Ameren Illinois Company Electric and Gas Energy Efficiency and Demand Response Plan 2018 – 2021



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1.0 Executive Summary

Ameren Illinois Company d/b/a Ameren Illinois (Ameren Illinois or the Company) submits to the Illinois Commerce Commission (Commission) this energy efficiency and demand response plan for the four year period, commencing January 1, 2018, (the 2018 Plan or Plan) in accordance with Sections 8-103B and 8-104 of the Illinois Public Utilities Act, 220 ILCS 5/8-101 *et seq.* (the Act).

The Plan represents the collaborative efforts of the Company and other participants of the Illinois Stakeholder Advisory Group (SAG) and the Illinois Low Income Advisory Group, which were undertaken over the months since the passage of the Illinois Future Energy Jobs Act, Public Act 99-0906 (FEJA). FEJA brought new opportunities to save energy and invest in Illinois, but it also brought about challenges to achieving the savings standards set forth in the Act. For example, for the first time ever, certain large customers (those whose total highest 15 minute demand exceeds 10MW during calendar year 2017) are exempted from participating in, and paying for, electric energy efficiency. These customers have had historically high participation during previous plan cycles.

In order to develop a plan that fulfils the goals of FEJA and meets the challenges posed by it, Ameren Illinois developed a key set of objectives, sought input from a variety of stakeholders, including those that traditionally participate in the SAG, and designed a robust portfolio of electric and gas energy efficiency programs, initiatives and measures that achieves optimal savings while investing in the development of technologies and delivery channels for the future. These investments include, among other things, investing in voltage optimization measures, increasing the diversity of suppliers and vendors and piloting new initiatives with promising future savings. This comprehensive approach plans to achieve the energy savings goals, which require modification in accordance with the provisions of the Act, reduce peak demand of electric customers and continues the commitment of Ameren Illinois to providing best in class energy efficiency programs, while implementing innovative delivery strategies designed to provide opportunities to hard to reach customers, including those residing in low-income markets.

Each section of the Plan provides a narrative of the information in accordance with the requirements of the Act. For ease of reference and to streamline any updating of the budgets, unmodified and modified savings goals, as well as related information, Ameren Illinois provides the technical information as Appendices. Ameren Illinois looks forward to implementing this Plan, if approved by the Commission and providing customers with the benefits of the programs, initiatives and measures set forth herein.

2.0 Introduction

Section 8-103B and Section 8-104 of the Act requires electric and gas utilities, respectively, to implement energy efficiency measures in order to meet the energy savings standards, as modified

¹ As explained later, Ameren Illinois' voltage optimization specific investment will be identified and explained in a future plan filed with the Commission, in accordance with Section 8-103B(b-20).

in accordance with the Act. Uniquely positioned as a joint electric and gas utility, Ameren Illinois presents a four-year integrated energy efficiency and demand response plan designed to, during the 2018-2021 calendar years, reduce electric and gas energy usage and peak demand of residential and non-residential customers within the Ameren Illinois service territory.

2.1 Key Features of the Plan

This Plan represents the next stage in Ameren Illinois' commitment to meeting both the electric and gas savings standards set forth in the Act through a portfolio of programs, initiatives and measures that enhance the value delivered to Ameren Illinois' customers. Ameren Illinois has worked with a large, diverse group of stakeholders to develop energy efficiency programs that use best practices program design and delivery channels to reach a broad range of customers groups through a cost-effective energy efficiency plan. The Plan has been developed to meet objectives of stakeholders, including the Company, as well as meet the requirements set forth in the Act. The Plan provides for an ongoing process to continue to offer the best customer energy efficiency services to both residential and non-residential customers.

The Plan comprises two programs: the Residential Program and the Business Program. Both programs feature multiple initiatives for customers to participate in electric and gas energy efficiency. The Plan also funds investment in communities while providing essential portfolio-level functions necessary to deliver energy efficiency to the Ameren Illinois service territory, including: marketing and outreach, program management, data analytics, community engagement and investment, research, development and use of breakthrough equipment and devices, and evaluation, measurement and verification activities.

The programs include a wide range of delivery strategies to provide all non-exempt customers in the Ameren Illinois service territory meaningful opportunities to participate. The strategies target a diverse cross section of customers, including:

- Residential single family and multifamily homes/units;
- Low income and moderate income residential customers;
- Large and small businesses customers;
- Public sector customers including municipal corporations; federal, state and local government;
- Public and private schools including colleges and universities; community colleges and school districts;
- Customers in existing buildings;
- Owners, renters and landlords;
- Customers replacing equipment, as well as customers retrofitting or operating existing equipment;
- Customers interested in comprehensive solutions across multiple systems and buildings as well as customers interested in more limited approaches targeting individual measures;

- Program Allies (trade allies and contractors) that install equipment directly in customer facilities and programs that encourage customers to work with these local trade allies for installations; and
- Programs that provide, in addition to financial incentives, education, energy
 assessments, design assistance, project management assistance, Program Ally
 network development; quality assurance, certification and other features to overcome
 efficiency market barriers.

2.2 Organization of the Plan

The following sections together outline the development process, planning assumptions and electric and gas integration strategies, which were all enhanced through collaboration with stakeholders who were instrumental in bringing together quality elements of the Plan:

- Section 3 explains the Plan development process, which includes the challenges and opportunities of meeting the requirements of the Act;
- **Section 4** provides the Plan objectives and outlines the residential and business programs;
- **Section 5** summarizes the process proposed for Evaluation, Measurement and Verification of the savings achieved by the Plan; and
- Section 6 describes the proposed cost recovery mechanisms, which are reflected in the various electric and gas tariff riders.

The Plan also includes Appendices that provide the technical details with respect to the budgets, goals, planned participation, cost-effectiveness, as well as documents supporting the Plan, including:

- **Appendix A,** which sets forth the electric budget by calendar year for each of the four years;
- **Appendix B,** which sets forth the 2018 Plan electric savings goals;
- **Appendix C**, which provides the electric demand response (DR) goal by calendar year for each of the four years, as well as the 2018 Plan demand reductions (MW);
- Appendix D, which provides the four year Plan gas budget;
- Appendix E, which includes the 2018 Plan gas savings goal;
- **Appendix F**, which provides a summary of both the electric and gas budgets and the 2018 modified savings goals, as well as the results of the total resource costs test;
- **Appendix G**, which provides the adjustable goals template that Ameren Illinois proposes be used in the future to calculate modified goal adjustments as a result of annual IL-TRM and net to gross updates;
- **Appendix H**, which includes the program description templates for the Residential Program and the Business Program; and
- **Appendix I**, which provides a list of the Measure Inputs by program and initiatives within those programs.

These Appendices provide a single place of reference for the Commission, the public and stakeholders. Ameren Illinois intends to make any updates, modifications or adjustments

ordered or allowed by the Commission, to the applicable Appendices in the future, as appropriate.

3.0 Plan Development

The Plan has been developed in accordance with the provisions of the Act, and in collaboration with stakeholders with a variety of interests, including those participating in the SAG and the Illinois Low Income Advisory Group. Due to certain information not available at the time of this filing, including the final list of customers who will be exempt from participating in Section 8-103B programs and the level of voltage optimization investment, an update the 2018-2021 Plan Appendices will be needed. Ameren Illinois seeks approval to make these updates to the Appendices through compliance filings authorized to be filed in this docket, as needed.

3.1 Development Process

The process of developing the Plan began soon after the Governor signed into law FEJA, P.A. 99-0906 (on December 7, 2016).

