



Electric Energy Efficiency Submission in
Accordance
with 220 ILCS 5/16-111.5B

Submitted as an accompaniment to AIC's Electric Procurement Submission
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Ameren Illinois Company

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1.0 Overview of Submission

In accordance with Section 5/16-111.5B (provided for reference purposes as Appendix 1) of the Public Utilities Act (the "Act"), Ameren Illinois Company d/b/a Ameren Illinois ("Ameren Illinois," "AIC" or the "Company") hereby submits this assessment and related information to the Illinois Power Agency ("IPA") regarding the procurement of energy efficiency for the upcoming program year ("PY") 10, which comprises the time period including June 1, 2017 through May 30, 2018.¹ This submission reflects careful consideration of the provisions of the Act, materials received by Ameren Illinois from energy efficiency vendors who provided bids in response to the request for proposal ("RFP"), and significant collaboration with, and input from, interested stakeholders who participated in the review of the RFP and bids, as well as workshops on several key policy issues, as directed by the Illinois Commerce Commission ("ICC" or "Commission").

By way of background, since 2007 Ameren Illinois has achieved an estimated 1.9 million MWh² of first-year electric energy savings through an innovative portfolio of energy efficiency programs offered through Section 5/8-103 of the Act. During this time, AIC has established and grown collaborative relationships with interested stakeholders³ and provided leadership on several major policy initiatives, including the development and approval of the statewide Technical Reference Manual ("IL-TRM") and the development and approval of a statewide Energy Efficiency Policy Manual ("IL Energy Efficiency Policy Manual"). Since 2012, and in accordance with the provisions of Section 5/16-111.5B, Ameren Illinois has prepared an annual submission relating to energy efficiency for use by the IPA when developing its 2017 IPA Electricity Procurement Plan to procure electricity for Illinois' electric utilities for the upcoming year.

¹This time period also coincides with Program Year 10, which is the first year of AIC's next Section 5/8-103 energy efficiency and demand response plan ("Plan 4"), which at the time of this submission has not yet been filed for approval.

²Notably, only estimated savings can be referenced as the Commission has completed review and approval of the savings reported by the independent evaluator for PYs 1-3 only.

³These stakeholders include: the Commission Staff, the Illinois Power Agency ("IPA"), the Office of the Attorney General for the State of Illinois ("OAG"), the Environmental Law and Policy Center ("ELPC"), the Natural Resources Defense Council ("NRDC"), the Citizens Utility Board ("CUB"), other utilities, interested customer groups and many industry-specific vendors and experts.

As in past years, it is expected that the IPA will review the submissions of the electric utilities, prepare its 2017 IPA Electricity Procurement Plan ("Procurement Plan"), and then file the Procurement Plan with the ICC for review and approval.

After receipt of the submissions required pursuant to Section 5/16-111.5B(a)(3) of the Act, the IPA, pursuant to Section 5/16-111.5B(a)(4), must include in its Procurement Plan filing, among other things, any "energy efficiency programs and measures it determines are cost-effective...." The Commission, however, must go beyond the IPA's cost-effectiveness analysis and approve "the energy efficiency programs and measures included in the Procurement Plan, including the annual energy savings goal, if the Commission determines they fully capture the potential for all achievable cost-effective savings, to the extent practicable, and otherwise satisfy the requirements of Section 5/8-103 of this Act." 220 ILCS 5/16-111.5B(a)(5) (emphasis added). In the Final Order in Docket No. 15-0541, the Commission determined that the phrase "to the extent practicable" gives the Commission "the authority to set practical limits on the procurement of EE" and further stated that "the phrase 'to the extent practicable' is a qualifying phrase that allows this Commission to exercise judgment and flexibility." ICC Docket No. 15-0541, *IPA Petition for Approval of the 2016 IPA Procurement Plan*, Final Order (Dec. 16, 2015) at 100-101. The Commission has used its discretion under the Act to fashion practical limits on the procurement of energy efficiency, in an attempt to, among other things, ensure that ratepayer funds are not spent on energy efficiency programs that would not yield meaningful electric energy savings for electric customers. *Id.*

AIC expects that the IPA and the Commission will again contend with the practical limits of energy efficiency procurement for PY10. This year's Procurement Plan represents only the second time that the Commission must review the proposed procurement of "new or expanded cost-effective energy efficiency programs or measures that are incremental to those included in energy efficiency and demand-response plans approved by the Commission pursuant to Section 8-103," Section 5/16-111.5B(a)(3)(C), simultaneously with its review of the electric utilities' proposed Section 5/8-103 energy efficiency and demand response plans themselves, which complicates the regulatory

review and approval of both.⁴ Moreover, the level of ratepayer funding and the large number of vendors vying for customer participation in the IPA procurement process, particularly in the small business market, affirms the need for a careful analysis of whether and in what amount the Commission should approve an incremental energy efficiency procurement. For example, in the first year of IPA procurement of energy efficiency for PY6, one small business vendor was approved to implement one small business program. Just three years later, for PY9, seven small business vendors were approved to implement ten small business programs.⁵ For this Procurement Plan, multiple small business vendors could again be implementing programs, and as noted below, several of those vendors seek to implement the same measures (with different incentive levels), with most of them duplicating efforts to work with the same program allies to reach the same type of customers.

In light of this evolved situation, AIC continues to carefully review the bids received by vendors who seek to have electric energy efficiency programs included as part of the Procurement Plan. This review has raised some concerns, which are included in this submission for IPA and Commission consideration. First, AIC has observed a different standard being applied by stakeholders for the review and approval of energy efficiency programs under Section 5/8-103 and those bids submitted pursuant to Section 5/16-111.5B. Specifically, stakeholder review under Section 5/8-103 has traditionally focused on program selection and the overall cost per kWh (accomplished through review of assumed program costs and proposed adjustments to same). See e.g., ICC Docket No. 13-0498, Final Order (Dec. 21, 2014) at 48-62 (setting forth stakeholder positions regarding the transfer of certain programs from the proposed Section 5/8-103 Portfolio to the Section 5/16-111.5B IPA procurement process). Yet, during review of proposed energy efficiency programs for inclusion in the Procurement Plan, the review has often focused on whether a program passes the Total Resource Cost (“TRC”) test⁶

⁴ While at the time of this submission AIC has not yet filed its petition for approval of its Section 5/8-103 and Section 5/8-104 integrated energy efficiency portfolio for PY10-12, that petition will be filed by September 1.

⁵ As noted above, none of these programs have been evaluated by the independent evaluator that evaluates, measures, and verifies energy savings.

⁶The TRC is defined by IL statute in Sec 1-10 of the Act as, "Total resource cost test" or "TRC test" means a standard that is met if, for an investment in energy efficiency or demand-response measures, the benefit-cost ratio is greater than one. The benefit-cost ratio is the ratio of the net present value of the

(and adjusting values used in the TRC test) as opposed to bidder costs or assessment of whether the bidders, many of whom are new to AIC's service territory or whose programs have not been evaluated, can actually deliver the estimated energy savings proposed. Accordingly, AIC includes with this submission certain qualitative analyses in an attempt to provide the IPA (and later the Commission) with information pertinent to the review of the bids. (See e.g., *Section 4.8.*)

Second, the substantial growth in the number of vendors and bidders participating in the Procurement Plan process appears to have had an impact on the cost of energy efficiency administration and implementation. Each year AIC must spend more administrative resources to try to ascertain bidder reliability, accountability and to ensure market allies and customers are not confused by the deluge of new bidders that may or may not be delivering consistent messages in AIC's vast service territory. Given the unique characteristics of AIC's service territory, in terms of size, demographics, and market channels, market confusion remains a challenge to successful growth of energy efficiency.

