for non-payment – are similarly flawed and non-dispositive on the issue of whether the Plan presents a cost beneficial solution for AIC’s electric customers. (Ameren Ex. 4.0R, pp. 15-20.) AIC explains the growth rate for dynamic pricing participation is achievable based on AIC’s customer demographics and general interest in dynamic pricing. (*Id.*, pp. 16-18; Tr., p. 104.) It contends the non-inclusion in the Cost/Benefit analysis of potential costs associated with a future site visit is reasonable to ensure full functionality provided by AMI as contemplated by the law and the pending changes to Part 280 rules. (*Id.*, pp. 18-19.) Finally, AIC contends neither sensitivity analysis results in a negative net present value for the “Base Case” in the AMI Plan. (*Id.*, pp. 18-20.)

In response to CUB/ELPC, AIC states those parties do not provide any calculations or quantified analysis to support their opinion that the Plan does not have enough details yet for the Commission to accurately forecast the Plan’s benefits. (Ameren Ex. 4.0R, p. 34.) AIC argues, to come to that conclusion, one would need to throw out the Cost/Benefit Analysis in its entirety (or, as it believes CUB/ELPC has done, conveniently ignore it). AIC concludes CUB/ELPC’s suggestion that the AMI Plan (supported by the Cost/Benefit Analysis) fails to deliver any operational and customer benefits should not be given any weight in the Commission’s consideration of whether the Plan presents a cost beneficial solution for AIC’s electric customers.

- 2. Staff Position**
- 3. CUB/ELPC Position**
- 4. AG Position**
- 5. Comverge Position**
- 6. Commission Analysis and Conclusion**

The Commission notes much attention has been given to the fact that AIC’s Plan describes the Company’s intent to automate gas meters in conjunction with deployment of the AMI network. Staff believes that before AIC may install gas AMI technology, AIC must provide the same evidentiary support and cost beneficial analysis for gas AMI that the law requires for electric. The law requires no such showing. Rather, the law requires participating utilities to file electric AMI plans that “shall provide for investment over a 10-year period that is sufficient to implement the AMI Plan across its entire service territory” Section 16-108.6(c). The Commission believes AIC’s Plan describes

more than what is required, namely a plan to automate gas meters in conjunction with the rollout of electric AMI. Whether automating gas meters is prudent, reasonable or cost-beneficial ultimately will be addressed in a different Commission proceeding concerning gas delivery rates. The Commission notes that AIC repeatedly acknowledged that approval of the AMI Plan as filed did not decide the prudence or reasonableness of costs that will be allocated to AIC's gas operations. If AIC chooses to automate gas meters during its deployment of AMI to its electric customers, it does so with the understanding that the Commission will review gas costs outside of this proceeding and outside of other proceedings authorized by EIMA. There is nothing about automation of gas meters that warrants the Commission's consideration in this proceeding or requires AIC to demonstrate now that automation of gas meters will be cost beneficial to gas customers.

It is undisputed that the Cost/Benefit Analysis supporting the AMI Plan results in a positive net present value for electric customers based on a deployment of AMI to 100% of electric customers over 15 years, *with or without* the automation of gas meters. No party has questioned the quantification of costs or benefits for electric customers under that deployment scenario. Staff's, AG's and CUB/ELPC's respective concerns do not justify rejection of the Plan. Moreover, the Commission finds the assumptions used in the Cost/Benefit Analysis, including the assumption that the remote disconnect feature will be utilized, to be reasonable. The Commission finds the AMI Plan as filed is cost-beneficial for AIC's electric customers. The Commission also rejects Staff's and AG's proposal to modify the AMI Plan to include projected rate impacts for electric (and gas) customers and require AIC to continually provide those impacts in annual reports. EIMA does not require AIC to report on the forecasted customer impact of the deployment of AMI; nor is this requirement necessary given that AIC already submits customer rate impact information for its overall electric delivery costs on an annual basis in future filings that update the cost inputs for its formula rate.