3.1.1 Plan Development Knowledge and Expertise

To maintain consistency and success, Ameren Illinois continued to engage the services of the Applied Energy Group (AEG) for the analysis and development of the Plan programs. AEG performed modeling for Plan 3 and Plan 4 as well as completing the past two potential studies for the Ameren Illinois service territory. In addition to the assessment and modeling of Ameren Illinois' Plan, AEG has over thirty years of national and international experience on energy efficiency strategy and portfolio development. In particular, AEG has experience in Illinois due to previously developing the utility portfolio plan filings for Peoples Gas and North Shore Gas, and performing the review and analysis of energy efficiency bid responses submitted on behalf of the Illinois Power Agency (IPA) electricity procurement plan for the past five years. AEG has also been actively participating in the SAG and the Technical Advisory Committee (TAC) over the last several years. AEG's independent expertise provides additional integrity and legitimacy to the Plan modeling. AEG used their Ben-Cost modeling tool to provide state-of-the-art cost-effectiveness analysis of the individual measures. The Ben-Cost model is utilized in multiple states throughout the country to assess cost-effectiveness, and has been used for modeling the annual bid responses for the 2013-2017 IPA electric procurement plan assessments in Illinois.

Plan development relied upon the support and guidance from the planning and implementation experience of three primary entities: the Ameren Illinois Energy Efficiency Team; Leidos and Resource Innovations. The combined energy efficiency knowledge and expertise of this team provided an understanding of what it takes to develop and implement successful and innovative strategies to deliver energy efficiency programs to difficult to reach market segments. Estimation of incentive levels, program administration and marketing costs, and portfolio level costs were based primarily expertise and on the actual field experience from prior plan implementation in the Ameren Illinois service territory.

Since the inception of energy efficiency programs in Illinois nearly ten years ago, Ameren Illinois has engaged the top of class energy efficiency program design and implementation services of Leidos (formerly SAIC). Leidos brings a breadth of knowledge and expertise as they have managed over 41 energy efficiency programs and delivered more than \$1 billion in energy efficiency and demand response incentives since 1995. In the last seven years, Leidos has managed energy efficiency programs for not only Ameren Illinois, but also for the Hawaii Public Utilities Commission (Hawaii Energy), State of Wisconsin (Focus on Energy), FirstEnergy (10 operating companies), Commonwealth Edison (Process Efficiency) and National Grid in Rhode Island and Massachusetts (Industrial Program). Leidos guidance and expertise with implementation of the Ameren Illinois energy efficiency business programs over the past eight years as well as their oversight of the IPA programs implemented by multiple vendors in the Ameren Illinois service territory over the past three years has greatly enhanced the development of the business program for non-residential customers.

In addition, Ameren Illinois engaged Resource Innovations to assist with the design and planning for the residential initiatives with assistance from Leidos who has had oversight responsibility for residential programs during the past several years and is familiar with the Ameren Illinois service territory and its residential and business customers. Resource Innovations is led by the owner and president who is a seasoned energy efficiency executive that brings more than 25 years of energy program management, consulting and policy experience, including more than a decade in the utility industry in various leadership roles at Pacific Gas &Electric Company. Resource Innovations has a strong understanding of Illinois energy policy from their extensive program design and implementation work for Nicor, ComEd, Peoples Gas and North Shore Gas over the past decade. In addition, their president, Lauren Casentini, served as a Midwest Energy Efficiency Alliance (MEEA) Board member and has been an active participant of the SAG. The company specializes in development of innovative energy efficiency programs that cost-effectively tap into new savings resources, especially in hard-to-reach markets. Their community-based program approach achieves optimal value by leveraging local resources to deliver program services, delivering an exceptional customer experience and reliably achieving goals. Their Vice President, Matthew Kok, has worked closely with the Ameren Illinois planning team to build these community-based innovation strategies into the residential portion of the portfolio that will serve Ameren Illinois' hard-toreach population in southern Illinois. He brings experience modeling and designing residential and low- to moderate- income programs for numerous utilities across the Midwest. Resource Innovations is a Woman Owned Business Enterprise that is committed to further diversity in the energy efficiency marketplace.

The Plan has been further enhanced with involvement from stakeholders throughout the state involved with the SAG. SAG-facilitated meetings for the 2018-2021 Plan occurred at least monthly beginning the month after FEJA was signed. Input was not only sought about Ameren Illinois' energy efficiency plans, but also regarding the new goals and requirements of energy efficiency. Ameren Illinois began making

presentations to the SAG in early 2017, with subsequent updated presentations made over the course of several months thereafter.

In addition to the various meetings and presentations to the SAG, Ameren Illinois met on numerous occasions with various parties throughout the State. Discussions with the Commission Staff started early this year as well, and have also continued throughout the planning process. Ameren Illinois also shared confidential information (e.g., Plan batch files and Plan inputs) with Staff and several parties who signed Non-Disclosure Agreements.² The sharing of information and data began in mid-April with discussions continuing throughout April, May and June.

Ameren Illinois has been very appreciative of the ideas and exchange of information received from SAG participants throughout the process and submits a Plan that not only meets the requirements of the Act, but does so in a manner consistent with recommendations made by various stakeholders.

3.1.2 Additional Plan Development Resources

The development of the Plan was also guided by several additional resources including past plans, the updated 2016 Ameren Illinois DSM potential study (*see* Ameren Exhibit 4.1), the Illinois Energy Efficiency Policy Manual (EE Policy Manual)³, and the Illinois Statewide Technical Reference Manual (IL-TRM).⁴

3.1.3 Plan Development Analysis

The Ben-Cost model is a Microsoft Excel®-based model that integrates technology-specific engineering and customer behavior data with load shapes, rate projections and marginal costs into an easily updated data management system. The model allows for efficient integration of large quantities of measure, building, and economic data to optimize DSM portfolios. Ben-Cost is currently being utilized by other Illinois utilities for DSM planning, in addition to dozens of utilities across the country.

Ameren Illinois used Illinois-specific inputs, past program experience, and evaluation results where possible in building the portfolio. The IL-TRM was utilized for all data inputs when appropriate and available. With stakeholder agreement, Version 6.0 of the IL-TRM was utilized for all measure savings, incremental costs, and lifetimes, where applicable. However, if data was not available in the IL-TRM for specific measures, a combination of industry sources, simulation modeling, and evaluation data was utilized for the TRC analysis. For example, Business Custom projects are not included in the IL-TRM. To fill the data gap, data was provided by Leidos, Ameren Illinois' implementation contractor, which provided past program performance of custom projects that savings were based on. Additional measure level data was

² Those signatories include the SAG Facilitation team; the Natural Resource Defense Counsel; the Attorney General Office; the Citizen Utilities Board and the Environmental Defense Fund.

³ Illinois Energy Efficiency Policy Manual Version 1.1 was submitted to the Commission by ICC Staff on June 1, 2017 as a consensus document and is currently awaiting Commission approval in Docket 17-0270.

⁴ The Illinois Statewide Technical Reference Manual for Energy Efficiency Ver. 6.0 was approved by the Commission on June 28, 2017 in Docket 17-0106.

garnered from impact evaluations of programs in the field for past program years of Plan 3, as was consistent with the evaluation framework approved by the Commission for that Plan in Docket No. 13-0498. The Ameren Illinois energy efficiency management and implementation teams, in addition to members or representatives of the SAG and their consultants, reviewed the results of this planning process in detail and their input and feedback helped refine the inputs used in building the portfolio.

As set forth herein, Ameren Illinois' integrated⁵ joint electric and gas utility energy efficiency Plan delivers a flexible portfolio capable of serving diverse market segments. Specifically, Ameren Illinois' integrated plan includes administrative and programmatic synergies for program delivery, increased energy benefits, more cost-effective measures, and operational benefits for trade allies in the field.

The dual-fuel integrated portfolio's single marketing vehicle encourages participation and program uptake, resulting in increased energy savings and streamlining administrative activities. As a result, increased energy savings can potentially increase the number of measures included and may also raise the cost-effectiveness of several dual-fuel measures.

3.2 Opportunities and Challenges

The enactment of FEJA has brought many opportunities, as well as challenges for Ameren Illinois.

As a joint electric and gas utility, Ameren Illinois must comply with both the electric and gas savings standards that were impacted by FEJA. However, there were some changes that were made only to the electric standards (*e.g.*, movement to cumulative persisting annual savings and complete exemption for certain customer). These requirements, provisions and exemptions have changed in comparison to the first nine years, when energy efficiency standards were established for electric under 220 ILCS 5/8-103.