Moreover, while cost-effectiveness of proposed programs is calculated at the planning stage, without knowledge of the effects of program-to-program impact, the practical reality remains that programs are not implemented in isolation. Rather, approved energy efficiency programs, as directed by the Commission, have been implemented in connection with the other energy efficiency programs, whether implemented pursuant to Section 5/8-103, Section 5/8-104 or Section 5/16-111.5B. Stakeholders and the Commission have previously recognized this issue, and the Commission has adopted a multi-factor test to prevent duplicative programs in their entirety and to seek to prevent competing programs from having a negative impact on the savings achieved by such

total benefits of the program to the net present value of the total costs as calculated over the lifetime of the measures. A total resource cost test compares the sum of avoided electric utility costs, representing the benefits that accrue to the system and the participant in the delivery of those efficiency measures, as well as other quantifiable societal benefits, including avoided natural gas utility costs, to the sum of all incremental costs of end-use measures that are implemented due to the program (including both utility and participant contributions), plus costs to administer, deliver, and evaluate each demand-side program, to quantify the net savings obtained by substituting the demand-side program for supply resources. In calculating avoided costs of power and energy that an electric utility would otherwise have had to acquire, reasonable estimates shall be included of financial costs likely to be imposed by future regulations and legislation on emissions of greenhouse gases."

programs or on the adoption of energy efficiency by AIC customers, in general. See ICC Docket No. 13-0456, Final Order (Dec. 18, 2013), at 148-149. As set forth below, the issues of competing or duplicate programs will once again be a practical concern when reviewing the bids for inclusion in the Procurement Plan for this year.

In context of the above, Ameren Illinois provides the following assessment and related information required pursuant to Section 5/16-111.5B.

1.1 Prior ICC Dockets Addressing IPA Procurement of Energy Efficiency

The Commission reviewed and approved energy efficiency programs for the Ameren Illinois service territory in accordance with 220 ILCS 5/6-111.5B in ICC Docket Nos. 12-0544 (PY6), 13-0546 (PY7), 14-0588 (PY8 and PY9) and 15-0541 (PY9). As noted above, this submission pertains to PY10, which coincides with the first year of AIC's three-year energy efficiency portfolio of programs implemented pursuant to Section 5/8-103 and Section 5/8-104 for PY10 through PY12. This three-year portfolio of programs ("Plan 4") remains under development, with a filing for approval by the Commission expected to be made by September 1, 2016.

1.2 Report on Items Ordered by the Commission in ICC Docket No. 15-0541

In ICC Docket No. 15-0541, the Commission encouraged or ordered the SAG to hold workshops on (1) whether and/or which consensus items should be included in the Procurement Plan, (2) what TRC-related information the utilities need to provide to the IPA for its analysis of duplicative programs, (3) how Section 5/16-111.5B bids will be conducted when the Section 5/8-103 programs for Plan 4 have not yet been approved (4) administrative cost tracking, categorizing, reporting and analysis (TRC analysis for Section 5/16-111.5B programs), and (5) how utilities scrutinize and negotiate vendor contracts for programs that have been approved by the Commission for implementation. See generally, ICC Docket No. 15-0541, Final Order (Dec. 16, 2015). The SAG held several workshops regarding these topics, and AIC participated in all of them. The process involved significant work by the utilities and other stakeholders.

1.3 TRC Modeling/Changes

To add rigor, expertise and independence to the analysis for this submission, AIC once again engaged the national consulting firm of Applied Energy Group ("AEG") who utilizes the robust "BENCOST" modeling software to determine measure savings and cost-effectiveness. AEG has been engaged with AIC for over five years and has performed past analysis for all of AIC's previous annual Procurement Plan submissions. AEG also has significant knowledge, experience and a deep understanding of energy efficiency programs in Illinois, as well as the stakeholders involved, by virtue of developing three-year energy efficiency plans for utilities in Illinois, including AIC, Peoples Gas and North Shore Gas. With input from AIC, stakeholders and bidders, AEG performed the TRC analysis included in this submission.

This year the following changes were made to the AEG BENCOST model:

1. Quantifiable non-energy benefits were included for water and O & M expenses;
2. A reserve adjustment was added to capacity; and
3. A reasonable estimate was included associated with the costs related to future regulations on greenhouse gasses.

AIC also provided utility-specific assumptions including but not limited to avoided costs (energy, capacity, and natural gas), discount rates, and line losses. Bids were evaluated using yearly avoided costs.

As in previous years, AIC provided to AEG a cost input to account for evaluation, administration, and marketing (including education and outreach). For this year, the cost input was based on the IPA programs that were implemented for PY8, for which some costs have been incurred and others are still expected to be incurred. AIC categorized these costs in accordance with Section 5.2 of the IL Energy Efficiency Policy Manual. In total, and in consideration of the effort and resources needed to implement approved programs, AIC estimated an additional 13.44% of costs over and above those included by the bidders themselves. This percentage includes both fixed and scalable costs. The scalable portion is 11.89% and the fixed portion is 1.55%.

Notably, while AIC will seek recovery of all costs associated with the evaluation, administration and marketing of the approved energy efficiency programs, only the scalable portion of 11.89% was used in the TRC analysis.

The 11.89% percent consists of the following: 3.97% for scalable EM&V costs; 5.61% for scalable administration, which includes, for example, the cost of planning, assessing and tracking the programs required under Section 5/16-111.5B; and 2.30% for scalable marketing (including education and outreach) efforts that are known and relied upon by the bidders when endeavoring for program success.

Finally, AIC has become concerned that some bidders designed their programs to rely on gas measures to make a proposed program cost-effective, as the programs would have only electric customers paying for these programs without any assurance that those electric customers would actually receive any gas savings. While AIC is a dual fuel utility, approximately 50% of residential customers do not receive gas service from AIC, while approximately 75% of small business customers do not receive gas service from AIC. Given AIC's concerns, and with consideration of stakeholder insight and opinion, AEG ran the TRC analysis for those programs with significant gas measures and savings both considering and excluding those gas benefits. While all parties acknowledge the Act's requirement to run the TRC test using electric and gas savings for purposes of inclusion in the Procurement Plan, AIC and certain stakeholders have historically agreed that the electric-only TRC may provide useful information for the utility, IPA and the Commission to consider when reviewing and approving bids to be included in the Procurement Plan and for setting practical limits on future RFP submissions.

1.4 TRM and NTG Assumptions

Consistent with prior ICC directives, AIC has actively participated in the development and update of an annual statewide IL-TRM⁷ which is the guiding document and tool for determining energy efficiency measure savings in Illinois. Therefore, bids were

⁷The first IL-TRM was approved in Dockets 12-0528 and 13-0077. The second and third IL-TRMs were approved in Dockets 13-0437 and 14-0189, respectively. The fourth was approved in Docket 15-0187 and the current version (Version 5.0) was approved in Docket 16-0171.

analyzed using measure values reflected in the 2016 updated IL-TRM (referred to as Version 5.0). Besides creating consistency with statewide accepted values, using ICC-approved IL-TRM values provides reasonable confidence in the methodology used to determine the savings estimates provided in this submission. Programs were also analyzed using the recommended Net-to-Gross ("NTG") values provided by AIC's independent evaluator, Opinion Dynamics. For ease of reference, the NTG values recommended by Opinion Dynamics are included as Appendix 2.

