

TABLE OF CONTENTS

I. INTRODUCTION 1

 A. Procedural History 3

 B. Legal Framework and Standard 5

II. WHETHER IMPLEMENTATION OF THE AIC AMI PLAN WILL BE COST BENEFICIAL 7

 A. The Record Demonstrates that Implementation of the AMI Plan Presented in AIC’s Direct Case on Rehearing Will Be Cost Beneficial. 7

 1. Revisions to the Plan Show that the Deployment of AMI to AIC’s Electric Customers Can Produce Benefits in Excess of Costs..... 8

 2. No Party to this Proceeding Recommends on Rehearing that the Commission Reject Outright the AIC AMI Plan. 10

 3. Concerns about the Plan’s Projected Societal Benefits Are Unfounded and Should Not Cause the Commission to Withhold Approval. 12

 B. The Modifications to the AMI Plan Offered by Comverge, CUB-ELPC, and the AG Are Outside the Scope of Rehearing and Otherwise Not Warranted..... 15

 1. The Commission Should Not Order AIC to File Proposed Tariffs for Critical Peak Pricing, Time of Use, or Direct Load Control. 16

 2. The Commission Should Not Order AIC to Include Additional Tracking Measures..... 18

 3. The Commission Should Not Order AIC to Analyze the Costs and Benefits of Direct Load Control Technology. 19

 4. The Commission Should Not Order AIC to Analyze the Cost and Benefits of Other Possible Deployment Scenarios. 20

 5. The Commission Should Not Order AIC to Commit to Voltage Optimization as a Core AMI Function..... 22

 6. The Commission Should Not Require AIC to Expand its AMI-Related Consumer Education Plans. 22

 7. The Commission Should Not Require AIC to Revise Its Distribution Generation Interconnection Procedures..... 23

 8. The Commission Should Not Order a Collaborative Workshop Process. 24

III. CONCLUSION..... 24

I. INTRODUCTION

The purpose of this rehearing proceeding is to answer one basic question: whether implementation of the AMI Plan, as revised by Ameren Illinois Company (AIC) after the Commission's May 29, 2012 order, will be "cost-beneficial." The answer to that question is a resounding "yes." Staff recognizes this, and to a large extent the Intervenors do as well.

The General Assembly requires utilities participating in Illinois' infrastructure investment program to file an AMI Plan with the Commission. It is one piece of a larger legislative construct enacted to improve and modernize Illinois' electric delivery system, reform ratemaking to reduce regulatory lag and ensure utilities recover their actual prudently-incurred costs, and educate customers about ways in which they can better monitor and manage their energy usage. The Act lays out, in broad strokes, the informational requirements and technical criteria that a Plan must contain. It establishes the Commission's standard for approving a Plan. And it provides for the Commission's annual review and oversight of the Plan's progress and evolution. The Plan is meant to be a roadmap of the utility's vision, strategy and schedule for deploying AMI technology in its service territory over the next ten years. It is not intended to be a guarantee of any level of costs or savings. It is intended to be the utility's framework for the deployment of AMI supported by reasonable projections of the costs and benefits of AMI.

In the seven months since AIC filed its original AMI Plan, the Commission has so far found that AIC's approach to implementing AMI in its service territory meets all of the statutory requirements but one: whether implementation of the Plan will be "cost-beneficial," i.e. whether the benefits of the Plan exceed its costs. In its Petition for Rehearing in this docket, AIC asked the Commission to revisit and consider additional evidence on the following specific finding: "the Commission cannot conclude that Ameren's AMI Plan complies with the requirement that such plan must be cost-beneficial as defined in Section 16-108.6(a) of the Act." Ameren Illinois,

Docket No. 12-0244, Order (May 29, 2012), p. 59. The additional evidence presented on rehearing is an AMI Plan and Cost/Benefit analysis, supported by direct and rebuttal testimony and revised to respond to the specific concerns noted by the Commission in its May 29, 2012 order. The scope and purpose of rehearing in this proceeding is evident: to determine whether the AMI Plan as revised by AIC to address the Commission's concerns shows that implementation of AMI in AIC's service territory will be cost-beneficial.

The evidence submitted in AIC's direct and rebuttal filings demonstrates that AIC's approach to deploying AMI to its electric customers will result in operational, customer and societal benefits that exceed the costs to implement the investment. It is an approach that *does not consider* any benefits and costs that AIC's gas customers would realize from AMI, were AIC to automate gas meters in areas of its service territory where the AMI network was deployed. (This was the Commission's first concern.) It is an approach that *does consider* the benefits and costs of "manual methods" that AIC may realize, were such methods necessary for AIC to meet annual performance goals for its AMI-related metrics. (This was the Commission's second concern.) And it is an approach that, even with some "extreme and unfavorable" assumptions, yields a positive result. As AIC's rebuttal testimony shows, even if one were to remove a large portion of the projected societal benefits from the analysis and use a discount rate of 7.0%, the benefits still exceed the costs. (Ameren Exs. 8.0RH, pp. 39-45; 8.2RH.) The sensitivity calculations that accompany the revised Cost/Benefit analysis thus illustrate that, even under the worst-case scenarios imagined by Staff and Intervenors, implementation of the AMI Plan will remain cost beneficial. The testimony of Staff witness Dr. Brightwell is instructive in this regard: even if one believes certain projected societal benefits are overstated, "there are nevertheless sufficient benefits to show AMI deployment is cost-beneficial." (ICC Staff Ex. 5.0, lines 67-68.)

Certain parties have intervened in this proceeding to attempt to have their say in the final version of the AMI Plan approved by the Commission. Comverge, Inc.—a vendor in demand response programs—generally supports the AMI Plan, but wants the Commission to require AIC to offer additional dynamic pricing tariffs, analyze the costs and benefits of AIC offering a Direct Load Control program, and track additional demand response data. CUB-ELPC has a laundry list of changes to the AMI Plan, and wants the Commission to postpone approval of the Plan and turn the reins over to the Smart Grid Advisory Council (SGAC) to modify the Plan to their liking. The Attorney General takes issue with the Plan’s projected societal benefits, and wants the Commission to “consider the limited societal benefits and financial risk imposed on customers in all future ratemaking proceedings related to recovery of AMI Plan costs,” whatever that may mean. The modifications and extraneous items proposed by Intervenors should not be adopted. They do not go to the issue of whether the Plan is “cost-beneficial” and they are not within the scope of this rehearing. The purpose of this proceeding is to determine whether the AMI Plan that AIC has presented is cost-beneficial, not to design a Plan to the satisfaction of all of the Intervenors’ far-flung agendas.