For example, FEJA removed the electric energy efficiency procurement through the Illinois Power Agency Procurement plans under Section 16-111.5B of the Act, which should result in an improvement to the energy efficiency offerings and opportunities for both the residential and small business customer and at the same time reduce customer confusion for these market segments.

Another change as result of FEJA is that **all** Ameren Illinois residential and non-residential customers will have the opportunity to improve their energy usage through the education, training and installation of energy efficiency measures/programs offered, under one umbrella, by Ameren Illinois. Previously, the law provided for a split of offerings with DCEO for implementation of programs for low income and the public sector (*i.e.*, community colleges, municipalities, school districts and local government). DCEO requested and received approval to provide implementation to an expanded list that included state and federal government as well as state universities. While presenting some

⁵ Section 8-104(f)(6)

challenges, this change should bring a level of consistency for all Ameren Illinois customers as well as the trade allies working throughout the Ameren Illinois service territory to install energy efficient measures.

3.2.1 Ameren Illinois Service Territory Unique Attributes

As noted over the past several years to stakeholders participating in the SAG in Illinois and in Plan filings, the Ameren Illinois service territory (see green portion in the inset picture) is substantially different from the service territory in the northern portion of the state (see white/blue/orange portion). Ameren Illinois is the only investor-owned utility in Illinois that provides delivery service to both electric and gas customers subject to the energy efficiency standards set forth in the Act. Ameren Illinois' service territory spans more than three-fourths of the State and encompasses a land area covering over 44,000 square miles which is significantly larger than the other electric-only and gas-only utilities in Illinois. In addition, the area does not have the large metropolitan areas of

the upper third portion of the State but is largely rural and made up of over 1,100 small towns and villages which are dotted throughout the territory with grain and livestock farms. Only two cities in the Ameren Illinois service territory have populations over 100,000, both of which just exceed that number, and in one of those towns (Springfield), Ameren Illinois serves only natural gas customers. In addition to its largely rural residential areas, the Illinois River runs through the length of the state and therefore is heavy with industrial customers. In fact, 25% of Ameren Illinois' total electric deliveries come from the industrial segment compared to Commonwealth Edison's 10%. The customer exemption provided for in Section 8-103B(l) had huge impacts when developing this Plan in comparison to previous Commission approved plans developed and implemented since energy efficiency began nearly ten years ago.

Ameren Illinois also must account for the unique circumstances involving over twenty-five electric cooperatives or municipalities that are either adjacent or overlap Ameren Illinois' service territory. (*See* inset picture of the IL Electric Co-op map). This has been a challenge to the Program Allies who cannot simply assume that all 1.2 million customers in the geographic Ameren Illinois service territory are Ameren Illinois electric customers.

Also unique to Ameren Illinois in comparison to the northern portion of the state is the economic climate in central and downstate Illinois that has been slow to recover from the Great Recession of 2008 as noted in a recent Crain's Chicago Business

article.⁶ A recent report from RCF Economic & Financial Consulting said 85 percent of Illinois' job gains since 2009 have gone to Chicago and the seven-county region. This slow economic recovery in central and downstate Illinois has been a challenge for Ameren Illinois.

Another challenge to the energy efficiency market in Ameren Illinois service territory is the fact that the Company's electric rates remain among the lowest in the nation. In effect, this means that Ameren Illinois customers implementing the exact same energy efficiency measures as those in the Midwest or even nationally, result in lower energy cost savings and longer periods of return on their investment.

3.2.2 Shift to Long Lasting Measures

As a joint gas and electric utility, Ameren Illinois must meet the energy savings requirements in both Section 8-103B (electric) and Section 8-104 (gas). Section 8-103B(g)(1) requires Ameren Illinois to demonstrate that its proposed electric energy efficiency measures will achieve the applicable requirements identified in Section 8-103B(b-15), as modified by Section 8-103B(f) and (g). Section 8-103B(b-15) requires Ameren Illinois to achieve cumulative persisting annual savings (CPAS) goals. The requirement to meet cumulative persisting annual savings goals for electric is a new requirement from the past nine years of statutory electric energy efficiency whose requirements in Section 8-103(b) was for meeting savings goals measured in first year, or annual savings and similar to gas energy efficiency goal requirements. Section 8-104(c) provides the opportunity for meeting compliance with annual incremental gas savings goal in the applicable year **or** by showing that total cumulative annual savings within the four year planning period are equal to the sum of each annual incremental savings requirement from the first day of the four year planning period through the last day of the multi-year planning period.

While the CPAS goals requirement is new to this Plan, Ameren Illinois has previously recognized the importance of lifetime energy savings in its last energy efficiency and demand response plan (Plan 4) filed with the Commission in Docket No. 16-0413, which was approved after modification through a Stipulated Agreement reached in the docket by Commission Staff, the Illinois Attorney General's Office, as well as environmental groups (NRDC, ELPC) and the consumer advocate groups (CUB) in October 2016 and later approved by the Commission in January 2017. In Plan 4, Ameren Illinois had already considered both lifecycle savings and annual savings in determining the program measure mix and setting program budgets at the request of many stakeholders of the SAG who had advocated shifting programs to include measures with higher lifecycle savings. Lifetime savings are greater for measures with savings that persist for longer periods over measures with shorter lifetimes. Therefore, the 2018-2021 Plan filing maintains a level of consistency with the previous Plan

http://www.chicagobusiness.com/article/20170427/NEWS02/170429894/why-chicagos-powerhouse-economy-cant-jumpstart-stalled-illinois

⁶ Crain's Chicago Business article at

agreed to by stakeholders and at the same time meets the goal of moving to long lasting measures required in 8-103B as cumulative persisting annual savings. These longer-lasting measures will also be a benefit to future electric energy savings plans required to be filed in 2021 and 2025⁷ as some of the longer-lasting measures will provide savings in future planning periods. Many of the longer-lasting savings are from measures installed in the low- to moderate-income residential customer homes through the Income Qualified Initiative. One of the primary objectives of this Plan is targeted outreach and implementation of energy efficiency measures to customers in the low- to moderate-income communities that are prevalent throughout the Ameren Illinois service territory in both rural and urban settings.

3.2.3 AMI Integration

Ameren Illinois' Advanced Meter Infrastructure (AMI) initiative will be providing a potential opportunity during the implementation of the 2018-2021 Plan. Before getting into the details of those potential opportunities, it would be best to first understand the customer metering upgrade process in Ameren Illinois' service territory. The upgrading of customer's electric and gas meters to AMI-read smart meters began during Plan 3 (in 2014) and although the upgrade process is on schedule, it is not expected to be fully completed until 2020 or when this Plan is nearing completion. In addition, the installations occurring since the outset have occurred with residential customers in predominantly rural areas. Until installations are completed in urban areas and on commercial and industrial facilities, the current data only reflects a specific sector of Ameren Illinois customers.

Ameren Illinois is considering multiple options for integrating current and future AMI data into this 2018-2021 Plan. An early use for AMI data would likely be market analysis. Internal analysis of all data points would provide Ameren Illinois with insight into customer energy consumption and behavior patterns. This information may allow the Ameren Illinois marketing team to work with program management to target specific geographic areas or customer sectors. This ability to discover and market to a specific customer base of great need could be particularly beneficial in the expansive and diverse service territory of Ameren Illinois.

In addition, there may be a possibility of utilizing third party program or software to integrate AMI data into a direct customer interaction. However, more research is needed on these possibilities after a higher percentage of Ameren Illinois customers have smart meters installed. Ameren Illinois will continue to investigate additional integration methods for AMI data as the upgrade deployment continues in the Ameren Illinois service territory. Accordingly, the implementation flexibility requested by Ameren Illinois will be critical to giving the Company the best opportunity to leverage the added infrastructure during Plan implementation.