1.5 Reservations and Requests

In light of the lack of approved energy efficiency programs pursuant to Section 5/8-103, there could be a concern that no "incremental" energy efficiency could be identified to be part of the Procurement Plan this year. Notwithstanding that concern, however, and consistent with the Commission's directives to work in "good faith" to identify ways to procure energy efficiency for PY10, AIC developed and provided this submission using the available information and materials known, including information and an exchange of ideas from the 2016 IPA SAG Workshops. But to the extent circumstances beyond AIC's control change (e.g., updates to the IL-TRM and NTG, changes in the market, a program or measure is no longer offered by a bidder or the desire to add new energy efficiency measures by the implementer),⁸ AIC reserves the right to update, revise, amend or end the programs approved in this docket. AIC's positions reflected herein are subject to change and AIC reserves the right to adjust any terms or conditions with any selected implementers to account for its upcoming Section 5/8-103 and Section 5/8-104 integrated energy efficiency and demand response Plan 4 filing, any pertinent ICC Orders, including those addressing customer data and privacy, or other relevant matters. See, e.g., ICC Docket No. 15-0541, Final Order (Dec. 16, 2015), at 36-37 (instructing the utilities to "use reasonable and prudent judgment" in negotiating and/or modifying the terms of vendor contracts to ensure that the programs "continue to result in a cost-effective EE program," and to "notify the Commission of changes made, in comparison to the approved programs").

⁸This concept is consistent with the consensus items that were addressed during the 2016 IPA SAG Workshops, the summary of which AIC anticipates will be filed in its final form by the IPA with its Procurement Plan.

As noted in prior ICC dockets, Illinois energy efficiency values are subject to change from the date of bid submission and prior to program implementation, which occurs more than a year following bid submission. Consistent with past practice, AIC intends to pursue contract negotiations (using the same level of scrutiny AIC uses when it negotiates its other vendor contracts) with those bidders of programs approved by the Commission, using contract parameters previously approved, including a "pay for performance" model of compensation that will reflect current ICC guidance. See e.g., ICC Docket No. 14-0567, *ICC v. Commonwealth Edison Company*, Final Order (Jun. 21, 2016) at 29-30. To the extent AIC can come to terms with bidders in a timely manner, AIC expects that approved programs will be implemented. However, it is possible that a contract for implementing a program cannot be signed even after the ICC issues an order for the 2017 IPA Electricity Procurement Plan.

In accordance with Section 6.2 Adjustable Savings Goals of the Illinois Energy Efficiency Policy Manual Version 1.0, the savings as submitted in this assessment may change. If so, the cost structures between AIC and the implementer will be re-negotiated for the savings calculations based on Section 6.2 Adjusted Savings Goals. AIC notes that it and/or bidders may choose not to implement the programs depending on any changes in values or if they are subject to a retrospective evaluation to determine savings based on revised IL-TRM and NTG values. Finally, a recalculated TRC value based on revised values may determine the program is no longer cost-effective. Following any pertinent ICC Orders, AIC will update the Commission Staff through the IL SAG regarding any resulting adjustments to the savings goals, TRC values or failure of a bidder's program to move into an implementation phase.

AIC also recognizes that the ICC approves the energy efficiency program savings goals and costs. However, AIC once again notes that the assessed savings and costs are estimates, as are the projected participation levels, none of which the utility created. Actual market results will differ from anticipated results, and so AIC will continue to rely on prior Commission-approval that indeterminate fluctuation in savings may occur by program year end.

Additionally, AIC seeks express approval that it is permitted to recover costs that exceed the estimated program costs. In no case will the costs to be recovered be greater than 110% of the estimated program costs plus administration costs. In lieu of this express approval, AIC will be forced to prematurely discontinue approved programs prior to the estimated budget being expended.

Finally, AIC intends to submit a robust portfolio of programs that complies with the requirements and intent of Sections 5/8-103 and Section 5/8-104. As AIC may be subject to certain provisions of the Act should it not achieve goal, it is paramount that the Commission allow AIC the utmost flexibility in development and submission of its Section 5/8-103 and Section 5/8-104 Plan 4. Accordingly, AIC may seek approval of programs as part of its Section 5/8-103 and Section 5/8-104 Plan that would render certain programs to be approved as a part of the Procurement Plan duplicative, and may seek conditional findings in this docket to provide for such an outcome.

2.0 Building Codes and Appliance Standards

Section 5/16-111.5B(a)(1) provides that the utility must include the impact of energy efficiency building codes or appliance standards, both current and projected. In accordance with this provision, the impact of building codes and appliance standards were used during the development of this submission and are explicitly incorporated in the AIC forecast, separately accompanying this submission.

3.0 Potential Study

Section 5/16-111.5B (a)(3)(A)-(B) provides that the utility must include "[a] comprehensive energy efficiency potential study for the utility's service territory that was completed within the past 3 years" and "the most recent analysis submitted pursuant to Section 5/8-103A of this Act and approved by the Commission under subsection (f) of Section 5/8-103 of this Act." In accordance with these provisions, AIC completed an energy efficiency potential study in 2016 and as agreed to by the IPA, provided the results to them on June 28, 2016, rather than as appendices herein to reduce the volume of information included with this submission.

4.0 Assessment of Opportunities

Section 5/16-111.5B(a)(3) provides that a utility must include "an assessment of cost-effective energy efficiency programs or measures that could be included in the procurement plan." In accordance with this provision, AIC provides the following assessment. Consistent with prior years, this assessment was performed, in part, with stakeholder collaboration and input that included discussions with the participating SAG members, including IPA, ICC Staff and other key stakeholders or their representatives. As noted above, a complicating factor this year is that AIC must also file its Plan 4 pursuant to Section 5/8-103(f).⁹

4.1 RFP Process and Responses

AIC initiated development of an RFP to obtain bids for Third-Party Energy Efficiency residential and small business programs for the 2017 IPA Electricity Procurement Plan in February 2016, one month later than previous years. This delay was in response to stakeholders preference and request to postpone development to coincide with the 2016 IPA SAG Workshop process ordered in ICC Docket No. 15-0541 and to allow for a more integrated approach to planning and review of proposed programs pursuant to Section 5/16-111.5B and Section 5/8-103 (while acknowledging the legal hurdles posed by the timing set forth for review under those sections of the Act). Therefore, the RFP was developed to identify all cost-effective programs in the market, including those that could inform the Plan 4 development process, with the caveat that "bidders will likely be competing for similar markets, customers, and/or technologies so competitive pricing and proposing realistic magnitudes of savings will be important selection factors on which qualified bids are accepted."¹⁰ Also in the interest of integration, the RFP was developed with the expectation that the market would respond with a comprehensive proposal for achieving all cost-effective savings except for exclusions set by AIC with expected Plan 4 programs in mind, to the extent possible at the time. For example, "AIC is not accepting any bids for kits at this time because it is expected that any

⁹ Discussions about this assessment and AIC's three year plan (previously defined as Plan 4) have been occurring and continue to occur with participating SAG members.

¹⁰ Request for Proposal (RFP) for Third-Party Electric Energy Efficiency Programs for Ameren Illinois Residential and Small Business Customers for the Illinois Power Agency Electricity Procurement Plan June 1, 2017 – May 31, 2018, at 9.

proposed kit programs would serve to duplicate AIC's kit programs that are planned for inclusion in the AIC EE Plan to be filed by September 1, 2016." The RFP also stated that bids relying on CFLs would not be accepted "as stakeholders have agreed that the market for CFLs has been transformed." This year, since the RFP coincided with the start of Plan 4, the RFP requested bids of up to three years (i.e., one, two or three years in duration), which was also consistent with past ICC directives.

The draft RFP was provided to stakeholders on February 29 for review and comment. Edits and comments were received from IPA, ELPC, the Department of Commerce and Economic Opportunity ("the Department") and ICC Staff, and many of the suggested edits were incorporated into the RFP. As in the past, the RFP was published on the Association of Energy Services Professional ("AESP") website on March 11. That RFP is attached as Appendix 3.

A pre-bid conference call was held with interested bidders on March 18. Bidders were provided an opportunity to ask and submit questions and on March 30, responses to those questions were issued to all who submitted "Intent to Bid."

Bids were due and received by April 7. Twenty-four (24) bids were received (8 for the residential sector and 16 for the small business sector). AIC and AEG reviewed the bids for completeness and compliance with the RFP requirements. Many bids were missing information (primarily related to the TRC inputs) or required clarification. Bidders were given an opportunity to provide the required data within a reasonable period of time. All bidders were responsive resulting in a final bid count of twenty-four (24). On April 8, AIC provided stakeholders with an opportunity to sign a Non-Disclosure Agreement ("NDA") which in turn, would provide them an opportunity to review the bids submitted in response to the RFP.