The Commission’s May 29, 2012 order identified a few specific concerns that impeded its ability to approve the original AMI Plan presented by AIC. Those concerns have now been addressed. The result is a revised AMI Plan that demonstrates the deployment of AMI in AIC’s service territory over the next ten years ultimately will produce benefits that exceed the Plan’s costs. That should be the Commission’s focus and the Commission’s finding. Accordingly, the Commission should approve the AMI Plan as AIC has presented it on rehearing.

A. Procedural History

The AMI Plan originally filed on March 30, 2012 presented AIC’s initial plan to deploy an AMI communications network and meters to 62% of its electric customers over a 10-year

period, and 100% of its electric customers over a 15-year period. In its May 29, 2012 order, the Commission found the original AMI Plan met all of the statutory “informational requirements” and “technical criteria.” (Ameren Ex. 6.0RH, pp. 2-5.) Based on the record established at the time, however, the Commission found that it “cannot determine that Ameren’s AMI Plan meets the cost-beneficial standard articulated in Section 16-108.6 of the Act.” Ameren Illinois, Docket 12-0244, Order (May 29, 2012), p. 51. Specifically, the Commission determined it could not approve an AMI plan with a deployment schedule that exceeded 10 years or included simultaneous automation of gas meters. Id., pp. 49-50. The Commission also found the record contained insufficient evidence concerning “manual” costs AIC might have to incur to meet annual performance goals for AMI-related metrics established in Docket No. 12-0089. Id., p. 50. As a result, the Order did not approve the original AMI Plan.

AIC filed a petition for rehearing on June 28, 2012, which was accompanied by a revised AMI Plan, revised Cost/Benefit analysis and supporting testimony. As the rehearing petition explained, the revised AMI Plan contains modifications carefully tailored to address concerns that the original Plan did not demonstrate that implementation of AMI would be cost-beneficial. The pace of deployment was accelerated to envision a rollout of the AMI network and meters to 62% of AIC’s electric customers in eight years, rather than ten years. The plan for deployment was expanded to detail the anticipated year-by-year, operating center by operating center schedule. The estimated costs were updated to reflect the latest vendor pricing proposals. The planned approach to educate consumers about the benefits of AMI was further developed. The costs (and resulting benefits) from the use of “manual methods” to meet AMI-related metric goals were included. The costs originally allocated to gas operations were included in this electric only analysis. Additional incremental operational, customer and societal benefits were

quantified. The result was a revised plan that demonstrated that implementation of AMI to 62% of AIC's electric customers within 10 years will be "cost-beneficial," as defined by Section 16-108.6 of the Act, even if AIC used "manual methods" to meet AMI-related metrics, and even if AIC did not automate gas meters.

AIC did not seek rehearing of any other findings in the Commission's May 29, 2012 order; nor was there any reason to do so, since the order found AIC met all other statutory requirements for approval of the AMI plan. No other party to the underlying proceeding sought rehearing. The Administrative Law Judges recommended the Commission grant AIC's application for rehearing "to consider additional evidence to evaluate whether the Revised Plan, either as filed or with modifications, meets the cost-beneficial standard contained in the Act." (Ameren Ex. 6.0RH, p. 6.) The Commission, by a vote of 5-0, granted the rehearing application.

B. Legal Framework and Standard

The Energy Infrastructure Modernization Act (EIMA) allows eligible electric utilities to participate in an investment infrastructure program that will fundamentally change and improve the delivery of energy. By electing to participate in EIMA, AIC has pledged to make significant incremental capital investments over the next ten years to strengthen and upgrade electrical systems. The deployment of AMI is a key component of AIC's investment program and a signature item from AIC's participation in EIMA.

EIMA establishes the regulatory framework by which the Commission can review the central tenets of a participating utility's plan to deploy electric AMI, before deployment begins. It required participating utilities to file an AMI plan with the Commission by a certain date soon after the enactment of the legislation. It establishes a process and timetable of review by the Commission of the plan's contents. It sets forth a limited number of requirements that the plan

must satisfy. And it creates an oversight of the plan's progress. Unlike other distribution investments, the General Assembly designed the EIMA to specifically emphasize AMI technology upfront in this regulatory process, before AIC had even installed its first AMI meter. AIC was required to file its AMI Plan by April 1, 2012—less than 3 months after it elected to participate in this new regulatory process. The emphasis is warranted: AMI is a principal benefit of EIMA for AIC's communities and the most significant EIMA investment AIC will make.

This proceeding allows AIC to demonstrate to the Commission that AIC can deploy AMI technology to its electric customers in a cost beneficial manner, i.e., the AMI will result in operational, customer and societal benefits that exceed the costs associated with the AMI investments. The open issue for rehearing is whether the revised AMI Plan meets EIMA's "cost-beneficial" standard. But the larger point of this new regulatory scheme, i.e., the Commission's annual review of the Plan's progress, is transparency. The focus now is whether AIC's planned approach to rolling out electric AMI will produce benefits that outstrip costs. The Commission then can review the Plan's progress and actual costs annually.

As stated above, Section 16-108.6 of the Act requires a showing that "implementation of the AMI Plan will be cost-beneficial." This standard is met if the present value of the total benefits of the plan exceeds the present value of the plan's total costs. The total costs shall include all utility costs reasonably associated with the plan. The total benefits shall include the sum of avoided electricity costs, including avoided operational costs, avoided consumer power, capacity, and energy costs, and avoided societal costs associated with the production and consumption of electricity. 220 ILCS 5/16-108.6(a). The Plan's total benefits shall also include "other societal benefits, including the greater integration of renewable and distributed power resources, reductions in the emissions of harmful pollutants and associated avoided health-

related costs, other benefits associated with energy efficiency measures, demand-response activities, and the enabling of greater penetration of alternative fuel vehicles.” *Id.* Assuming the participating utility can demonstrate its plan produces a positive net benefit (and meets the other statutory requirements), as AIC has, the Commission does not have discretion to reject the plan.