⁷ Section 8-103B(f)(2-3)

⁸ Section 8-103B(i)

3.2.4 Past Successes

Ameren Illinois electric energy efficiency programs began in June 2008 while gas energy efficiency programs began in January 2009. Since that time, Ameren Illinois has been successful in achieving the Energy Efficiency and Demand Response (EEDR) savings goals approved by the Commission for the first three plans/nine years. Although Ameren Illinois has not received official Commission approval for the savings goals for PY5 and PY6, the last two years of Plan 2, this was under the past statutory regime, and Ameren Illinois anticipates approval very soon and savings dockets for the last three years (PY7-PY9) have not yet been opened.

In accordance with the Act, the Commission has modified Ameren Illinois' savings goals in the last three approved plan years. These modifications were a success as Ameren Illinois met its past goals, the Commission has approved the reconciliation of costs to revenue for the first two plans (i.e., for six years, PY1 through PY6) and the first year (PY7) of Plan 3. Ameren Illinois has thus been able to achieve its goals through prudently incurred costs.

3.2.5 Loss of Exempt Customers

Electric

Unique to this Plan is the loss of those customers who have a total highest 15-minute demand that is greater than 10 MW ("Exempt Customers")⁹ with the impact to this portfolio of less energy savings and higher cost per energy saved. The Exempt Customers will no longer participate in or pay for the electric energy efficiency programs. Over the past years, these customers have been very active participants and have greatly reduced their electric energy consumption as a result of the Ameren Illinois energy efficiency programs. Historically, these customers have provided 40-

⁹ Exempt Customer definition is included in Ameren Illinois Electric Service Schedule Customer Terms and Conditions as follows:

Exempt Customer means Retail Customers that are exempt from energy efficiency and demand response measures whose highest 15-minute demand was more than 10,000 kilowatts in the 12 consecutive Billing Periods prior to the start of the first year of each energy efficiency multi-year plan approved pursuant to 200 ILCS 5/8-103 or 8-103B, as applicable. The multi-year plan approved under Section 8-103 began June 2014, so Retail Customer demands for the 12 consecutive Billing Periods from June 2013 through May 2014 establish whether such Retail Customer exceeds 10,000 kW and is an Exempt Customer. Section 8-103B multi-year plans begin in January 2018, 2022, and 2026, so demands for the 12 consecutive Billing Periods from January through December 2017, 2021, and 2025 respectively, will establish whether such Retail Customer exceeded 10,000 kW and is considered and Exempt Customer.

If a Customer who is an Exempt Customer changes ownership, the Company, in conjunction with the new legal owner, shall determine if such Customer meets the requirements to continue to be an Exempt Customer. Upon change of ownership, if Customer's operation is discontinued or substantially altered such that the highest 15 minute demand is not expected to exceed 10,000 kW, Company may at its sole discretion, remove Customer from Exempt Customer status.

A Customer, or Customer at a new Premises, that did not have a 15-minute demand in the 12 consecutive Billing Periods prior to the start of the first year of each energy efficiency multi-year plan shall not become an Exempt Customer within the current multi-year plan if such Customer subsequently experiences a 15-minute demand greater than 10,000 kW.

50% of the overall business savings achieved through the Section 8-103 programs. The savings provided by the Exempt Customers were at relatively lower cost than from either residential or the small- to medium size non-residential customers. Furthermore, large amounts of the savings were provided by a relatively small number of customers; therefore, savings without those large customers will require more coordination with a much higher number of customers. Moreover, in order to obtain higher participation from the small-to medium-size non-residential customers, and for customers that have not traditionally participated in Ameren Illinois' programs at a high level, incentives have been increased to cover a larger portion of the incremental cost.

Gas

As noted in subsequent Section 3.8, the impact of Section 8-104(n) will result in a significant drop in gas savings in 2020 (half-way through this Plan) when the provisions for Self-Directing Customer (SDC) end which will in effect, result in all large customers (identified in 8-104 as those with annual therm usage for all facilities in Ameren Illinois service territory at or greater than four million therms or for those customers with facilities throughout the state whose combined energy usage is at or greater than eight million therms). This will result in the loss of a large number of low cost savings for the Plan.

3.2.6 EISA Impact on Lighting Savings

The Energy Independence and Security Act (EISA), a federal law enacted in 2007, has been reducing the available energy savings associated with lighting measures since its passage. During the 2018-2021 Plan, the lighting market will continue to transform from older technologies (e.g., incandescent, halogen and compact fluorescents (CFLs), leaving LEDs as the primary technology for residential general service applications. This shift will have a dramatic impact to the available savings in later years of the Plan. The pace of this market transformation is unknown and is creating significant uncertainty in achievable savings. This uncertainty is related to two inputs to the planned savings assumptions. First, the net-to-gross ratio is the percentage of bulbs installed that are attributable to Plan activities. Net-to-gross ratios are expected to drop as LEDs become more prominent and older technologies become less available. Second, baseline lighting values in the IL-TRM will continue to decline, resulting in lower savings when compared to LED technology. Residential lighting savings has been a significant contributor to energy efficiency savings since 2008. LED technology is also transforming the non-residential lighting market – again creating significant uncertainty of achievable savings in the planning period.

3.2.7 Increase in Low- to Moderate-Income Participation

Approximately 41% of Ameren Illinois residential customers are classified as low income under the definition used by the Illinois Weatherization Assistance Program (IWAP), which is equivalent to a household income of \$49,200 for a family of four. These customers are at increased risk of financial hardship due to increases in their energy costs and other market conditions, and have limited discretionary income to invest in energy efficiency improvements. In many cases, the homes that low- and moderate-income customers reside in were built before the implementation of uniform energy efficiency codes, and have the potential to achieve substantial energy savings.

However, many of these homes will need significant investment in home repairs and other health and safety improvements before energy saving measures can be installed. A comprehensive home weatherization program that provides services at little or no cost to low- and moderate-income customers is needed to tap this energy savings resource.

The scale of Ameren Illinois' Income Qualified Initiative, as explained below, will require a level of participation well beyond that achieved by IWAP and other DCEO Weatherization programs in recent years. Ramping up production capacity to achieve Ameren Illinois' Income Qualified Initiative goals will require a concerted effort and investment to build capacity among community action agencies and within the private sector. This effort, which will be targeted primarily to local organizations, also represents an opportunity to stimulate local economies, create jobs and develop expertise within the workforce to support the present and future successes of the Initiative.

3.2.8 Non-Rider EE Claimed Savings

In an effort to maintain innovative savings strategies that leverage existing and future investment and technologies, Ameren Illinois proposes that it be afforded the flexibility to count evaluated, measured and verified energy savings achieved as a result of the Ameren Illinois energy efficiency programs or influence thereof, but whose direct project costs are not recovered through Rider EE or Rider GER, the cost recovery mechanisms proposed in this docket.

3.3 Electric Budget

Appendix A provides the budget set forth in Section 8-103B(f),(g) and (m) for each of the four calendar years.

The electric budget, for the four year plan beginning January 1, 2018, is set to limit the average net increase in the average customer amount paid per kilowatthour (kWh) by 3.5%. Per Section 8-103(m) of the Act, 3.5% of the average residential eligible retail customer all-in rate during 2015, forms the cents/kWh rate. This rate is multiplied by the Ameren Illinois actual sales for the calendar year 2015 to establish the budget before the Exempt Customer adjustment. The total number is then adjusted to account for the Exempt Customer group. The budget is reduced by the Exempt Customer group's proportion of the total sales for the year the Plan is derived (currently modeled in this filed Plan as the twelve months ending April 2017). However, Section 8-103B(l) notes the criteria for determining the applicability of the Exempt Customer load is based on the 12 consecutive billing periods prior to the start of the first year of each such multi-year plan. With the 12 months prior to the start of the first year of this multi-year Plan (calendar year 2017) not concluded either at the time of this filing or the final order in the docket, Ameren Illinois will make a compliance filing in the first quarter of the first year of this Plan that determines the Exempt Customer list based upon the 12 consecutive billing months in 2017.