The following stakeholders or their representatives accepted this opportunity and signed the NDA as well as an NDA amendment governing disclosure of avoided cost information: IPA, Office of the Illinois Attorney General, ELPC, NRDC, CUB, and IIEC. Bids were provided to stakeholders and ICC Staff for review on April 15 or thereafter, as the required NDAs were executed. Specifically, bids were provided to the IPA on April

15, and as agreed to by the IPA, are not included as appendices herein to reduce the volume of information included with this submission. Bidder confirmations of TRC inputs provided after April 15 are included in Appendix 4. On April 15 and in accordance with the RFP, AIC provided ten (10) of the bids received to the Department for assessment as these bids targeted the public sector, in whole or in part. The Department reviewed the bids to determine if they could potentially be competing or duplicative with programs in the Department's Section 5/8-103 Portfolio for PY10 through PY12, if the same bidders applied for and were selected as Portfolio implementers. Comments were received from and clarified with the Department. The Department indicated none of the bids they reviewed would be duplicative with programs in the Department's anticipated plan pursuant to Section 5/8-103 for PY10 through PY12.

AIC proceeded with bid review and cost-effectiveness screening and, on May 24, presented an IPA Bid Overview to stakeholders who were interested and had signed the required NDA and amendment. In the presentation, AIC provided bidder, program, budget and savings information along with initial preliminary results of the cost-effectiveness screening completed at that time to supplement information previously provided. An initial preliminary assessment of potential competing and duplicative bids was also presented. Stakeholders or their representatives attending the May 24 presentation included IPA, Office of the Illinois Attorney General, ELPC, NRDC, CUB, and IIEC along with ICC Staff. Stakeholder questions and requests not responded to during the presentation were captured for AIC to respond to at a later date. Stakeholder feedback was elicited.

On June 14, AIC presented additional information to stakeholders who were interested and had signed the required NDA and amendment. Further refined but not yet complete results of the cost-effectiveness screening performed were provided. Preliminary information on AIC's three year energy efficiency portfolio pursuant to Section 5/8-103 and Section 5/8-104 was also provided to generate discussion and feedback on duplicity between the developing portfolio and the bids submitted in response to the RFP. Further discussion of nonresponsive, competing or duplicative

bids, particularly those relative to small business direct install programs, as well as residential behavior modification programs ensued. Stakeholders or their representatives attending the June 14 presentation included IPA, Office of the Illinois Attorney General, ELPC, NRDC, CUB, and IIEC along with ICC Staff. AIC responded to outstanding stakeholder questions and requests submitted during or since the May 24 presentation. Stakeholder feedback was again elicited and, to the extent received, considered by AIC.

4.2 AEG Bid Analysis

As previously mentioned, AEG performed the TRC analysis for AIC, which included review of the program proposals, measure information spreadsheets, and other supporting documentation. All bidders were required to provide the detailed calculations and assumptions that savings and costs were based upon. If the values were not based on the IL-TRM, third party evaluations or other documentation was provided.

AEG reviewed the detailed savings calculations provided by the bidders and then independently calculated savings for each individual measure to verify compliance with IL-TRM Version 5.0 where an IL-TRM equation was applicable. If the results matched, compliance was verified. If AEG found minor discrepancies, AEG adjusted the savings so they were in compliance. If there were major discrepancies, AEG went back to the bidder to understand why there were differences between the bidder's savings calculations and AEG's savings calculations. In all but one case, the issues were resolved and AEG was able to verify correct application of IL-TRM algorithms where applicable.¹¹ In the one unresolved case, the AEG independently calculated savings values were utilized.

In summary, AEG may have made revisions to the values provided by the vendor based on the most recently approved version of the IL-TRM, NTG assumptions that are also reviewed by the independent evaluation contractor, or other values that did not seem

¹¹One bidder did not agree with the IL-TRM. Discussions did not resolve the disagreement as AIC noted in the RFP where applicable IL-TRM values would be used in the analysis.

reasonable. If revisions were made, the vendor was asked to review and sign-off on the changes made to their bid. Bidder confirmations of TRC inputs are included in Appendix 4.

4.3 Duplicative and Competing Analysis

As reflected in Appendix 3, AIC's RFP states:

"As used in past IPA procurement plans 'duplicative' is intended to mean a program that overlaps an existing program in a manner in which greater market participation by vendors does not yield sufficient additional value to consumers. Alternatively, there could be energy efficiency offerings that, while overlapping substantively, would actually benefit from multiple channels; those programs are understood to be 'competing.'"

Effective June 1, 2017, AIC has no approved Section 5/8-103 programs or IPA programs. Therefore, by definition, there cannot be (and there are no) duplicative programs with AIC's Section 5/8-103 programs for consideration in this IPA submission. AIC is currently in the development of Plan 4 that will be applicable starting June 1, 2017, and reserves the right to submit in its Section 5/8-103 Plan to the Commission any and all measures and programs, including those that may render IPA Programs duplicative.

Many bids included duplicative measures delivered by the same channel to the same market. In its assessment, AIC determined such bids to be duplicative and by definition, they should not be allowed to run. In addition, some bids were competing in nature. If the IPA recommends and the Commission approves competing bids, it is entirely possible that bids allowed to run in a competing fashion would not ultimately be cost-effective.

More specifically, there were three residential programs that passed the TRC test, none of which are competing or duplicative of other IPA programs. On the business side, there were several programs that passed TRC and had duplicative measures with other programs which were also bid this year. Areas of duplication are exterior lighting,

interior lighting, and HVAC. Duplicative measures are further discussed in Section 4.8.

4.4 Programs Not Responsive to the RFP

This year's RFP stated that "The purpose of this RFP is to procure energy efficiency programs that acquire electric savings in accordance with Section 5/16-111.5B of the Act. Accordingly, any programs or measures designed to acquire gas savings will not be accepted. However, if an electric program design captures incidental gas savings through multi-fuel measures, it may be considered. Such savings will be considered for purposes of the TRC test."

One bid, Matrix Demand Controlled Ventilation, had a program designed to achieve over two thirds of its savings from gas measures. After reviewing the bid, AIC determined the Matrix bid also had measures that AIC currently plans to include in its upcoming Plan 4 under Section 5/8-104 (the gas energy efficiency statute). In addition, AIC notes that this vendor has not appeared to perform up to expectations in an IPA program run in another part of the State. As a result, consistent with the RFP, the bid was not accepted and no cost-effectiveness analysis was conducted.

Another bid, OPower Behavior Modification, was designed by the bidder to be provided to joint electric and gas customers already participating in the existing OPower Behavior Modification Program. This bid had over half of its savings derived from gas measures. AIC reviewed this bid multiple ways to see if the bid was responsive to the RFP, as the TRC calculation set forth in the law did not fully inform analysis.¹² First, after running the traditional TRC analysis, AIC also analyzed the electric-only benefits with a one year measure life (to be consistent with past practice under which behavioral programs were modeled with a one year life) and the program was determined to be cost-ineffective. Second, AIC analyzed the electric-only incremental benefits with persistent savings (to be consistent with Version 5 of the IL-TRM under which behavioral programs are

¹² AIC acknowledges that the program may pass the TRC test if that analysis includes the significant gas measures contemplated by the program design.

recognized to have persistent savings after the program was stopped). Again, the program failed the TRC analysis and was determined to be cost-ineffective.¹³

Several bidders had gas savings that were between 1% and 31% of the overall savings on a BTU basis. Consistent with prior years, these bids were analyzed both using electric and gas savings and electric-only savings when determining whether the bids were responsive to the RFP.