II. WHETHER IMPLEMENTATION OF THE AIC AMI PLAN WILL BE COST BENEFICIAL

The revised AMI Plan addresses the Commission’s prior concerns in its May 29, 2012 order and demonstrates sufficient projected benefits to support a “cost-beneficial” finding. The modifications proposed by Intervenors skirt the “cost-beneficial” issue and the scope of this rehearing.

A. The Record Demonstrates that Implementation of the AMI Plan Presented in AIC’s Direct Case on Rehearing Will Be Cost Beneficial.

The record evidence submitted by AIC in rehearing in support of the revised AMI Plan is substantial.

- Mr. Craig Nelson explains broadly the changes to the AMI Plan, the policy justifications for approving the deployment of AMI to Illinois’ downstate citizens, and the scope of rehearing. (Ameren Exs. 1.0RH; 6.0RH.)
- Mr. Ryan Ellen presents the redlined revised AMI Plan and explains the revisions to cost estimates, the deployment schedule and the consumer education plan. (Ameren Exs. 2.0RH; 7.0RH.)
- Mr. Michael Abba sponsors the revised Cost/Benefit analysis, responds to many of the extraneous Intervenor proposals, and explains why, even with Staff and the AG’s assumptions, AIC has demonstrated that implementation of the revised Plan will be cost beneficial. (Ameren Exs. 3.0RH; 8.0RH.)
- Mr. James Mazurek describes additional direct operational and customer benefits in the revised AMI Plan—benefits that no party disputes. (Ameren Ex. 4.0RH.)
- Dr. Ahmad Faruqi, a principal in *The Brattle Group*, sponsors a new analysis of many of the Plan’s projected customer and societal benefits—many of which AIC did not quantify in the original AMI Plan but that are specifically included within the definition of “cost-beneficial” under the Act—and responds to Staff and AG’s concerns about reasonableness of the projections. (Ameren Exs. 5.0RH; 10.0RH.)

- Mr. James Blessing responds to the AG's concerns about the reasonableness of AIC's forecasted avoided generating capacity costs. (Ameren Ex. 9.0RH.)
- Mr. Leonard Jones responds to Comverge and CUB-ELPC's proposals that the Commission order AIC to develop and file tariffs now for additional dynamic pricing programs, rather than wait for the retail electric supply market to develop and full AMI functionality to be achieved. (Ameren Ex. 11.0RH.)
- Mr. William Davis responds to the AG's use of an 8.8% discount rate and Total Resource Cost (TRC) test in its modeling and explains why the Plan's societal benefits call for the use of a societal discount rate. (Ameren Ex. 12.0RH.)

The manifest weight of this evidence calls for a Commission finding that implementation of the revised AMI Plan will be cost-beneficial. The concerns posed by Staff and Intervenors about certain assumptions for the Plan's projected societal benefits amount to nibbling around the edges. No party calls for the Commission to reject the Plan outright. And no party disputes that the Plan is cost-beneficial, if projected customer/societal benefits are included and a customer/societal discount rate is used. As shown in AIC's rebuttal filing (Ameren Exhibit 8.2RH), even if modest adjustments are made to the projected customer/societal benefits that Staff and AG reviewed, the Plan remains cost beneficial, even with a discount rate as high as AIC's net-of-tax Weighted Average Cost of Capital (WACC).

1. Revisions to the Plan Show that the Deployment of AMI to AIC's Electric Customers Can Produce Benefits in Excess of Costs.

The singular consideration driving the revised AMI Plan presented on rehearing is demonstrating that AIC can deploy AMI in its service territory over the next ten years in a manner that projects to be cost-beneficial. This led to a two-pronged approach: revising certain assumptions in the Plan and Cost/Benefit analysis in light of the Commission's May 29, 2012 order and revisiting all of the costs, benefits and assumptions in the initial Cost/Benefit analysis. (Ameren Ex. 3.0RH, p. 2.) The resulting product was a Plan that (i) has an accelerated deployment schedule, (ii) is not dependent on benefits electric customers would realize through

the allocation of shared costs with AIC's gas customers, (iii) accounts for any "manual methods" costs to reach annual performance goals for AMI-related metrics; (iv) accounts for any costs incurred to be in compliance with the existing Commission rules on disconnection; and (v) quantifies additional operational, customer and societal benefits not previously included.

The revised AMI Plan and Cost/Benefit analysis now assume the deployment of AMI meters to 62% of AIC's electric customers within eight years, rather than ten years. (Ameren Exs. 2.0RH, pp. 5-6; 3.0RH, p. 3.) Cost estimates have been updated based on the latest vendor pricing (Ameren Exs. 2.0RH, p. 4; 3.0RH, p. 6.) Incremental "manual methods" costs have been quantified and included. (Ameren Ex. 3.0RH, pp. 6-7.) Assumptions about allocation of a portion of shared costs to gas operations have been excluded. (Ameren Ex. 2.0RH, p. 4.) Costs for disconnects for non-pay have been retained. (Ameren Ex. 3.0RH, pp. 12-13.) Incremental operational benefits related to call volume reduction, Customer Accounts back-office cost reductions, outage management efficiencies, and electric distribution asset management planning have been quantified. (Ameren Ex. 4.0RH.) Additional customer benefits related to reliability improvements have been quantified. (Id.) Additional customer/societal benefits from demand response programs, energy efficiency programs and plug-in electric vehicles (PEV) have been quantified. (Ameren Exs. 5.0RH; 5.6RH.) The compilation of the costs and benefits quantified on rehearing produce a Plan that both addresses the Commission's concerns and satisfies EIMA's statutory requirements.