V. STAFF'S PROPOSED MODIFICATIONS TO THE AMI PLAN

A. Relationship between Metrics Plan and AMI Plan

1. AIC position

AIC argues the Commission should reject Staff's proposed modification to the AMI Plan to account for potential costs the Company may incur to implement "manual methods" to achieve annual, incremental goals for its "uncollectible expense" and "consumption on inactive meters" performance metrics (or amend the Plan to meet those yearly requirements) included in its Multi-year Performance Metrics ("Metrics Plan") (which is the subject of a different Commission proceeding (Docket 12-0089)) pursuant to Section 16-108.5(f)(6) & (8).

AIC contends Section 16-108.6 does not require the AMI Plan to account for any potential, incremental costs that AIC may incur to implement "manual methods" outside of the Plan to meet its performance metrics. Rather, that Section only requires the AMI Plan to account for quantifiable, expected costs and benefits to deploy the AMI network and meters to electric customers. AIC asserts its AMI Plan does just that. AIC explains the Plan accounts for reductions in "uncollectible expense" and "consumption on inactive meters" that the Company expects to realize from the AMI deployment. Using vendor average pricing from RFI responses, the Plan also accounts for the anticipated costs to install the AMI communications network. AIC believes the unquantified and unsupported costs that Staff questions whether AIC may or may not

incur outside of the deployment should not be considered in the analysis of whether implementation of the AMI Plan is cost beneficial.

Specifically, AIC points out the law does not require the AMI Plan to be designed to achieve – or demonstrate how AIC intends to achieve – the annual, incremental performance goals proposed in its Metrics Plan. AIC contends it is not surprising that the yearly reductions for uncollectible expense and consumption on inactive meters that the Company expects to achieve through implementation of AMI are different from yearly reductions as determined under the Metrics Plan, when the calculations are markedly different and serve different purposes. AIC explains, the annual goals in the Metrics Plan are derived from the baseline as proscribed by Section 16-108.5(f). (Ameren Ex. 4.0R, p. 21.) In each instance, the aggregate percentage improvement from the baseline required by the Act has been spread over the 10-year measurement period in equal segments. (*Id.*) In contrast, AIC further explains, the reductions reflected in the AMI Cost/Benefit Analysis for these expenses are based on the projected timing of expected benefits from the planned AMI deployment. (*Id.*, p. 22.) The yearly amounts are higher in the AMI Plan than the levels calculated under the Metrics Plan, largely because benefits from reduced uncollectible expense and consumption on inactive meters attributable to AMI deployment will not be realized until full AMI functionality is obtained. (*Id.*) AIC believes it would not be appropriate when calculating the expected net benefit from AMI deployment to include reductions that AIC does not expect to realize from the AMI deployment. (*Id.*)

AIC further contends, whether the planned AMI deployment allows AIC to meet its performance goals under the Metrics Plan is not relevant to the issue that the Commission must address in this proceeding, namely whether the implementation of the Plan is cost beneficial to AIC's electric customers. AIC states the purpose of the AMI Cost/Benefit Analysis is to demonstrate that AIC can deploy AMI to electric customers in a cost beneficial manner, not to account for the total costs that AIC may incur in meeting performance goals under the Metrics Plan through any means. (Ameren Ex. 4.0R, pp. 23-24.) AIC believes, to make that determination, the Commission must weigh the expected costs and benefits to electric customers attributable to the AMI deployment. The Company contends, that it may incur "manual methods" costs (outside of the AMI deployment), is irrelevant to that determination. Thus, AIC concludes, any potential, incremental "manual methods" costs that AIC may incur (beyond the costs it expects to incur in deploying AMI) should not be reflected in the AMI Cost/Benefit Analysis.

2. Staff Position

3. Commission Analysis and Conclusion

The Commission believes the AMI Plan and Cost Benefit Analysis sufficiently account for the expected benefits attributable to the AMI deployment. The Commission further believes it is reasonable to expect the timing of benefits from the deployment to result in reductions that do not match what is required under the Metrics Plan. Finally, the Commission agrees with AIC it is not relevant to approval of the AMI Plan whether AIC may incur other costs outside of the Plan to achieve its annual performance goals. Accordingly, the Commission rejects Staff's recommendation to require AIC to align (or account for the difference between) the calculated reductions reflected in the Metrics Plan and AMI Plan for uncollectible expense and consumption of inactive meters.