4.5 Analysis Showing Cost-Effectiveness

Section 5/16-111.5B(a)(3)(c) provides that after conducting an RFP process, a utility must include in its assessment "identification of new or expanded cost-effective energy efficiency programs or measures that are incremental to those included in the energy efficiency and demand response plans approved by the Commission pursuant to Section 5/8-103 of the Act and that would be offered to all retail customers whose electric service has not been declared competitive under Section 16-113 of this Act and who are eligible to purchase power and energy from the utility under fixed-price bundled service tariffs, regardless of whether such customers actually do purchase such power and energy from the utility."

In accordance with these provisions and past practices, AIC provides the following table for bids that were responsive to the RFP¹⁴:

¹³ An additional note on the OPower Behavior Modification program, last year the program passed the TRC screening but was determined to be more expensive than the cost of supply and the Commission ordered AIC not to run the program. ICC Docket No. 15-0541, Final Order (Dec. 16, 2015) at 102. As noted below in Section 4.7, this year AIC, again, compared the OPower Behavior Modification program to the cost of supply and just like last year, the program is more expensive than the prevailing cost of comparable supply.

¹⁴Appendix 5 contains descriptions of the programs with a TRC>1 in Table 2. Please refer to Appendix 6 for analyses of those bids.

Table 1
Program Assessment Results: TRC Test

Sector	Program	TRC > 1
RES	CLEAResult-Advanced Tune-ups	Fail
RES	Direct Options-Personal Energy Plan	Fail
RES	NTC-In-School Behavior Mod	Fail
RES	CLEAResult-Community LED Distribution	Pass
RES	CLEAResult-Residential Retail Lighting	Pass
RES	Elevate-Supportive & Transitional Housing	Fail
RES	Energy Resources Center-Low Income Multifamily	Pass
BUS	Power Take Off-Small Commercial Behavioral	Fail
BUS	Power Take Off-DCEO Behavioral	Fail
BUS	Matrix-LED Accelerator	Fail
BUS	Nexant-HVAC Check-Up	Fail
BUS	Staples-Small Business Whole Building	Pass
BUS	Matrix-Deep Retrofit	Fail
BUS	Franklin-SBDI	Pass
BUS	MEEA-STEP	Pass
BUS	360 Energy-Private HVAC	Pass
BUS	360 Energy-Public HVAC	Pass
BUS	360 Energy-Private LED	Fail
BUS	360 Energy-Public LED	Fail
BUS	GDS-Exterior Lighting	Pass
BUS	GDS-Lit Signage	Pass
BUS	Weidt Group-Com New Construction	Pass

4.6 Analysis Showing a Reduction in Overall Cost of Service

Section 5/16-111.5B(a)(3)(D) provides that the utility's assessment should include "analysis showing that the new or expanded cost-effective energy efficiency programs or measures would lead to a reduction in the overall cost of electric service."

In accordance with these provisions and past practices, AIC performed a "Utility Cost Test" ("UCT") to determine if the cost-effective energy efficiency programs or measures would lead to a reduction in the overall cost of electric service. The UCT allows utilities

to evaluate costs and benefits of energy efficiency programs (and/or demand response and distributed generation) on a comparable basis with supply-side investments. A UCT greater than one (1) indicates that energy efficiency programs are lower-cost approaches to meeting load growth than wholesale energy purchases and new generation resources (including delivery and system costs). A UCT greater than one (1) indicates that the total costs to save energy are less than the costs of the utility delivering the same power. A positive UCT also shows that customers' average bills will eventually go down if efficiency is implemented.¹⁵ As reflected below, all programs included in the estimated MWh goal passed the UCT. The following table provides programs that passed both the TRC test and the UCT test.¹⁶

Table 2
Program Assessment Results: UCT

Sector	Program	UCT > 1	TRC > 1
RES	CLEAResult-Community LED Distribution	Pass	Pass
RES	CLEAResult-Residential Retail Lighting	Pass	Pass
RES	Energy Resources Center-Low Income Multifamily	Pass	Pass
BUS	Staples-Small Business Whole Building	Pass	Pass
BUS	Franklin-SBDI	Pass	Pass
BUS	MEEA-STEP	Pass	Pass
BUS	360 Energy-Private HVAC	Pass	Pass
BUS	360 Energy-Public HVAC	Pass	Pass
BUS	GDS-Exterior Lighting	Pass	Pass
BUS	GDS-Lit Signage	Pass	Pass
BUS	Weidt Group-Com New Construction	Pass	Pass

¹⁵EPA's "Understanding Cost-Effectiveness of Energy Efficiency Programs", *A Resource of the National Action Plan For Energy Efficiency*, November 2008.
<http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf>

¹⁶Refer to Appendix 6 for detailed analyses.

4.7 Analysis Showing How the Cost of Procuring Energy Efficiency Compares to Prevailing Cost of Supply

Section 5/16-111.5B (a)(3)(E) provides that the utility's assessment should include "analysis of how the cost of procuring additional cost-effective energy efficiency measures compares over the life of the measures to the prevailing cost of comparable supply." AIC asserts that the comparison to the cost of supply analysis is not so much a test to be applied to determine inclusion by the IPA in its Procurement Plan as it is a qualitative factor to be considered when the Commission is approving or not approving programs for inclusion in the Procurement Plan.

With respect to the analysis, AIC believes that the right comparison would include the same costs that IPA uses to serve the load if it was not reduced by energy efficiency. As stated by the Commission, "It is not 'efficient' to procure a source of energy that is more expensive than supply, as such procurement, without other benefits (and none have been raised here), is wasteful. Additionally ... the cost of EE procurement is directly borne by ratepayers.... The only reduction in the cost of electric service that would take place with energy efficiency programs that are more expensive than electricity would be to shift the cost of electricity onto the purchase of energy efficiency, at a greater price. Procurement of such energy efficiency programs seems to contravene the spirit, if not the letter, of [220 ILCS 5/16-111.5B(a)(2)]." ICC Docket No. 15-0541, Final Order (Dec. 16, 2015) at 100; 102 (analyzing parties' arguments when finding the ICC has discretion to reject programs that exceed the prevailing cost of comparable supply.) For clarity, the "prevailing cost of comparable supply" used by AIC when evaluating the bids included only the energy and capacity components of the TRC equation.¹⁷ Further, it should be noted that IPA purchases energy and capacity at the generator adjusting kilowatt hours at the meter for transmission and distribution losses. Simply stated, the cost of supply is calculated by taking the energy saved at the meter

¹⁷ To determine the cost of supply, AIC utilized the BENCOST model with revised inputs to only account for those costs associated with acquiring supply. Gas costs, avoided baseline replacements, and T&D costs were removed from the inputs. The resulting Net Present Value of avoided energy costs is what AIC compares to the Total Program Costs when performing the analysis called for under Section 5/16-111.5B(a)(3)(E)

adjusted for losses to get it to the generator multiplied by the cost of capacity and the cost of energy and then comparing it to the cost of the energy efficiency program. Such a comparison is practical and results in the proper procurement of supply and EE resources for electric ratepayers.

In accordance with these provisions and AIC’s position, the following table provides a comparison between the costs of procuring the additional cost-effective energy efficiency programs (using the estimated useful life of the measures) to the prevailing cost of comparable supply.

Table 3
Program Assessment Results: Cost of Supply

Sector	Program	Program Cost < Cost of Supply	UCT > 1	TRC > 1
RES	CLEAResult-Community LED Distribution	Yes	Pass	Pass
RES	CLEAResult-Residential Retail Lighting	Yes	Pass	Pass
RES	Energy Resources Center-Low Income Multifamily	Yes	Pass	Pass
BUS	Staples-Small Business Whole Building	Yes	Pass	Pass
BUS	Franklin-SBDI	Yes	Pass	Pass
BUS	MEEA-STEP	Yes	Pass	Pass
BUS	360 Energy-Private HVAC	Yes	Pass	Pass
BUS	360 Energy-Public HVAC	Yes	Pass	Pass
BUS	GDS-Exterior Lighting	Yes	Pass	Pass
BUS	GDS-Lit Signage	Yes	Pass	Pass
BUS	Weidt Group-Com New Construction	Yes	Pass	Pass

4.8 Bid Assessment and Supplemental Qualitative Information for Consideration

Ameren Illinois provides the following information for the IPA, and later the Commission, to consider in the development of the 2017 IPA Electricity Procurement Plan regarding bids that pass the TRC.