The base case AMI Plan submitted in AIC's direct filing on rehearing yields a positive net present value of \$406 million for the 20-year analysis period. (Ameren Ex. 8.0RH, p. 2.) With the correction presented on rebuttal to the Cost/Benefit analysis, the positive net present value (NPV) for the Plan is slightly reduced to \$405 million. (Id., p. 39.) That assumes the use

of a 3.62% societal discount rate derived from the 20-year Treasury bond rate. (Ameren Ex. 1.0RH, p. 13.) The NPV for the base case AMI Plan, however, remains positive, even if a discount rate is used in excess of 14%. (Id.; Ameren Ex. 8.2RH.) To demonstrate the robustness of the Plan, the Cost/Benefit analysis included sensitivity analyses around ten different factors (deployment timeframe and % customers receiving AMI meters, O&M benefits, O&M costs, Capital costs, Consumption on Inactive meter benefits, customer opt-out option, premise visits for non-pay disconnect, energy theft benefit and customer/societal benefits). (Ameren Ex. 8.0RH, p. 2-3.) By varying the different factors, the Cost/Benefit analysis includes 18 different sensitivity analyses with NPVs ranging from \$200 million to over \$700 million. (Id.) In each case, the NPV of the sensitivity analysis remains positive, i.e., the relevant benefits exceed the costs. (Id.) This analysis does not even account for additional societal benefits identified by Dr. Faruqui that have not yet been quantified, such as the bidding of demand response into the ancillary services market, better integration of renewable resources into the grid, and the avoided damages of pollutants and associated health-related costs. (Ameren Ex. 10.0RH, pp. 13-14.) The point here is evident: even if reasonable minds disagree over certain assumptions for the projected customer/societal benefits, there is a cushion of sufficient benefits to demonstrate implementation of AMI will be cost-beneficial.

2. No Party to this Proceeding Recommends on Rehearing that the Commission Reject Outright the AIC AMI Plan.

Much ink has been spilt on rehearing about the reasonableness of some of AIC's projections for customer/societal benefits. That red herring should not divert the Commission from this blunt truth: no party on rehearing has called for the Commission to reject outright the revised AMI Plan, and no party disputes that the Plan is cost-beneficial, if projected customer/societal benefits are included and a societal discount rate is used. Witnesses for Staff

and the Attorney General in fact explicitly acknowledge that implementation of the revised Plan would meet the statutory definition of “cost-beneficial,” even as they speculate that some projected benefits may be overstated.

Staff witnesses Dr. Brightwell and Dr. Schlaf, for instance, take issue with certain assumptions used in the calculation of projected societal benefits. But Dr. Brightwell finds “there are nevertheless sufficient benefits to show AMI deployment is cost-beneficial.” (ICC Staff Ex. 5.0, lines 54-55.) He ultimately concludes, “the [AMI] plan is cost beneficial as that term is defined in Section 16-108.6(a) of the PUA.” (*Id.*, lines 67-68.) In addition, neither Dr. Brightwell nor Dr. Schlaf proposes any modifications to the Plan. The presumption is that Staff believes the Commission must approve the revised AMI Plan without modification.

Intervenors make similar concessions about the aggregate level of benefits. Comverge witness Mr. Lacey testifies, “Comverge supports Ameren’s AMI Plan,” (Comverge Ex. 1.0RH, p. 12, line 4), and finds the projected benefits from demand response to be “feasible.” (*Id.*, p. 8, line 5.) The Attorney General witness Mr. Hornby acknowledges that, even if projected societal benefits are reduced under his analysis, the Plan still has a benefit to cost ratio greater than 1.0, with the use of a societal discount rate. (AG Ex. 1.0RH, p. 4.) As with the analysis performed by Staff, the AG’s own analysis, even if one disagrees with the reasonableness of the assumptions used, confirms AIC’s overall conclusion: implementation of the revised Plan will be cost-beneficial.

CUB and ELPC remain the lone holdouts refusing to acknowledge the Plan meets the statutory definition of “cost-beneficial” under any analytical perspective. Their witnesses claim the Plan does not provide enough “detail” or “commitments” to demonstrate projected benefits will be achieved. (CUB-ELPC Exs. 2.0RH, p. 8; 3.0, p. 7.) But this really isn’t surprising.

These are the same opinions their witness offered in the underlying proceeding. (CUB-ELPC Ex. 1.0 2nd-C, pp. 5-6.) They did not present an alternative calculation of the Plan's projected benefits or net present value of benefits then in the underlying proceeding. And they still haven't presented an alternative calculation now on rehearing that would prove their case. They haven't even identified which projected benefits are overstated or by how much they should be reduced. Their agenda is evident: to co-opt the AMI Plan and this process by encouraging the Commission to take another pass on approving the Plan. The Commission should give their unsupported opinions on the cost-beneficial nature of the Plan no weight and reject their invitation to further delay Plan approval.

3. Concerns about the Plan's Projected Societal Benefits Are Unfounded and Should Not Cause the Commission to Withhold Approval.

Staff and Intervenors chose to conduct detailed reviews and take issue with only a portion of the projected customer/societal benefits, namely the demand response, energy efficiency, plug-in electric vehicle enhancement, and carbon reduction benefits. (Ameren Ex. 8.0RH, p. 4.) No party took issue with any of the capital or O&M costs, the operational benefits, or the other identified customer benefits included in the revised Plan's Cost/Benefit analysis. Thus, the debate in this docket has been reduced to whether certain projected customer/societal benefits calculated by Dr. Faruqui and *The Brattle Group* are reasonable *in amount*. Once it becomes evident that the dispute is narrowed to the *levels* of projected customer/societal benefits that are reasonable to assume, it becomes apparent the Commission cannot withhold its approval of the revised AMI Plan.

AIC's evidence concerning societal benefits received only token opposition, at best. Staff witnesses Dr. Brightwell and Dr. Schlaf quibble over certain assumptions relied upon by Dr. Faruqui and *The Brattle Group*, but ultimately agree the revised Plan is cost-beneficial.