3.4 Electric Savings Goals

The electric savings goal is calculated pursuant to Sections 8-103B (f), (g) and (m). Notably, Section 8-103B of the Act sets forth new energy efficiency goals for applicable utilities based on cumulative persisting annual savings. Cumulative persisting annual savings represent the cumulative savings from energy efficiency measures installed from previous years and measures installed in the applicable year less any expired savings during that year. These unmodified cumulative persisting annual savings goals for Ameren Illinois are laid out in Section 8-103B(b-15), as modified by subsections (f) and (b-15). These goals are expressed in percentages and are to be applied to the deemed baseline sales for 2014, 2015, and 2016 of 36,900,000 MWhs less the average annual consumption during the same time period for those customers that have been determined exempt based on Section 8-103B(l). FEJA also identifies situations that would require modification of cumulative persisting annual savings goals. Ameren Illinois is proposing modification to the cumulative persisting annual savings goals due to the budgetary limitations set forth in the Act.

Since previous standards focused on first year savings attributable to energy efficiency programs and lifetime persisting savings was not tracked, persisting savings attributable to energy efficiency programs provided prior to January 1, 2018 have been deemed. These percentages from Section 8-103B(b-10) are to be applied to the same baseline referenced above to determine the persisting savings from programs prior to January 1, 2018.

In addition to a cumulative persisting annual savings target, the legislation has set forth an annual applicable incremental goal, which is used to calculate the cost of capital component of the Company's energy efficiency formula rate. The annual applicable incremental goal is determined by taking the cumulative persisting annual savings goals for an applicable year and subtracting the preceding year's cumulative persisting annual savings target. The savings achieved in each year from Plan savings must first be used to replace expired savings before applying to the Ameren Illinois applicable annual incremental goal.

Please see Appendix B for the calculation of Ameren Illinois electric savings goals.

3.5 Demand Response Savings

Appendix C provides the electric demand response (DR) goal by calendar year for each of the four years, as well as the 2018 Plan DR reductions (MW). Ameren Illinois must reduce peak demand by 0.1% over the prior year for eligible retail customers and for customers that elect hourly service from the utility. As previously approved by the Commission for the past two plans, Ameren Illinois will achieve demand response reductions and meet its obligations under Section 8-103B(g)(4.5) through the through the coincident electric energy efficiency savings of this Plan.

3.6 Gas Budget

Appendix D provides the gas budget set forth in Section 8-104(f) for each of the four calendar years.

Section 8-104(d) of the Act identifies a limit on the amount of gas energy efficiency measures that can be implemented under that Section of the Act. This provision serves "to limit the estimated average increase in the amounts paid by retail customers in connection with natural gas service to no more than 2% in the applicable reporting period." The budget is calculated by multiplying estimated Retail Revenue (amounts paid by retail customers) by this 2% limit.

Detailed explanations of the calculations used in determining the 2018-2021 Plan gas baseline spend including applicable exempt or excluded data from those customers who are designated as Self-Direct Customers are included in the testimony of Mr. Matthew Noonan.

3.7 Gas Savings Goals

Appendix E provides the four-year Plan gas savings goals. Per Section 8-104(c), as modified by subsection (d), the gas savings goals are applied to the qualified sales (excluding certain sales under the Act) for the base calendar year 2009. This base of qualified sales applies for the calendar years 2018-2019. The savings goals are equal to 1.4% for Program Year 2018 and 1.5% of the qualified sales for each year thereafter.

Considerations were made in the planning process as they relate to the provisions in Section 8-104(n) of the Act as those provisions apply half-way through the 2018-2021 Plan. Section 8-104(n) states "The applicability of this Section to customers described in subsection (m) of this Section is conditioned on the existence of the SDC program. In no event will any provision of this Section apply to such customers after January 1, 2020." This provision reflects the fact that beginning on the effective date, gas customers meeting the eligibility requirements of Section 8-104(m) will not be eligible for gas energy efficiency programs. Although a large portion of customers eligible to be approved as a Self-Directing Customer were not participating in the Ameren Illinois gas energy efficiency programs, there were several large gas customers that made a decision to not become a Self-Directing Customer and instead participate in the Ameren Illinois gas energy efficiency programs and pay the Rider GER tariff charges. However, due to the legislative language in Section 8-104(n), no customers meeting the eligibility requirements of Section 8-104(m) will be able to participate in the Ameren Illinois gas energy efficiency programs beginning January 1, 2020. As a result, Ameren Illinois will lose a large number of low cost savings from these gas customers beginning on January 1, 2020 when they will no longer be able to participate.

3.8 Electric and Gas Integration

Ameren Illinois is the only joint electric and gas utility in the state of Illinois required to comply with the energy efficiency standards set forth in Sections 8-103B and 8-104 of the Act. Ameren Illinois remains committed to developing and implementing energy savings programs ensuring cost sharing across portfolios, minimizing Program Ally and customer confusion, and providing the best possible opportunity for customers to achieve energy savings. All customers receiving both electric and gas delivery service from Ameren Illinois, residential and non-residential (commercial and industrial), receive the same message about the many opportunities to reduce both their electric and gas energy usage which reduces confusion to all customers. In addition, Program Allies, the frontline

providers of the energy efficiency programs offered by Ameren Illinois, can deliver one unified message to the customers they are working with and encouraging installation of energy efficient measures. Both the customers and the Program Allies only have to complete one application and marketing of both gas and electric savings opportunities can be provided at one website. In addition, the direct installation of energy efficient measures can be provided for both electric and gas, as applicable to the customer's eligibility.

New building and appliance codes¹⁰ required under the legislation can be implemented jointly for both electric and gas. The following examples of how the Ameren Illinois 2018-2021 Plan demonstrates adherence to new standards:

- As a result of compliance with EISA legislation and increased opportunities to promote cost-effective LEDs, CFLs have not been included as a measure.
- Under the Business Program, fluorescent linear tubing is being phased out in 2018 with a focus on LED technologies.
- Ameren Illinois continues its involvement in a building codes working group with the other Illinois Utilities with the purpose of integrating energy efficiency into building codes.
- Ameren Illinois will provide training and education opportunities about codes and standards to Program Allies.

3.9 Funding Requirements and Allocations

In comparison to past electric and gas energy efficiency Plans, there are several funding requirements that are new to Ameren Illinois in this 2018-2021 Plan. Some of the requirements are specific to electric or gas only, and sometimes with differences (*Compare*, *e.g.*, public sector in Section 8-103B(c) for electric and Section 8-104(e-5) for gas).

3.9.1 Low Income

One of the new requirements for Ameren Illinois in this Plan is the funding and implementation of low-income programs for both electric¹¹ and gas¹². For electric, the low-income households are defined as households at or below 80% of area median income and expenditures to implement the measures shall be no less than \$8.35 million per year.

As noted in Appendices A and H for electric and gas respectively, Ameren Illinois plans to exceed the minimum low-income requirements through the Income Qualified and Public Housing Initiatives.

3.9.2 Public Sector and Public Housing

The statute also requires a minimum of 10% of Ameren Illinois entire gas portfolio and 7% of Ameren Illinois' entire electric portfolio funding each year to procure cost-effective energy efficiency from the public sector which includes units of local

¹⁰ Section 8-103B(g)(2); Section 8-104(f)(2)

¹¹ Section 8-103B(c)

¹² Section 8-104(e-5)

government, municipal corporations, school districts, and community college districts. Public housing is also included in the 7% of electric portfolio funding but is not included in the 10% of gas portfolio funding. The Act calls for a minimum percentage of available funds be used to procure electric energy efficiency from public housing equal to public housing's share of public building energy consumption. Ameren Illinois has worked with its development team to determine innovative ways to meet this requirement, and using the Commission approved flexibility the Company will work with the identified groups to procure the required cost-effective energy efficiency, and track compliance with these public sector and public housing requirements through the four years.

3.9.3 Third Party Electric Energy Efficiency Program

New to Ameren Illinois in this Plan is the presentation of how the Company intends to bid, identify and contract for a third-party electric energy efficiency implementation program. The Act requires Ameren Illinois to fund an electric third-party energy efficiency program (or programs) annually at a minimum of \$8.35 million that will begin in the second year of this Plan (2019). The Act puts the impetus of this third-party program(s) and process on Ameren Illinois as the electric utility, specifically requiring Ameren Illinois to conduct a solicitation process, propose bidder qualifications, performance measurement process, contract structure, and retain an independent third-party evaluator to score the proposals.