The tables that follow in this section walk through the multi-factor test previously recognized by stakeholders and the Commission to prevent duplicative programs in their entirety and to seek to prevent competing programs from having a negative impact on the savings achieved by such programs or in the adoption of energy efficiency by AIC customers, in general. Observations and conclusions drawn by AIC are shown following each table.

(see next page for Table 4)

Table 4: Program Assessment Results
Small Business

		Staples - Small Business Whole Building	Franklin - Small Business Direct Install	360 Energy - Private HVAC	306 Energy - Public HVAC	GDS - Exterior Lighting	GDS - Lit Signage	MEEA - STEP	Weidt Group - New Construction
Similarity in Product or Service (expressed in savings per MWh by measure type)	Lighting	60,883	60,520	-	-	-	-		
	Exterior Lighting	12,899	1,196	-	-	33,246	47,873		
	HVAC	40,256	-	21,115	21,115	-	-		
	Refrigeration	19,446	-	-	-	-	-		
	Compressed Air	1,926	-	-	-	-	-		
	Water Heating	-	-	-	-	-	-		
Market Segment Targeted		All DS2	All DS2	Private DS2	Public DS2	All DS2	All DS2	Public DS2	All DS2
Program Delivery Approach		Direct Install	Direct Install	Direct Install	Direct Install	Direct Install	Direct Install		
Compatibility with other programs		Not compatible with any other program except Weidt Group	Not compatible with Staples	Not compatible with Staples	Not compatible with Staples	Conflict with Staples, minor overlap with Franklin	Conflict with Staples, minor overlap with Franklin	Compatible	Compatible
AIC Vendor Experience		Ran Refrigeration Program for PY8 only met 28% of goal. Running refrigeration program for PY9 lowered IPA bid goal by over 50%.	Ran SBDI Program for PY8, exceeded goal. Running Program for PY9, expected to achieve goal.	Started running program for PY9. No available results.	Started running program for PY9. No available results.	Started running the Lit Signage program for PY9. No available results.	Started running program for PY9. No available results.	Started running program for PY9. No available results.	New program and new vendor
Impact on Section 8-103 Portfolio performance		Unknown, AIC Portfolio is still under development. DCEO expects to coordinate with vendor.	Unknown, AIC Portfolio is still under development. DCEO expects to coordinate with vendor.	Not expected to be in Portfolio	DCEO expects to coordinate with vendor	Not expected to be in Portfolio	Not expected to be in Portfolio	DCEO expects to coordinate with vendor	Not expected to be in Portfolio

Observations and Conclusions

- Franklin was recommended by the IPA and approved by the Commission in the 2016 IPA Procurement Plan docket to run a Small Business Direct Install program for PY8 and PY9. Franklin has done an excellent job running the program in PY8, established a strong program ally network throughout the AIC service territory, and have doubled the size of their bid for PY10.
- Staples was recommended by the IPA and approved by the Commission in the 2016 IPA Procurement Plan docket to run a Small Business Refrigeration program in AIC's service territory for PY8 and PY9. For PY8, they achieved less than 30% of the approved program goal, and these savings may be overstated as they installed two measures at the same business with savings that overlap. For PY9, Staples is proposing to achieve 41% of the approved program goal using 65% of the approved budget.

The bid submitted for PY10 (2017) has approximately 45% of the savings coming from non-lighting measures. In the Summary of Qualifications and Experience section of the bid, Staples referenced similar programs they ran in other areas, but in those areas, non-lighting measures accounted for 10% to 20% of the savings.

In terms of duplicity, the Staples bid is approximately equal in savings to the Franklin bid for lighting and the 360 Energy bids for HVAC, and considerably smaller than the GDS bid for exterior lighting. The Staples and the combination of the Franklin, 360 Energy and GDS bids are duplicative because in AIC's assessment, they target the same market, have the same delivery approach, provide the same measures and therefore duplicate costs while adding no additional value for the customer.

- More specifically, with respect to the Staples and Franklin bids and in terms of Interior Lighting, these bids were submitted unaware of what the other bidder was submitting. It is not practicable to believe that if both bids were approved, the savings in each bid would be realized. Both would be recruiting the same programs allies, and program allies would likely favor the one providing the greatest benefit to the program ally. In addition, this would create a duplication of efforts among bidders to achieve savings, which was not anticipated in the submission of bids.

This would likely increase costs and decrease the TRC values of the programs. Additionally, customers would be confused with multiple vendors offering measures at different costs, for example. The rational expectation if both bids were approved is that neither would meet their goal nor together, meet the goal of even one of the bids. And, there would be a definite duplication of costs.

In conclusion, in light of the above and AIC's assessment, the Staples bid is duplicative to the Franklin, 360 Energy and GDS bids and should not be run. Based on this conclusion, the Staples bid is not included in the tables that follow in Section 4.9 Impact on Electric Savings, Electric Ratepayers and Electricity Procurement. If the IPA recommends and the Commission approves this bid, the IPA will need to adjust the tables accordingly.

In AIC's assessment, the Franklin bid, 360 Energy bids, GDS bids, Weidt Group bid and MEAA bid are included in Section 4.9 Impact on Electric Savings, Electric Ratepayers and Electricity Procurement.

Table 5: Program Assessment Results

Residential

	CLEAResult - Residential Retail Lighting	CLEAResult - Community LED Distribution	Energy Resources Center - Low Income
Similarity in Product or Service (expressed in measure type)	LED Lighting	LED Lighting	Led lighting Insulation Faucet aerator Showerhead
Market Segment Targeted	All DS 1	All DS 1	USDA 515 Rural Housing Projects
Program Delivery Approach	Retail Stores	Food Pantries	Direct Install
Compatibility with other programs	Compatible	Compatible	Compatible
AIC Vendor Experience	Ran program for PY8 & PY9 with a combination of LEDs and CFLs	Running same program for PY9 with CFLs	Ran other DCEO Programs
Impact on Section 8-103 portfolio performance	Not expected to be in 8-103 Portfolio	Unknown, 8-103 Portfolio is still under development	Not expected to be in 8-103 Portfolio

Observations and Conclusions

- The above table shows that there are no competing or duplicative issues among the residential programs bid into the 2017 IPA Electricity Procurement Plan.
- With respect to the CLEAResult Residential Retail Lighting bid, the program is designed as a three year program which will provide LED lighting through retail stores. LED lighting is changing quickly and prices continue to drop.

- With respect to the CLEAResult Community Based LED Distribution bid, the program is designed as a three year program during which the bidder would distribute packages of LED bulbs through local food pantries. In its assessment, AIC made the following observations:
 - a) In order to meet the proposed goal over three years, the typical household would need to receive six packages of four LED bulbs on average (total of 24 bulbs) bringing the total bulbs received per household to 32 bulbs when combined with the CLEAResult Community Based CFL Distribution program approved by the Commission in the 2016 IPA Procurement Plan docket for PY9. AIC is concerned whether 32 bulbs would be needed, installed and used by each household over the course of four years.
 - b) Using local food pantries as a delivery channel has not yet been proven in the AIC service territory. AIC is uncertain about potential leakage and the adequacy of controls over the handling and distribution of bulbs in this manner, and would propose that the results of the Community Based CFL Distribution program approved by the Commission for PY9 be used to inform implementation of the three year program bid in for PY10 through PY12.
 - c) As noted above for the CLEAResult Residential Retail Lighting bid, LED lighting is changing quickly and the prices continue to drop.
- With respect to the Energy Resource Center bid, the following information was included. "The ERC has supported the Department and its Illinois Energy Now programs for several years, including conducting the technical analysis and modeling to support the Department last two three-year EEPS Integrated Electricity and Natural Gas Efficiency Plans. The ERC has developed and implemented several successful ongoing programs for the Department, such as the Boiler System Efficiency Program, Green Nozzle Program, Energy Aggregation Program, and Trade Ally Program."