Indeed, Staff acknowledges that the Plan would not be cost-beneficial only if “extreme and unfavorable” assumptions were applied to eliminate a large portion of the projected societal benefits. (Ameren Ex. 8.0RH, p. 6.) Comverge boldly claims the Plan would not be cost-beneficial without the benefits of demand response programs, but even if all the demand response benefits were removed (an extremely negative assumption), the Plan would remain cost-beneficial. (Id., p. 9.) CUB-ELPC complains that the Plan does not contain enough detail on how AIC will realize the projected demand response, energy efficiency and PEV benefits, (CUB-ELPC Exs. 2.0RH, pp. 15-21, 23-24; 3.0RH, p. 8), but they have not conducted any quantitative analysis of the Plan’s costs and benefits for the Commission’s consideration.

Only AG witness Mr. Hornby produces a model that he claims supports a finding that the Plan is not cost-beneficial, at least “under one analytical perspective.” But this analysis is just further evidence of how “extreme” the assumptions have to be to produce a result with a benefit to cost ratio of less than one. Under his “one analytical perspective,” to reach a negative NPV, Mr. Hornby has to (i) exclude 75% of the demand response benefits; (ii) exclude 50% of the energy efficiency benefits; (iii) exclude all of the electric vehicle benefits; (iv) exclude all of the carbon emission reduction benefits; and (v) ignore the statutory requirement to evaluate the Plan from a societal perspective by using a “Total Resource Cost” with a discount rate as high as 8.8%. (Ameren Ex. 8.2RH.) As AIC’s rebuttal filing shows, these assumptions are not only unreasonable, but also fanciful. The rebuttal testimony of Ameren witness Mr. Blessing explains the basis for AIC’s projections of avoided generating capacity costs. (Ameren Ex. 9.0RH.) The rebuttal testimony of Dr. Faruqui explains the basis for AIC’s projections of reductions in peak demand, participation rates in dynamic pricing, and benefits from direct load control technology and plug-in electric vehicles. (Ameren Ex. 10.0RH.) The rebuttal testimony of Mr. Davis

explains why a societal discount rate and societal cost-benefit analysis should be used to determine the net present value of the Plan and how that approach is consistent with Mr. Hornby's reference sources. As AIC's rebuttal case demonstrates, Mr. Hornby's analysis, which again assumes only 1/4 of projected demand response benefits, 1/2 of the projected energy efficiency benefits, zero projected carbon reduction benefits, and zero PEV benefits, is not credible or reasonable. (Ameren Ex. 8.2RH.) Indeed, even with Mr. Hornby's extremely negative assumptions concerning the projected benefits, it would still take a discount rate above 6% for the Plan to not be cost-beneficial in Mr. Hornby's world. The evidence shows these assumptions are not reasonable for any analysis of the cost and benefits of a base case AMI Plan in Illinois. These assumptions are not even reasonable for a sensitivity analysis.

AIC conducted an additional "multivariable" sensitivity analysis on rebuttal to demonstrate that, even with a more conservative estimate of benefits, the AMI Plan remains cost-beneficial. (Ameren Ex. 8.0RH, pp. 39-45.) The base case was modified as such: (i) assumed the "low" participation rate (20%) for all *The Brattle Group's* customer/societal benefits (rather than 40%), (ii) removed all energy efficiency benefits attributable to customers participating in the existing PSP program; (iii) reduced avoided capacity costs by 20%; and (iv) included the costs to continue premise visits for non-pay disconnects. (Id., pp. 39-40; Ameren Ex. 8.2RH.) Based on those changed assumptions, demand response benefits dropped to 42% of the base case amount, energy efficiency benefits dropped to 45% of the base case amount, PEV benefits dropped to 50% of the base case amount, and carbon reduction benefits dropped to 44% of the base case amount. (Ameren Ex. 8.2RH.) All in all, the rebuttal "multivariable" sensitivity analysis reduced total benefits by nearly \$250 million. But even with those adjustments to projected benefits, the net present value of the revised Plan remains positive at \$166 million,

with a benefit to cost ratio of 1.36. (Ameren Exs. 8.0RH, p. 41; 8.2RH.) Moreover, that net present value would remain positive, with those assumptions, up to a discount rate of 9.21%.

(Id.) Again, this sensitivity analysis serves to show the robustness of the revised AMI Plan.

The concerns posed by Staff and Intervenors about certain assumptions by Dr. Faruqui and *The Brattle Group* in projecting customer/societal benefits do not support a Commission finding rejecting the revised Plan. If anything, the analysis performed by Dr. Brightwell and Mr. Hornby confirms that implementation of the revised Plan will be cost-beneficial. In that regard, neither Dr. Brightwell nor Mr. Hornby recommends rejection of the Plan. Nor do they propose modifications to the Plan or Cost/Benefit analysis that need to be conducted before Commission approval can be granted. AIC agrees. The revised AMI Plan should be approved as filed.¹

B. The Modifications to the AMI Plan Offered by Comverge, CUB-ELPC, and the AG Are Outside the Scope of Rehearing and Otherwise Not Warranted.

The concerns that Staff and Intervenors have with AIC's projected societal benefits, even though overblown, are properly within the scope of this rehearing proceeding. It is appropriate for parties to test and question the assumptions relied upon by AIC and its experts when projecting benefits from demand response, energy efficiency, PEV enhancement and carbon reductions. The same cannot be said for the modifications to the AMI Plan and other extraneous items that the Intervenors would like the Commission to order. The obligations that Comverge, CUB-ELPC and the AG ask the Commission to order AIC to bear are not necessary to determine whether implementation of revised AMI Plan will be cost-beneficial. That the Plan may lack the

¹ AG witness Mr. Hornby recommends the Commission "consider the limited societal benefits and financial risk imposed on customers in all future ratemaking proceeding related to recover of AMI Plan costs." (AG Ex. 1.0RH, p. 5.) First, as stated elsewhere, AIC takes issue with the assumptions underlying Mr. Hornby's "limited societal benefits." Second, the "financial risk" alluded to by Mr. Hornby is neither quantified nor qualitatively defined. All risk is relative. The risk of all benefits not outstripping all costs is a risk far different from the risk of actual societal benefits being less (or more) than projected. Lastly, issues of recovery of AMI Plan costs are outside the scope of this AMI Plan proceeding. The formula rate process will decide issues of AMI Plan cost recovery.

specific details and commitments the Intervenors may want does not demonstrate the Plan is not cost-beneficial, and does not support the Commission withholding or delaying its approval. As detailed below, each of the Intervenors' requested add-on items should be denied.