Ameren Illinois is requesting approval from the Commission to meet the requirements of this third-party electric program in Section 8-103B(g)(4) through the solicitation of select measures identified in the Residential Retail Products Initiative, Residential Direct Distribution of Efficient Products Initiative and Business Standard Initiative, delivered through traditional and on-line retail distribution channels, using contract mechanisms in-line with previously approved contract structures (*e.g.*, performance based or time and material), as appropriate. Ameren Illinois intends to issue a request for proposal (RFP) that would be developed using a process similar to the one used to during the Illinois Power Agency Procurement. Ameren Illinois will engage a third party independent reviewer employed by Ameren Illinois to review the bids of other third party energy efficiency provider, in accordance with the Act.

3.9.4 Market Transformation

Market transformation is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or exploiting opportunities to accelerate the adoption of cost-effective energy efficiency as a matter of standard practice. The intent is to transform markets, meaning changes in the market structure or function, so that efficient product, services, and practices are adopted within specific target markets on an accelerated, sustained and permanent basis. The Act provides that utilities may allocate five percent of the entire gas portfolio of cost-effective energy measures to local government and municipal

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¹³ Section 8-103B(g)(4)

corporations for market transformation initiatives, though electric utilities can fund market transformation initiatives as well.¹⁴

As a joint electric and gas utility, Ameren Illinois' market transformation activities will be focused towards both electric and gas energy efficiency to all non-exempt customers.

Ameren Illinois will use its Commission-approved flexibility to identify the optimal activities, but at this time the Company anticipates considering funding the following market transformation initiatives: Builder Operator Certification (BOC) Program; Illinois Codes Collaborative and Codes Education and Technical Assistance Programs; Strategic Energy Management; serving underserved markets and providing technical assistance.

3.9.5 Prior Commitments of DCEO

The changes to the electric and gas energy efficiency legislation stemming from the passage of FEJA has resulted in the electric and gas utilities now given authority to plan, design and implement energy efficiency portfolios for all electric and gas customers for investor-owned utilities in the state of Illinois. Although the Act contains provisions to account for the transition of the energy efficiency programs previously administered by DCEO, there were some projects entered into prior to the passage of the new legislation that were projected to be completed after the transition period that ends on December 31, 2017. Ameren Illinois has made verbal commitments to DCEO and the implementers of those projects that the financial commitments made and approved by DCEO would be honored. Therefore, Ameren Illinois has included a line item in the budget as well as the accompanying energy savings for those specific four projects and requests the Commission approval DCEO's prior plan commitments.

3.9.6 Electric Funding for Gas Programs

New to the electric energy efficiency legislation as described in Sec/ 8-103B(b-25) is the new ability for electric utilities to continue offering a gas energy efficiency measure in the event the gas funds are exhausted whereby the electric utility may recover the costs of offering the gas energy efficiency measure with electric funds. These gas savings may also be converted to electric savings and counted toward the electric goals but such conversations are not to exceed 10% of the applicable annual incremental goal.

4.0 Portfolio of Programs

4.1 Portfolio Design

The Ameren Illinois Plan is designed to meet several key portfolio objectives built around compliance with the electric and gas energy efficiency statutory requirements while

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¹⁴ Section 8-104(e-5)

assisting residential and non-residential customers in reducing their electric and gas energy usage through the initiatives outlined in the residential and business programs.

4.1.1 Plan/Portfolio Objectives

Ameren Illinois complies with the Act with a portfolio that achieves several objectives including:

- A cost-effective portfolio that complies with the new provisions set forth in Section 8-103B and Section 8-104, using the Total Resource Cost Test.
- Ameren Illinois will seek to optimize annual and lifecycle savings with an increased focus on long-term measures with longer-lasting savings as further discussed in Section 3.2.2 of this Plan.
- Ameren Illinois will seek to provide a diverse cross section of opportunities with delivery of energy efficiency to low- to moderate-income and public sector customers; the delivery and development of under-served energy efficiency markets through innovative delivery channels; address the unique circumstances and attributes of Ameren Illinois' service territory and customer base; and the policy of investment in quality, effective and longer-lasting energy efficiency programs. With respect to offerings targeted to low- to moderate-income customers, and in accordance with the Act, Ameren Illinois will seek to contract, when it is practicable and consistent with Ameren's contracting protocols, to independent third parties that have demonstrated capabilities to serve such households, or that have existing relationships with or experience serving low-income communities.
- Ameren Illinois will seek to improve the economic health, viability and safety of traditionally unserved and underserved communities' neighborhoods through the delivery of energy efficiency programs, as well as the training and delivery of energy efficiency measures by program/trade allies within those same neighborhoods. Through implementation of this Plan, Ameren Illinois looks forward to providing exciting opportunities for Ameren Illinois customers to receive both the savings and the economic benefits of energy efficiency.
- Ameren Illinois will seek to maintain program continuity and stability for customers and trade partners (Program Allies). Customers and program allies in Ameren Illinois service territory have been plagued with multiple energy efficiency vendors over the past five years with the Section 16-111.5B programs to the residential and small business market. Customers and Program Allies have voiced their concerns with their confusion and dissatisfaction of these multiple energy efficiency vendors who in some cases, provided the same and/or similar measures creating mixed messages. The residential and business programs have been designed to maintain continuity of the energy efficiency measures offered throughout the four years of this Plan. Stopping and starting the implementation of energy efficiency measures during the four-year Plan period not only creates confusion in the market place for

both customers and program allies not knowing when they can purchase and/or market energy efficient measures at discounted prices through Ameren Illinois EE program, it also increases the costs to the customers as programs ramp up and down.

• Ameren Illinois will seek to increase its engagement with diverse business enterprises acknowledging the importance of fostering economic activity in Illinois through the use of energy efficiency dollars to support Illinois-based jobs. It is important to ensure that Illinois-based businesses including but not limited to, non-profit organizations, universities, and women, minority and disabled veteran-owned businesses not only have equal opportunity to provide energy efficiency goods and services for the portfolio, but Ameren Illinois will also help facilitate the reality of their participation.

4.2 Portfolio Elements

Ameren Illinois' Plan is comprised of two programs; the Residential Program and the Business Program. Both programs feature opportunities for customer participation through the initiatives outlined in the program description templates included as Appendix H. The Plan objective is to offer customers a broad suite of options to meet their energy management needs, rather than forcing customers to sort through a variety of individual programs.

Various market factors including but not limited to new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy over time. Ameren Illinois could also alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. Subject to the Commission approved flexibility, pursuant to Ver. 1.1 of the EE Policy Manual, to appropriately respond to the market, the Programs are designed to run through the duration of this Plan period—January 1, 2018 through December 31, 2021.

4.2.1 Residential Program

The Residential Program is comprised of eight initiatives that address key electric and natural gas end-uses in single family and multifamily units and providing incentives and services to residential customers. It offers a range of educational opportunities and incentives for customers to implement a series of energy efficiency improvements. Each initiative is a potential entry point for customers into the Program, which is structured to facilitate cross-promotion between initiatives. Direct installation initiatives, targeted primarily to low- to moderate- income, are designed to achieve deep reductions in energy consumption within participant's homes through the installation of low-cost energy saving measures and comprehensive weatherization services. The structure of the Residential Program is illustrated in Figure 1. Delivery and marketing strategies, target markets and eligible measures for the eight initiatives are included in the program description template included as Appendix H.

Figure 1: Residential Program

Residential Program								
Behavior Modification	Retail Products	Income Qualified	Public Housing					
Direct Distribution Efficient Products	HVAC	Appliance Recycling	Multifamily					

4.2.2 Business Program

The Business Program provides incentives and services to non-residential customers to achieve electric and natural gas energy savings. The cornerstone to the Program is providing incentives to both private and public sector non-residential customers to drive them to conduct energy efficiency projects and reduce their energy usage. Other aspects include education and training, energy efficiency marketing, and advancement of construction and monitoring beyond standard energy intensity best practices. The Program is comprised of four core initiatives as identified in Figure 2. Delivery and marketing strategies, target markets and eligible measures for the initiatives are included in the program description template in Appendix H.