The AIC RFP for the 2017 IPA Electricity Procurement Plan stated that "If an IPA bidder later works under the AIC EE Plan as either a contractor or subcontractor, a clear separation of duties and costs will be required under the AIC contract

terms." AIC would suggest that a clear separation of duties and costs be required between any work ERC does for the Department and any IPA programs that are under contract with AIC. This would ensure that any information ERC learns from working with the Department could not be used to provide an unfair bidding advantage in the IPA RFP process.

In conclusion, in light of the above and AIC's assessment:

- (1) If the CLEARResult Retail Lighting bid is recommended by the IPA and approved by the Commission for greater than one year, AIC should be granted the ability to reopen the contract on an annual basis to review product type, product quantity and price to ensure the customer is achieving a good value through the program.
- (2) The CLEARResult Community LED Distribution bid should be recommended by the IPA and approved by the Commission for only one year (PY10) to give AIC an opportunity to assess the CFL program approved by the Commission for PY9.
- (3) If the IPA recommends and the Commission approves the Energy Resources Center bid for Low Income Multifamily, a clear separation of duties and costs between work for the Department and implementation of an IPA program through AIC should be required of the bidder to seek prevention of any unfair bidding advantage in the future.

In Section 4.9 Impact on Electric Savings, Electric Ratepayers and Electricity Procurement, the CLEARResult Retail Lighting bid and the Energy Resources Center bid for Low Income Multifamily have been included for all three years. The CLEARResult Community LED Distribution bid is included only for the first year.

4.9 Impact on Electric Savings, Electric Ratepayers, and Electricity Procurement

Section 5/16-111.5B (a)(3)(F) provides that the utility's assessment should include an "energy savings goal, expressed in megawatt-hours, for the year in which the measures will be implemented." Should the eleven (11) cost-effective programs be included in the Procurement Plan, the total estimated savings goal would be 194,208 MWh for PY10.

Prior to June 1, 2013, when the IPA began procuring energy efficiency as an alternative to supply, the average annual electric energy efficiency rider charges (via Rider EDR) totaled approximately \$20 for DS-1 customers and \$61 for DS-2 customers for energy efficiency programs procured as part of the Section 5/8-103 Portfolio. While Ameren Illinois does not have an approved Section 5/8-103 Portfolio that covers PY10 at this time, based on current modeling for the upcoming Section 5/8-103 filing, the charges AIC will be collecting through Rider EDR for DS-1 would be approximately \$23 annually and for DS-2 customers approximately \$65 annually. For Section 5/16-111.5B, if the commission were to approve all eleven (11) programs with a TRC greater than one, DS-1 customers would on average pay an additional \$17 for efficiency programs annually and DS-2 customers an additional \$148 dollars annually.

Unlike the Section 5/8-103 legislation which puts a cap on the bill impact for energy efficiency, the Section 5/16-111.5B legislation has no ratepayer protections. If the Commission were to approve all eleven (11) programs with a TRC greater than one, it would represent a 74% increase to average Rider EDR charges for DS-1 and a 228% increase to average Rider EDR charges for DS-2.

If the Commission were to approve the ten (10) programs recommended by AIC in its assessment, excluding the one (1) small business program AIC in its assessment recommends *not* be run, the increase to average Rider EDR charges for DS-2 would be around 137%.

In summary, the following tables identify the ten (10) programs that (1) resulted from the RFP and bid review process, (2) passed the TRC test; (3) passed the UCT test; (4) had program costs that are estimated to be less than the prevailing cost of comparable supply; and (4) are recommended by AIC in its assessment. The Total Utility Costs and savings associated with each program are also provided.

**Table 6: Program Assessment Results
(For PY10, PY11, PY12, and in total)**

PY10

Sector	Program	Program Cost < Cost of Supply	UCT > 1	TRC > 1	Total Utility Costs (millions)	Estimated Gross MWh Savings at Busbar	Estimated Net MWh Savings at Busbar	Estimated Gross MWh Savings at Meter	Estimated Net MWh Savings at Meter
RES	CLEAResult-Community LED Distribution	Pass	Pass	Pass	\$2.68	12,210	12,210	10,994	10,994
RES	CLEAResult-Residential Retail Lighting	Pass	Pass	Pass	\$14.45	134,454	92,773	121,069	83,538
RES	Energy Resources Center-Low Income Multifamily	Pass	Pass	Pass	\$0.96	6,092	6,092	5,486	5,486
BUS	Franklin-SBDI	Pass	Pass	Pass	\$5.71	24,449	21,759	22,015	19,593
BUS	MEEA-STEP	Pass	Pass	Pass	\$0.77	2,007	1,967	1,807	1,771
BUS	360 Energy-Private HVAC	Pass	Pass	Pass	\$1.13	7,817	6,957	7,038	6,264
BUS	360 Energy-Public HVAC	Pass	Pass	Pass	\$1.13	7,817	6,957	7,038	6,264
BUS	GDS-Exterior Lighting	Pass	Pass	Pass	\$2.52	9,377	8,346	8,444	7,515
BUS	GDS-Lit Signage	Pass	Pass	Pass	\$3.08	14,582	12,978	13,131	11,686
BUS	Weidt Group-Com New Construction	Pass	Pass	Pass	\$0.27	1,271	978	1,144	881
					\$32.69	220,075	171,017	198,167	153,993

PY11

Sector	Program	Program Cost < Cost of Supply	UCT > 1	TRC > 1	Total Utility Costs (millions)	Estimated Gross MWh Savings at Busbar	Estimated Net MWh Savings at Busbar	Estimated Gross MWh Savings at Meter	Estimated Net MWh Savings at Meter
RES	CLEAResult-Community LED Distribution	Pass	Pass	Pass	\$0.00	-	-	-	-
RES	CLEAResult-Residential Retail Lighting	Pass	Pass	Pass	\$14.49	135,253	93,324	121,789	84,034
RES	Energy Resources Center-Low Income Multi family	Pass	Pass	Pass	\$0.96	6,092	6,092	5,486	5,486
BUS	Franklin-SBDI	Pass	Pass	Pass	\$5.71	24,144	21,488	21,741	19,349
BUS	MEEA-STEP	Pass	Pass	Pass	\$0.77	2,007	1,967	1,807	1,771
BUS	360 Energy-Private HVAC	Pass	Pass	Pass	\$1.13	7,817	6,957	7,038	6,264
BUS	360 Energy-Public HVAC	Pass	Pass	Pass	\$1.13	7,817	6,957	7,038	6,264
BUS	GDS-Exterior Lighting	Pass	Pass	Pass	\$3.35	12,466	11,095	11,225	9,991
BUS	GDS-Lit Signage	Pass	Pass	Pass	\$3.54	16,788	14,941	15,117	13,454
BUS	Weidt Group-Com New Construction	Pass	Pass	Pass	\$0.55	2,541	1,957	2,288	1,762
					\$31.63	214,925	164,778	193,530	148,376