1. The Commission Should Not Order AIC to File Proposed Tariffs for Critical Peak Pricing, Time of Use, or Direct Load Control.

Comverge would like the Commission to direct AIC to file tariffs for a Critical Peak Pricing (CPP) program and a Direct Load Control (DLC) program. (Comverge Ex. 1.0RH, p. 2.) CUB-ELPC would like the Commission to direct AIC to file a tariff for a Time of Use (TOU) dynamic pricing program. (CUB-ELPC Ex. 2.0RH, pp. 15-21.) Neither action is within the scope of rehearing. And neither action is warranted to demonstrate the Plan is cost-beneficial.

AIC has no plans to offer a CPP pricing program, a DLC program, or a TOU program in the near term before full AMI functionality is realized. (Ameren Ex. 11.0RH, pp. 3-4, 9.) The existing metering at most customers' premises is insufficient. (*Id.*) And the marketing of power and energy programs by AIC is restricted to allow the competitive retail electric market to develop unimpeded by the incumbent utility. (*Id.*) The only dynamic pricing programs AIC plans to offer in the near term are the existing PowerSmart Pricing (PSP) program and the statutorily required Peak Time Rebate (PTR) program. In turn, the large majority of the projected incremental demand response benefits flow from the PSP and PTR programs, not from any offered CPP program, and not from DLC. (Ameren Ex. 8.0RH, p. 21.)

Granted, a small portion of the incremental demand response benefits (and associated costs) embedded in the revised Cost/Benefit analysis is attributable to other dynamic pricing programs and DLC. But they are not dependent on AIC being the supplier who offers a CPP, TOU or DLC program. And they are not projected to commence until 2016. The assumption—an assumption that no party has disputed—is that the market for additional dynamic pricing

programs will develop between now and 2016, once the AMI Plan is approved and deployment of the network and meters commences. (Ameren Ex. 8.0RH, pp. 10-11; Ameren Ex. 11.0RH, pp. 5-11.) In the meantime, it is premature for AIC to commit to other dynamic pricing structures now, before that market can develop, and before full AMI functionality is achieved. AIC's Plan shows there is expected value to consumers through the marriage of AMI and dynamic pricing. It is reasonable to assume a supplier will seize the opportunity to market that value and offer dynamic rates. Thousands of residents already have switched to alternative suppliers, in part because of government aggregation. (Ameren Ex. 11.0RH, p. 6.) It seems likely that someone other than AIC may be in a better position by 2016 to offer consumers other alternative dynamic pricing options. The Commission should not preempt that process or take action that would manipulate or cause inefficiencies in the market.

This is not meant to suggest that AIC may never offer a CPP, TOU or DLC program to power supply customers. It may, some day. This is just meant to suggest that the time to decide on whether such programs are offered by AIC is not now. It is more appropriate for the market, rather than the Commission, to first determine what rate programs and services are offered by which suppliers. Flooding the market now with AIC product would short circuit that process. It also would cause the utility to incur costs unnecessarily in designing tariffs and, in the case of any proposed CPP program, installing additional metering technology that would be replaced by AMI. (Tr. 52-53.) To the extent the market does not fully develop in the near term, AIC recommends the Commission convene a series of workshops to examine any potential market barriers. (Ameren Ex. 11.0RH, pp. 7-8, 11.) That would give everyone a seat at the table with a stake or interest in the evolution of the power supply market as AMI is deployed: the distribution utilities, the alternative retail suppliers, the vendors and Commission Staff.

2. The Commission Should Not Order AIC to Include Additional Tracking Measures.

Each Intervenor wants the AMI Plan modified to require AIC to include additional information in its annual reports to the Commission on the implementation of the Plan. Comverge would like for AIC to track information on any demand response programs that it offers. (Comverge Ex. 1.0RH, p. 4.) CUB-ELPC would like to see additional “tracking measures to gauge customer benefits” and proposes the Commission order AIC to adopt the 20 “trackers” that Commonwealth Edison (ComEd) *voluntarily* adopted. (CUB-ELPC Exs. 2.0RH, pp. 9, 24-32; 3.0RH, pp. 7, 9-18.) The AG wants the Commission to adopt “the same metrics and stakeholder outreach” that the Commission ordered in the ComEd AMI docket, whatever that may mean, “as well as the same reporting requirements.” (AG Ex. 1.0RH, p. 31.) None of these proposals should be accepted. In its May 29, 2012 order, the Commission already found the metrics and milestones included in the original AMI Plan adequately addressed the statutory requirement. Ameren Illinois, Docket 12-0244, Order (May 29, 2012), p. 25. In making this finding, the Commission rejected CUB-ELPC’s proposal to include additional trackers—a finding that CUB-ELPC did not seek to change on rehearing. In revising the Plan, AIC did not change any of its proposed metrics or milestones. The Commission should not allow CUB-ELPC to re-litigate issues already decided. Nor should the Commission entertain modifications to the Plan that have no bearing on whether implementation of the Plan will be cost beneficial. It is neither necessary nor proper for the Commission to adopt the proposed Intervenor trackers.