Figure 2: Business Program

Business Program							
Standard	Custom	Retro- Commissioning	Streetlighting				

4.3 Portfolio Management and Cross-Functional Portfolio Activities

Portfolio Management consists of several key activities required to properly manage the portfolio. These elements include Planning, Implementation and Administration; Outreach, Marketing and Communications; Tracking and Reporting; Breakthrough Equipment and Devices (formerly referred to as Emerging Technologies or Research and Development); Market Transformation; Risk Management; Supplier Diversity and Inclusion; and the process of updating the Plan. These elements are considered portfolio-level costs because they provide services across the entire portfolio. As a joint electric and gas utility these activities are managed across both electric and gas energy efficiency portfolio.

4.3.1 Planning, Implementation and Administration

Planning, implementation and administration comprised of a myriad of activities; including, but not limited to, the development and execution of Ameren Illinois' portfolio strategy utilizing both external coordination to communicate the portfolio and programs strategies and progress to the Commission and the SAG, and internal coordination to ensure use of consistent messaging and to provide general oversight of the planning and implementation process. Additional activities include the continued analysis of the Ameren Illinois portfolio, programs and budgets as well as the management of electric and gas rider reconciliations and dockets.

Vendor/implementation contracting and payment processing is yet another key activity. Other key activities include managing the process of the SAG and/or Commission-led activities such as the IL-TRM, the EE Policy Manual, On Bill Financing and energy efficiency installer certifications.

4.3.2 Outreach, Marketing and Communications

Outreach, marketing and communications will continue to be an important and vital mechanism to educate and raise awareness about the value and benefits of energy efficiency to customers and for ensuring customers and Program Allies are aware of and participate in the portfolio programs.

Since the inception of the energy efficiency programs in 2008, Ameren Illinois has received over 30 international, national and regional awards for its innovative approaches and successful execution of its energy efficiency plans. A third of those awards were international awards received in the energy field from Platts and PowerGrid in addition to the awards received for marketing and advertising such as the Communicator, Davey, MarCom, Telly, Summit and VEMA Awards. Nearly 50% of the awards have been national awards with the majority of those awards coming from the United States Environmental Protection Agency and its ENERGY STAR® segment. Fifteen percent of the awards achieved over the past 10 years have been regional awards received from the Midwest Energy Efficiency Alliance as well as the State of Illinois for the Illinois Governor's Sustainability Award. A local award was received from the Heart of Illinois Hospitality Association in Ameren Illinois' efforts and assistance to encourage hotels and restaurants to participate in the energy efficiency programs.

The Ameren Illinois energy efficiency team will continue to speak at numerous peer conferences and gatherings; and will continue to engage with national and international organization to help lead our industry, benchmark our activity and advance the overall goals of energy efficiency.

Utilizing the recognized Ameren Illinois brand, the program has developed a number of award-winning campaigns and initiatives that encourage customers to "take action" to reduce energy consumption. The Ameren Illinois brand has also strengthened the co-marketing efforts for participating Program Allies.

Campaign activities include:

- An Ameren Illinois portal for Program Ally participation which provides up-to-date online access to information, instructions, applications, etc. for program participation. The website also provides energy-saving tips, portfolio program offerings, Program Ally search portals, incentive applications and more.
- Print advertising, digital media, direct mail, and email blast communications
- Press releases resulting in newspaper and television news stories.
- Brochures and literature.
- Conference and special event exhibits.
- Outreach events, sponsorships, educational seminars, and speaking engagements.
- Routine webinars, email communications, e-newsletters, round tables and customizable marketing materials for Program Allies.

4.3.3 Tracking and Reporting

Instrumental to the success of the Ameren Illinois portfolio is the management of program tracking and reporting. Proper management ensures program implementers, as well as internal staff, consistently have access to accurate, reliable tracking data. Ameren Illinois and its implementers utilize a variety of tools for tracking and managing program data. The tracking and reporting structures continue to evolve as needs require.

4.3.4 Breakthrough Equipment & Devices ("BED")15

Numerous innovations in energy efficiency-related technologies are on the horizon, and many new, innovative products and services are becoming available. Ameren Illinois seeks to be a part of these potentially new products and services in the energy efficiency field. With the doubling of the percentage of BED to six percent for electric energy efficiency as outlined in the Act¹⁶ and the continued three percent outlined in the gas legislation¹⁷ for demonstration of BED, it is clear that Illinois policy supports this involvement. Ameren Illinois believes that the investment in new energy efficiency concepts is critical to the future success of its energy efficiency portfolio.

For the 2018-2021 Plan (and beyond), Ameren Illinois intends to implement a structured process that identifies opportunities within the portfolio and researches potential responses to these opportunities. Additionally, Ameren Illinois proposes that all applicable BED projects be evaluated for electric and/or gas energy savings such that those savings can be applied to the annual electric and/or gas savings goals.

Besides specific BED projects, Ameren Illinois will also continue to invest BED budget dollars in organizations that support energy efficiency (e.g., Consortium for

¹⁷ Section 8-104(g)

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¹⁵ As explained in Section 1 of the EE Policy Manual, BED activities include research and development activities.

^{...} Section 8-103B(h)

Energy Efficiency). Organizations such as these provide opportunities to take advantage of research being conducted at a national level, leveraging energy efficiency funding from across the country.

Within this Plan, Ameren Illinois intends to monitor the energy efficiency landscape and identify opportunities when they arise. Examples of BED projects or pilots that Ameren Illinois intends to investigate over this Plan's life include but not limited to, Business Behavioral Modification, Energy Disaggregation, Smart Street Lighting, Home Energy Monitor and a flexible payment billing option.

A key initiative included in the BED budget is focused on increasing the capacity for delivering energy efficiency programs through partnerships with a broad range of existing and developing resources in communities across the Ameren Illinois service territory. This market transformation initiative will seek to; 1) increase the number of local, held jobs held by diverse individuals providing energy efficiency services within economically-challenged communities; 2) increase the number of diverse business entities that deliver energy efficiency services to Ameren Illinois customers; and 3) increase the number of participants from targeted diverse communities that participate in Ameren Illinois energy efficiency programs. The effort will be implemented using the following primary strategies:

- Research and assessments will be used to identify both successful programs that may already exist, as well as the primary barriers for energy efficiency job development and business growth in diverse and economically-challenged communities.
- Community leaders and organizations will be identified and interviewed to better understand community successes, needs and barriers.
- Diverse businesses throughout the service territory will be identified and interviewed to identify best practices, barriers faced, and opportunities for growth and expansion.
- A list of energy efficiency job and business opportunities within Ameren Illinois' portfolio of programs will be developed for diverse employee training and diverse business contracting.
- The assessments and research will be used to develop a list of engagement strategies needed to create an impact and to set metrics that can be tracked to assess outcomes.
- Community organizations identified through research above will be considered as possible partners to engage in the implementation of the initiative working with the diverse employees and/or businesses in their communities. These organizations will be ambassadors in their communities to ensure that the engagement strategies and financial incentives funneled to the communities will provide sustainable results.

- O Performance based agreements with the community organizations that have identified a 2-4 year plan for achieving sustainable results in one of the three goal areas of this initiative – number of diverse individuals employed through energy efficiency funding, number of diverse business enterprises providing energy efficiency services, number of customers from diverse and/or economically-challenged communities participating in Ameren Illinois energy efficiency programs.
- A variety of engagement strategies such as business training, technical training, coaching/mentoring, access to business expert advice, and others will be provided to the business, individuals and organizations identified through the initiative. This funding will be provided through 2-4 year performance based agreements including metrics and sustainability goals.
- o Funding provided for engagement strategies will be targeted to individuals, businesses and organizations that will provide energy efficiency services within the Ameren Illinois service territory.
- o These services and support funded through the performance based agreements, entered into in accordance with the provisions of FEJA, will be evaluated based on sustainability and ability to measure indicators of progress throughout the implementation period.
- It is anticipated the demand for services will grow over the 4 year period as awareness of the initiative grows throughout communities in need allowing Ameren to continue qualifying new individuals, businesses, and organizations to provide services through and beyond the 4 year period.