B. Use of Existing Radio Frequency (RF) Network

1. AIC Position

AIC opposes Staff's recommendation that the Commission require AIC to amend its AMI Plan to explain how it will incorporate (or not incorporate) the existing radio frequency (RF) network (which AIC explains is installed and owned by Landis + Gyr and used for the deployment of automated meter reading (AMR) (Ameren Ex. 4.0R, pp. 24-26)) into its AMI network and how that decision will affect the expected costs to deploy AMI. AMI contends that recommendation is unnecessary and premature.

AIC first contends its AMI Plan does not need to account for any hypothetical costs or savings that AIC may realize (or not realize) if it utilizes (or does not utilize) the existing RF network owned by Landis + Gyr as part of its AMI communications network. AIC points out Section 16-108.6 only requires the AMI Plan to account for quantifiable, expected costs and benefits to deploy the AMI network and meters to electric customers. AIC states its AMI Plan does just that: using vendor average pricing from RFI responses, the Plan accounts for the anticipated costs to install the AMI communications network.

AIC further explains Landis + Gyr purports that its existing RF network has the potential to be used as a two-way communications network in the AMI deployment. (Ameren Ex. 4.0R, pp. 25.) AIC explains the selection of the AMI network, however, is subject to the selection of the AMI vendors and equipment following evaluation of the RFP responses. (*Id.*) If Landis + Gyr responds to the RFP, it will have to identify and explain the changes that must be made to the existing RF network to ensure that it will satisfy interoperability and cyber security standards and other requirements of the AMI network. AIC contends, until the RFP process has run its course, AIC cannot make a final determination on how (if at all) it may use the existing RF network in its AMI network, and it certainly cannot make that decision, independent of the owner of the network, Landis + Gyr, as Staff suggests.

AIC does not dispute that its decision to utilize (or not utilize) the existing RF network may change the resulting expected costs and benefits mix of AMI deployment, as Staff implies. Nevertheless, AIC argues, that does not mean the Commission must hold approval of the AMI Plan in abeyance until that decision has been made. AIC concludes the unquantified and unsupported costs that Staff questions whether AIC may or may not incur outside of the deployment should not be considered in the analysis of whether implementation of the AMI Plan is cost beneficial.

2. Staff Position

3. Commission Analysis and Conclusion

The Commission agrees with AIC that its AMI Plan does not need to account for any hypothetical costs or savings that AIC may realize (or not realize) if it utilizes (or does not utilize) the existing RF network owned by Landis + Gyr as part of its AMI communications network. Section 16-108.6 only requires the AMI Plan to account for quantifiable, expected costs and benefits to deploy the AMI network and meters to electric customers. The AMI Plan does just that. As AIC explained, utilizing average vendor pricing, AIC calculated the costs associated with the installation of the AMI network and reflected these costs in the AMI Cost/Benefit Analysis. The Commission believes is not appropriate to include additional, hypothetical costs (or savings) that AIC may incur by utilizing (or not utilizing) the existing RF network, nor does the Commission believe it is appropriate to assume whether the existing RF network will be used (or not) until final decisions on the choice of AMI vendor or equipment have been made. The

Commission agrees with AIC that any attempt to quantify the impact on the final selection of the AMI network on the expected installation costs would be a speculative exercise at this juncture. Based on these considerations, the Commission rejects Staff's recommendation to require AIC to modify its AMI Plan to account for these possible additional, hypothetical costs.

VI. CUB'S PROPOSED WORKSHOPS

A. AIC Position

AIC argues CUB/ELPC's recommendation that the Commission convene a six-month workshop process to update the AMI Plan is unwarranted and should be rejected.