Even if these various proposals to expand the Plan’s trackers were properly within the scope of this rehearing, Intervenor have not met the burden to establish that any of these additional trackers are practical and beneficial. The additional information that Comverge would like tracked is duplicative of information AIC already proposes to track or tied to other dynamic

pricing programs that AIC does not intend to market at this time. (Ameren Ex. 8.0RH, p. 12.) CUB-ELPC's proposal does not indicate whether any of its trackers will have baselines, annual goals or penalties. (Ameren Ex. 8.0RH, pp. 26-27.) Some CUB-ELPC trackers are beyond the scope of AMI deployment; some are too vague to determine whether they would be feasible and beneficial; some of the proposed trackers could have significant associated costs; and some of the proposed trackers may not even be directly related to AIC's operations. (*Id.*, pp. 28-29.) The AG has not even identified the specific metrics, stakeholder outreach and reporting requirements that it wants included in the Plan. (Ameren Ex. 8.0RH, p. 38.) The record simply does not support the imposition of any additional "metrics" or "trackers" on AIC, based on the evidence put forth by the Intervenors. Nor should the Commission order AIC to commit to all of the same measures that ComEd has to track for the sake of standardization, especially if the primary basis for adoption here is ComEd's voluntary adoption of measures in its AMI proceeding.

This is not to say that AIC is not open to further dialogue on additional tracking measures. In its May 29, 2012 order, the Commission encouraged AIC and all stakeholders to continue the dialogue, outside of this proceeding, on appropriate measurements. AIC intends to honor that request. (Ameren Ex. 6.0RH, p. 6; Ameren Ex. 8.0RH, p. 33.) At some point, after further dialogue, with additional information, research, and understanding of the Intervenors' proposals, it may make sense to update the Plan to include more trackers. With the limited information provided and at this early stage in the deployment of AMI however, it would be premature for AIC to agree to, or the Commission to order, the tracking measures proposed by Intervenors.

3. The Commission Should Not Order AIC to Analyze the Costs and Benefits of Direct Load Control Technology.

Comverge also would like the Commission to order AIC to include, in its filings for both the CPP tariff and the statutorily required Peak Time Rebate (PTR) tariff, "a cost-benefit analysis

of the provision of enabling direct load control technology” to CPP and PTR participants. (Comverge Ex. 1.0RH, p. 2.) This request, like Intervenors’ request that AIC be compelled to develop and file CPP and DLC tariffs, is premature. At a high level, the incremental costs of developing, offering and marketing a DLC program are included in the revised Cost/Benefit analysis. (Ameren Ex. 8.0RH, p. 11.) But the incremental costs are the costs of some supplier offering DLC, not necessarily AIC. (Id.) And the incremental costs (and benefits) do not begin until 2016. (Id.) If it is premature for AIC to develop, offer and market additional dynamic pricing programs that use DLC technology, it would be premature for AIC to measure the costs and benefits of undefined, hypothetical price structures that use DLC technology, especially if it turns out AIC is not the supplier that offers such programs. Moreover, it is a costly exercise that is neither necessary nor productive for this proceeding. (Ameren Ex. 11.0RH, p. 8.) Even Comverge agrees its DLC products require the synergies of AMI before any AMI-related pricing program for AMI can be implemented. (Tr. 203.) Comverge has not justified the costs that AIC would need to incur, and subsequently pass onto customers, to produce a separate cost-benefit study on one aspect of demand response. (Tr. 205, 208.) It would be far better and likely more accurate to defer a cost-benefit analysis of DLC technology closer to the time when AMI is fully functional in AIC’s service territory. (Tr. 43-46.) A decision to compel AIC to conduct such an analysis can be made then. Any dollars expended now for such efforts however will not be well spent. The task of the Commission here is to judge whether implementation of the AMI Plan is cost beneficial, not whether the introduction of DLC technology will be cost beneficial.

4. The Commission Should Not Order AIC to Analyze the Cost and Benefits of Other Possible Deployment Scenarios.

CUB-ELPC also recommends the AMI Plan be modified to examine the costs and benefits of different deployment scenarios. (CUB-ELPC Ex. 2.0RH, pp. 9, 32-35.) Like other

modifications proposed by CUB-ELPC, this modification is unnecessary and unwarranted.

AIC has presented a deployment of AMI that has shown to be cost-beneficial based on the statutory requirements and definitions in Section 16-108.6. In its May 29, 2012 order, the Commission found AIC's suggested deployment schedule satisfied the requirements of Section 16-108.6(c)(3) of the Act. Ameren Illinois, Docket 12-0244, Order (May 29, 2012), p. 23. As explained by Ameren witness Mr. Ellen, even more detail on the plan for deployment was provided. (Ameren Ex. 2.0RH, pp. 4-8.) Cost estimates were updated based on vendor pricing proposals received in response to Request for Proposals (RFPs). (Id., p. 4.) The deployment schedule in AIC's base case was revised to remove any costs and benefits from the automation of gas meters and the deployment of electric AMI meters beyond the ten year period. (Id.) The deployment schedule was also accelerated to deploy meters to 62% of AIC's electric customers in eight years, rather than ten years. (Id., p. 5.) Finally, the Plan now includes a detailed year-by-year, operating center by operating center schedule that identifies when and where the deployment of AMI meters will take place. (Id.) This detailed schedule continues to deploy AMI meters to areas of AIC's service territory that do not have AMR. (Id.) This is an efficient plan for deployment and a deployment schedule that realizes the most operational benefits in the quickest amount of time from reductions in cost of service. (Ameren Ex. 7.0, pp. 3-5.)

Designing a deployment schedule based solely on population density would neither be practical nor efficient. (Id., p. 3.) Nor has CUB-ELPC indicated how the relative presence of customer segments by operating centers—if data existed to measure that—would be relative for determining the deployment schedule. No further analysis of deployment scenarios is justified. The purpose of this proceeding is for the Commission to determine whether the deployment scenario AIC proposes will be cost-beneficial, not for CUB-ELPC to dictate to the Commission

what deployment scenario AIC should use.