PY12

Sector	Program	Program Cost < Cost of Supply	UCT > 1	TRC > 1	Total Utility Costs (millions)	Estimated Gross MWh Savings at Busbar	Estimated Net MWh Savings at Busbar	Estimated Gross MWh Savings at Meter	Estimated Net MWh Savings at Meter
RES	CLEAResult-Community LED Distribution	Pass	Pass	Pass	\$0.00	-	-	-	-
RES	CLEAResult-Residential Retail Lighting	Pass	Pass	Pass	\$14.54	135,952	93,807	122,419	84,469
RES	Energy Resources Center-Low Income Multifamily	Pass	Pass	Pass	\$0.96	6,092	6,092	5,486	5,486
BUS	Franklin-SBDI	Pass	Pass	Pass	\$5.75	24,144	21,488	21,741	19,349
BUS	MEEA-STEP	Pass	Pass	Pass	\$0.77	2,007	1,967	1,807	1,771
BUS	360 Energy-Private HVAC	Pass	Pass	Pass	\$1.13	7,817	6,957	7,038	6,264
BUS	360 Energy-Public HVAC	Pass	Pass	Pass	\$1.13	7,817	6,957	7,038	6,264
BUS	GDS-Exterior Lighting	Pass	Pass	Pass	\$4.02	14,961	13,316	13,472	11,990
BUS	GDS-Lit Signage	Pass	Pass	Pass	\$4.25	20,138	17,923	18,133	16,139
BUS	Weidt Group-Com New Construction	Pass	Pass	Pass	\$0.11	-	-	-	-
					\$32.66	218,928	168,506	197,135	151,732

Total PY10-PY12

Sector	Program	Program Cost < Cost of Supply	UCT > 1	TRC > 1	Total Utility Costs (millions)	Estimated Gross MWh Savings at Busbar	Estimated Net MWh Savings at Busbar	Estimated Gross MWh Savings at Meter	Estimated Net MWh Savings at Meter
RES	CLEAResult-Community LED Distribution	Pass	Pass	Pass	\$2.68	12,210	12,210	10,994	10,994
RES	CLEAResult-Residential Retail Lighting	Pass	Pass	Pass	\$43.47	405,658	279,904	365,277	252,041
RES	Energy Resources Center-Low Income Multifamily	Pass	Pass	Pass	\$2.87	18,277	18,277	16,458	16,458
BUS	Franklin-SBDI	Pass	Pass	Pass	\$17.18	72,737	64,736	65,496	58,292
BUS	MEEA-STEP	Pass	Pass	Pass	\$2.30	6,021	5,901	5,422	5,314
BUS	360 Energy-Private HVAC	Pass	Pass	Pass	\$3.40	23,450	20,870	21,115	18,793
BUS	360 Energy-Public HVAC	Pass	Pass	Pass	\$3.40	23,450	20,870	21,115	18,793
BUS	GDS-Exterior Lighting	Pass	Pass	Pass	\$9.88	36,805	32,756	33,141	29,496
BUS	GDS-Lit Signage	Pass	Pass	Pass	\$10.88	51,508	45,842	46,381	41,279
BUS	Weidt Group-Com New Construction	Pass	Pass	Pass	\$0.93	3,812	2,935	3,432	2,643
					\$96.98	653,927	504,302	588,832	454,101

Finally, as set forth in Table 7 below, the estimated eligible retail customer savings is 57,395 MWh¹⁸ for PY10 based on the switching data related to the forecast supplied in the other portion of this submission. Estimated eligible retail customer savings is also provided for PY11, PY12 and in total.

Table 7: Savings Attributable to Eligible Retail Customers								
(For PY10, PY11, PY12 and in total)								
	Before Switching			Forecasted		After Switching		
PY10	DS1 EE at Meter	DS2 EE at Meter	Total	DS1 Eligible Retail	DS2 Eligible Retail	DS1 EE at Meter	DS2 EE at Meter	Total
Jun-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Jul-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Aug-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Sep-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Oct-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Nov-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Dec-17	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Jan-18	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Feb-18	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Mar-18	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Apr-18	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
May-18	8,335	4,498	12,833	38.46%	35.07%	3,206	1,577	4,783
Total	100,018	53,975	153,993			38,466	18,929	57,395

¹⁸In order to determine an estimate of the IPA's reduction in procuring supply, the savings estimates must exclude those who are not eligible retail customers.

PY11	Before Switching			Forecasted		After Switching		
	DS1 EE at Meter	DS2 EE at Meter	Total	DS1 Eligible Retail	DS2 Eligible Retail	DS1 EE at Meter	DS2 EE at Meter	Total
Jun-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Jul-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Aug-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Sep-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Oct-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Nov-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Dec-18	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Jan-19	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Feb-19	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Mar-19	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Apr-19	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
May-19	7,460	4,905	12,365	38.46%	35.07%	2,869	1,720	4,589
Total	89,520	58,855	148,376			34,429	20,640	55,069

PY12	Before Switching			Forecasted		After Switching		
	DS1 EE at Meter	DS2 EE at Meter	Total	DS1 Eligible Retail	DS2 Eligible Retail	DS1 EE at Meter	DS2 EE at Meter	Total
Jun-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Jul-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Aug-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Sep-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Oct-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Nov-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Dec-19	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Jan-20	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Feb-20	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Mar-20	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Apr-20	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
May-20	7,496	5,148	12,644	38.46%	35.07%	2,883	1,805	4,688
Total	89,955	61,778	151,732			34,596	21,665	56,261

Total	Before Switching			Forecasted		After Switching		
	DS1 EE at Meter	DS2 EE at Meter	Total	DS1 Eligible Retail	DS2 Eligible Retail	DS1 EE at Meter	DS2 EE at Meter	Total
June	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
July	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Aug	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Sept	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Oct	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Nov	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Dec	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Jan	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Feb	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Mar	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Apr	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
May	23,291	14,551	37,842	38.46%	35.07%	8,958	5,103	14,060
Total	279,493	174,608	454,101			107,490	61,234	168,724

5.0 Cost Recovery and Estimated Budget

Section 5/16-111.5B (a)(6) provides that "an electric utility shall recover its costs incurred under this Section related to the implementation of energy efficiency programs and measures approved by the Commission in its order approving the IPA Procurement Plan under Section 16-111.5 of this Act, including, but not limited to, all costs associated with complying with this Section and all start-up and administrative costs and the costs for any evaluation, measurement, and verification of the measures, from all retail customers whose electric service has not been declared competitive under Section 16-113 of this Act and who are eligible to purchase power and energy from the utility under fixed-price bundled service tariffs, regardless of whether such customers actually do purchase such power and energy from the utility through the automatic adjustment clause tariff established pursuant to Section 5/8-103 of this Act, provided, however, that the limitations described in subsection (d) of that Section shall not apply to the costs incurred pursuant to this Section or Section 16-111.7 of this Act."

In accordance with the above, Rider EDR has been and will continue to be used, as amended from time to time, to recover all costs incurred in connection with any energy

efficiency programs approved for inclusion in the 2017 IPA Electricity Procurement Plan. In committing to the reasonableness and prudence of expenses, AIC will seek to protect electric ratepayers by negotiating contracts in accordance with, but not limited to, the pay for performance model outlined in the RFP, which included holdback and bond requirements. Consistent with past practice, AIC will report unsuccessful negotiations to stakeholders through a filing in the ICC docket in which the Procurement Plan is approved.

AIC notes that the Company retains independent evaluators for the evaluation of its Section 5/8-103 energy efficiency portfolio and, to maintain evaluation consistency and as in accordance with the expected consensus of the 2016 IPA SAG Workshops, also plans on retaining the same evaluators for the evaluation of Section 5/16-111.5B programs.

6.0 Submission Summary

Through its statutorily required assessment, AIC presents an objective evaluation of the programs proposed to be included in the 2017 IPA Electricity Procurement Plan. The Commission and IPA play an important role in determining the price Ameren Illinois' electric ratepayers will pay for the procurement of electric energy efficiency, and should not increase the energy efficiency to be procured for the AIC service area above that which is reasonable and supported by and in full compliance with the relevant provisions of the law.