First, AIC contends the necessary information and data has been presented in this proceeding, requiring the Commission to approve the AMI Plan now. The Company submits it has presented to the Commission an AMI Plan that meets the requirements of Section 16-108.6(c): There is a statement of AIC's Smart Grid AMI vision on how it plans to develop a cost beneficial Smart Grid. There is a statement of AIC's Smart Grid strategy that includes its approach on how it intends to select the appropriate technology to create customer benefits and ensure full AMI functionality. There is a framework in place to deploy the AMI network and meters to AIC's electric customers. There are annual milestones and metrics to measure AIC's success in enabling AMI functionality and enhancing customer benefits. There is a plan to educate consumers to encourage them to understand, accept and realize the potential benefits of AMI. And there is a demonstration that implementation of the AMI Plan will result in a quantifiable net benefit to AIC's electric customers. AIC explains, that every detail is not known does not give the Commission the discretion to "conditionally reject" the AMI Plan, as CUB/ELPC proposes, and adopt CUB's workshop proposal. AIC believes doing so would effectively delay approval of a modified AMI Plan for more than a year until the resolution of the Commission's 90- day review of AIC's April 1, 2013 update filing at the end of June 2013.

Next, AIC argues CUB/ELPC's workshop proposal would unnecessary duplicate procedures and processes already in place to work with stakeholders and inform the Commission on updates to the AMI Plan. AIC states it intends to continue to consult with the Smart Grid Advisory Council on future developments to the AMI Plan and attend future Council meetings. (Ameren Ex. 4.0R, pp. 7-9; Ameren Ex. 3.0R, pp. 18-19.) AIC believes this process is the appropriate forum for informing and seeking input from interested stakeholders on the decisions and details of the AMI deployment that have not been finalized. AIC further explains, after consultation with the Council, it must submit annual reports by each April 1st to the Commission regarding the progress made towards completing implementation of its AMI Plan, per Section 16-108.6(e). These annual reports must "identify any updates to the AMI Plan." *Id.* AIC states, by April 1, 2013 – the time when AIC's initial annual report is due – the final decisions as to the identity of the AMI vendor and equipment and sequence of deployment by operating center will have been made. The Company contends overlaying yet another layer of regulatory review – beyond what the General Assembly contemplated – would only serve to add to the costs borne by ratepayers.

Lastly, AIC argues that CUB/ELPC's proposal undermines CUB/ELPC's own goal for the six-month workshop process: to ensure that consumers timely receive the benefits of AMI. AIC points out that CUB/ELPC claim "[t]he goal should be to ensure

that Ameren's actual deployment does not slow the accrual of benefits to consumers . . ." (CUB/ELPC Ex. 1.0 2nd C, ll. 641-642), but their recommendation that the Commission revisit a modified AMI Plan ensures that approval of the Plan would not occur sooner than the end of June 2013. AIC's witnesses explained in their testimony there is a process already underway to select the AMI vendor, equipment and deployment sequence by the end of 2012 and begin the deployment of the AMI network by early 2013. (Ameren Ex. 4.0R, pp. 6-7.) The Company contends the Commission cannot expect AIC to finalize decisions and details while approval of its Plan remains in limbo and subject to any number of undetermined modifications.

B. Staff Position

C. CUB Position

D. Commission Analysis and Conclusion

The Commission believes CUB/ELPC's proposal for stakeholder workshops before the plan is approved is a remedy in search of a problem. Those parties have misconstrued the statute by adding their own verbiage, calling for additional detail and obligations that are not required for Plan approval. Had the legislature not dictated an abbreviated review process for AMI plans, months or years could be spent debating these issues. The Commission believes the legislature instead directed participating utilities to file AMI plans early in the formula rate process and for the Commission to rule on these plans expeditiously for good reason: it wants to see plans in place as soon as possible for deployment of AMI technology. Moreover, the stakeholder process, which CUB/ELPC advocates as a precondition for approval (or "conditional rejection"), already exists through the consultation with the Smart Grid Advisory Council. In other words, the EIMA acknowledges and accommodates updates and changes to the AMI Plan through collaboration with the Smart Grid Advisory Council. AIC is required to report to the Commission annually about its progress under the Plan, and to also advise of any changes or updates. Given the process and procedure for ongoing monitoring of the AMI Plan, the Commission is assured that it may review these details and decisions as they are made. Further, the Commission recognizes these details and decisions are milestones in the AMI Plan, and thus will not be made (because they cannot be made) if the Plan is not approved and this process forestalled. An approved AMI Plan is a condition precedent to further review by the Advisory Council, or by the Commission itself in annual update filings.