5. The Commission Should Not Order AIC to Commit to Voltage Optimization as a Core AMI Function.

CUB-ELPC also recommends the AMI Plan be modified to demonstrate a commitment to voltage optimization as a “core” function of AIC’s AMI deployment. (CUB-ELPC Ex. 2.0RH, pp. 8, 13-14.) In its final order in Docket No. 10-0568, the Commission suggested AIC conduct a pilot on the demand response and energy efficiency capabilities of a voltage optimization. Ameren Illinois, Docket 10-0568, Order (Dec. 21, 2010), p. 28. As Ameren witness Mr. Abba explained, AIC expects to submit a final report on that pilot program to Staff by the end of March 2013. (Ameren Ex. 8.0RH, p. 19.) AIC is willing to share the results of that report with CUB-ELPC and other stakeholders. (Tr. 155-156.) The Commission, however, should not order AIC to “commit” to voltage optimization as a “core” AMI functionality before the pilot program has even been completed. Once the pilot is complete and the results have been analyzed, and once AMI is in place and fully functional, AIC will make a determination on how to further deploy and enhance voltage optimization.

6. The Commission Should Not Require AIC to Expand its AMI-Related Consumer Education Plans.

CUB-ELPC also would like the Plan to be modified to expand the AMI customer education plan to include specific proposals “for stakeholders engagement and to focus on customer benefits.” (CUB-ELPC Exs. 2.0RH, pp. 9, 35-36; 3.0RH, p. 8.) In its May 29, 2012 order in this proceeding, the Commission found AIC “provided sufficient detail in its AMI Plan to indicate that its consumer education will be consistent with Section 16-108.6(c)(5)...” Ameren Illinois, Docket 12-0244, Order (May 29, 2012) p. 25. In its revised AMI Plan however, AIC greatly expanded the discussion of its AMI communications and consumer education strategies. (Ameren Exs. 2.0RH, pp. 8-9; 2.2RH, pp. 24-50.) These changes provided more

detail on AIC's current plans to use its budgeted customer education dollars. (Ameren Ex. 7.0RH, p. 6.) Those changes demonstrate AIC's intention to develop different messaging for different audiences based on customer segmentation across its service territory. (*Id.*; *see, e.g.*, Ameren Ex. 2.2, pp. 24-30.) Thus, the revised AMI Plan contains even more detail than the original Plan. Nor has CUB-ELPC offered any different, detailed proposals for AIC's consideration. It is not appropriate for the Commission to reconsider its earlier finding that AIC provided sufficient detail on its approach to educating customers on the benefits of AMI. As the Commission recognized in its May 29, 2012 order, the Commission will have the opportunity to review annually both the Plan's progress and the actual costs incurred in educating consumers.

7. The Commission Should Not Require AIC to Revise Its Distribution Generation Interconnection Procedures.

CUB-ELPC also wants the Commission in this proceeding to order AIC to make changes to its distribution generation (DG) interconnection procedures. (CUB-ELPC Ex. 2.0, pp. 9, 21-23.) As Ameren witness Mr. Abba explains, AIC's existing DG interconnection procedures are consistent with the Commission's findings from Docket Nos. 06-0525 and 08-0481. (Ameren Ex. 8.0RH, p. 22.) CUB-ELPC has not provided a convincing case that AIC either should post publicly detailed maps of the distribution network or move to a web-based application process for interconnection proposals. (*Id.*, pp. 23-24.) More importantly, AIC has not quantified any DG benefits in its AMI Cost/Benefit analysis, or made any other claims as to the benefit of greater integration of distributed generation in its AMI Plan. (*Id.*, p. 23.) Thus, there is no nexus between CUB-ELPC's proposal and the issue of whether implementation of the revised AMI Plan is cost-beneficial. It would have been inappropriate for the Commission to reconsider AIC's DG interconnection procedures in the initial review of the Plan. It is even more inappropriate for the Commission to take up that issue on rehearing.

8. The Commission Should Not Order a Collaborative Workshop Process.

CUB-ELPC's overall recommendation is that AIC be compelled to modify the AMI Plan through a "collaborative" process facilitated by the Smart Grid Advisory Council (SGAC). AIC's position on this recommendation has not changed: AIC will consult with and inform the SGAC on the progress of the implementation of the Plan and any updates thereto, but AIC opposes a separate regulated process to discuss further modifications to the Plan before approval of the Plan can be obtained. (Ameren Ex. 6.0RH, p. 9.)

The EIMA already provided the "structured means" to engage stakeholders. It devoted an entire section of the new law to the Plan's requirements and the process of Commission review. It provided for this very proceeding whereby any interested party can intervene to offer comments on the Plan. It created the SGAC "for the purposes of advising and working with participating utilities on the development and implementation of" the Plan. It allowed for a continuing obligation on AIC's part to consult with SGAC throughout the implementation of the AMI Plan—and even beyond completion of the Plan. The EIMA thus provides for an unprecedented level of transparency and engagement with stakeholders when it comes to AIC's potential investment in AMI. Nor does the evidence support CUB-ELPC's assertion that AIC "has not found a good way of working" with SGAC and other stakeholders. (Ameren Ex. 8.0RH, p. 16.) No further "structured means" is necessary.

III. CONCLUSION

The evidence shows that the revised AMI Plan will be cost-beneficial. The Commission should approve it as filed, without modifications.

DATED: October 3, 2012

Respectfully submitted,

AMEREN ILLINOIS COMPANY

By: /s/ Mark A. Whitt

One of their attorneys

Edward C. Fitzhenry
Matthew R. Tomc
AMEREN SERVICES COMPANY
One Ameren Plaza
1901 Chouteau Avenue
St. Louis, Missouri 63166
(314) 554-3533 (phone)
(314) 554-4014 (fax)
efitzhenry@ameren.com
mtomc@ameren.com

Mark A. Whitt
Christopher T. Kennedy
WHITT STURTEVANT LLP
PNC Plaza, 20th Floor
155 E. Broad St,
Columbus, Ohio 43215
(614) 224-3911
whitt@whitt-sturtevant.com
kennedy@whitt-sturtevant.com

Albert D. Sturtevant
Rebecca L. Segal
WHITT STURTEVANT LLP
180 N. LaSalle Street, Suite 2001
Chicago, IL 60601
(312) 251-3017
sturtevant@whitt-sturtevant.com
segal@whitt-sturtevant.com

CERTIFICATE OF SERVICE

I, Mark A. Whitt, certify that on October 3, 2012, I caused to be served a copy of the foregoing Initial Brief on Rehearing of Ameren Illinois Company 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