In light of these considerations and the parties' arguments, the Commission believes delaying approval of the AMI Plan and requiring AIC to come back to the Commission next year to litigate approval of a modified Plan is unnecessary and counterproductive to CUB/ELPC's desire to have consumers see the benefits from AMI sooner than later. Therefore, the Commission rejects CUB/ELPC's workshop proposal.

VII. FINDINGS AND ORDERING PARAGRAPH

The Commission, having given due consideration to the entire record herein and being fully advised in the premises, is of the opinion and finds that:

- (1) AIC is an Illinois corporation engaged in the transmission, sale, and distribution of electricity to the public in Illinois, and is a public utility as defined in Section 3-105 of the Act;

- (2) AIC is an “electric utility” as defined in Section 16-102 of the Act, and a “combination utility” and “participating utility” as defined in Section 16-108.5(b) of the Act;
- (3) the Commission has jurisdiction over AIC and the subject matter herein, the facts recited and conclusions reached in the prefatory portion of this Order are supported by the record and are hereby adopted as findings of fact;
- (4) on March 30, 2012, AIC timely filed with the Commission its Smart Grid Advanced Metering Infrastructure Deployment Plan (AMI Plan) after consultation with the Smart Grid Advisory Council and after the evaluation report in the Commission-approved AMI Pilot Program had been issued, consistent with Section 16-108.6(c) of the Act;
- (5) AIC’s AMI Plan contains the five required elements set forth in Section 16-108.6(c)(1)-(5) of the Act and is compliant with that Section;
- (6) in accordance with Section 16-108.6(c) of the Act, AIC’s AMI Plan is consistent with the standards of the National Institute of Standard and Technology for Smart Grid interoperability that are currently in effect;
- (7) in accordance with Section 16-108.6(c) of the Act, AIC’s AMI Plan includes open standards and internet protocol to the maximum extent possible consistent with cyber security;
- (8) in accordance with Section 16-108.6(c) of the Act, AIC’s AMI Plan maximizes, to the extent possible, a flexible smart meter platform that can accept remote device upgrades and contain sufficient internal memory capacity for additional storage capabilities, functions and services without the need for physical access to the meter;
- (9) in accordance with Section 16-108.6(c) of the Act, AIC’s AMI Plan secures the privacy of personal information and establishes the right of consumers to consent to the disclosure of personal energy information to third parties through electronic, web-based and other means in accordance with State and federal law and regulations regarding consumer privacy and protection of consumer data;
- (10) the present value of the total benefits of AMI’s Plan exceeds the present value of the total costs of Plan and the AMI Plan is cost-beneficial consistent with the principles established through the Illinois Smart Grid Collaborative, giving weight to the results of any Commission-approved pilot designed to examine the benefits and cost of AMI deployment;
- (11) AIC’s AMI Plan fully complies with Section 16-108.6 of the Act and should be approved without modification.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that Ameren Illinois Company’s Smart Grid Advanced Metering Infrastructure Deployment Plan, as outlined in this Order, is hereby approved, without modification, consistent with the conclusions contained herein.

IT IS FURTHER ORDERED that all motions, petitions, objections, and other

matters in this proceeding which remain unresolved are to be disposed of in a manner consistent with the conclusions herein.

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

DATED: May 4, 2012

Respectfully submitted,
AMEREN ILLINOIS COMPANY

By: /s/ Mark A. Whitt

One of their attorneys

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CERTIFICATE OF SERVICE

I, Mark A. Whitt, certify that on May 4, 2012, I caused to be served a copy of the foregoing Ameren Illinois Company Draft Order by electronic mail to the individuals on the Commission's Service List for Docket No. 12-0244.

/s/ Mark A. Whitt
Attorney for Ameren Illinois Company