4.3.5 Application of the IL-TRM and EE Policy Manual

Intrinsic to energy efficiency portfolios is the uncertainty of program performance, evaluations, the economy, customer participation and funding continuity. These uncertainties lead to risks that must be managed within the portfolio. As a result, Ameren Illinois must manage two primary risks: achievement of the electric and gas energy savings goals and adherence to the electric and gas budgets outlined within the Act.

Due to the development and execution of the statewide Illinois Technical Reference Manual that has been annually updated and approved by the Commission over the past six years, the management of electric and gas energy savings have been partially mitigated. The IL-TRM annually deems the electric and gas energy savings for many energy efficiency measures and reduces risks concerning the measure savings.

In addition to the approved IL-TRM, the EE Policy Manual provides opportunity for risk mitigation. The EE Policy Manual includes several key areas that assist in reducing risk to the electric and gas portfolios. The net-to-gross (NTG) framework sets

an annual NTG value for most programs, but the EE Policy Manual provides adjustment for the gas savings goal for NTG for only the first year. The adjustable savings goals framework also allows the gas energy savings goals to be adjusted to align them with the annual changes to IL-TRM values. Accordingly, the annual gas energy savings goals will be adjusted to align them with the changes to the IL-TRM, and annual gas energy savings goals will be adjusted for the entire Plan period, prior to the start of the first Plan Year of an approved Plan, so that they are aligned with the most recently recommended NTG values, as determined by the independent evaluator. Notably, for the first year of the 2018-2021 Plan, the IL-TRM values approved by the ICC in Docket 17-0106 have been utilized in the Plan model as well as the NTG values agreed through the SAG process in February 2017. Therefore, there will be no adjustments needed for PY2018. For the three remaining years of the 2018-2021 Plan, Ameren Illinois will file adjusted gas energy savings goals reflecting updated IL-TRM values applicable and approved by the Commission.

The EE Policy Manual also allows for Ameren Illinois to present an adjustable goal framework for electric savings. By way of background, the Commission approved Ameren Illinois' energy efficiency portfolio under Docket 13-0498, for the period June 1, 2014 through May 31, 2017, included adjusted electric and gas savings goals for annual updates for both IL-TRM and NTG changes. Ameren Illinois requests that the Commission approve the continuation of this policy only with respect to the adjustment of electric energy savings goals. With all of the changes resulting from FEJA, these annual IL-TRM and NTG adjustments are of critical importance. The annual IL-TRM and NTG adjustments are beyond the utility's control, causes unplanned shifts in the portfolio to occur, the degree of which cannot be predetermined, and thus creates risk to program success. In order to fairly and prudently address these shifts, Ameren Illinois requests that it be allowed to apply a commensurate adjustment to its annual electric goals. The methodology of such adjustments is set forth in Appendix G. Additionally, the EE Policy Manual includes implementation flexibility and budgetary shift rules that allow Ameren Illinois to make program changes and/or budget shifts when needed to account for changes in the market, the economy or with energy efficiency measures.

These two statewide policies have mitigated several risk factors, but several potential risk factors remain. For this Plan, the major risks that remain include the following:

- The budgets make it impossible to achieve the unmodified goals for both electric and gas;
- Energy prices continue to remain relatively low in Ameren Illinois service territory;
- The economy in Ameren Illinois' service territory continues to struggle;
- Continued uncertainty for changes to the IL-TRM, including EISA baseline shifts for lighting; and
- Continued uncertainty for annual IL-TRM and NTG changes for both electric and gas.

4.3.6 Supplier Diversity, Inclusion and Investment

Ameren Illinois recognizes the importance of supplier diversity and inclusion throughout its procurement process including energy efficiency. Ameren Illinois has a corporate commitment to supplier diversity whereby the sourcing process is designed to provide increased opportunities for businesses that are certified diverse business enterprises. Ameren Illinois is committed to supporting the diverse communities it serves and in developing strong partnerships with diverse suppliers. The Company has a culture that strongly embraces diversity and inclusion enables us to better understand and meet the needs of our diverse customer populations, enhances engagement among our co-workers that drives innovative solutions to meet our customer's energy needs and expectations. Additionally, the Company believes that providing diverse-owned businesses with an opportunity to partner with Ameren in providing quality goods and services to our customers enhances our service and helps drive the growth of the communities in the Ameren Illinois service territory.

4.3.7 Update Process

Unlike past plans, there are certain provisions in Section 8-103B that will result in the need to update the 2018-2021 Plan to meet the terms of those provisions. Those provisions include the final Exempt Customer list¹⁸ and the filing of the voltage optimization plan called for in Section 8-103B(b-20).¹⁹

10 MW Exempt Customers

As noted previously in Section 3 of this Plan, unknown to Ameren Illinois' at the time of this filing is the final list of Exempt Customers as the period for determination is based on the 12 consecutive billing months prior to the start of this 2018-2021 Plan or December 31, 2017. Ameren Illinois proposes the approval of an update process to comply with this provision. After the Exempt Customers have been identified, Ameren Illinois will make a compliance filing within 60 days after the conclusion of calendar year 2017. If the impact to the budget from the Exempt Customers results in an overall increase, Ameren Illinois will apply the budget increase and contingency dollars to the Income Qualified Initiative with savings increased proportionally. Accordingly, if the impact to the budget from the Exempt Customers results in an overall decrease, Ameren Illinois will remove the dollars from the contingency and if any funds remain, Ameren Illinois will reduce the participation on a pro-rata basis to all programs such that costs are proportionally decreased by the same reduction in the overall decrease. Other than applying the updated customer list to the budget and savings goals calculations, the Company does not intend to make any other changes, including to the rates approved by the Commission to be charged under Rider EE.

Voltage Optimization Investment Plan

Section 8-103B(b-20) requires Ameren Illinois to file a plan with the Commission that identifies the cost-effective voltage optimization investment the electric utility plans to undertake through December 31, 2024. This filing must be made by February 26, 2018

¹⁸ 8-103B(I)

¹⁹ 8-103B(b-20)

and therefore will be made when this Plan has already been approved and Plan implementation underway. Once the voltage optimization filing has been made and Commission approval granted, the Commission will adjust the applicable cumulative persisting annual savings goals for this Plan either up or down based upon the annual savings attributable to voltage optimization for each applicable year. The adjustment of the applicable cumulative persisting annual savings goal that will be made by the Commission and once approved, will be reflected in updated Appendices, as applicable. With the costs incurred by Ameren Illinois to implement the voltage optimization measures recovered under the provision of Article IX or Section 16-108.5 of the Act, there will be no Plan budgetary adjustments needed.tb

5.0 Evaluation, Measurement and Verification

Ameren Illinois proposes to continue with the current model used to engage and collaborate with the Independent Evaluation, Measurement and Verification ("EM&V") contractors approved by the Commission in previous plan dockets (e.g., ICC Docket No. 13-0498), though Ameren Illinois intends to adhere to Section 7 (addressing evaluations) of the EE Policy Manual and the electric and gas EM&V reporting requirements outlined in the Act, as well as to take steps to ensure evaluator independence. Even though there are no evaluation reporting deadlines outlined within the gas legislation under Section 8-104, where applicable, Ameren Illinois intends to provide joint electric and gas evaluation reports and will provide those reports under the timing requirements for electric under 8-103B.

6.0 Cost Recovery

6.1 Cost Recovery Mechanism

The Act allows a cost recovery tariff mechanism to fund the proposed energy efficiency measures and to ensure the recovery of prudently and reasonably incurred costs of Commission-approved programs, Section 8-103B(d)(1-3); Section 8-104(f)(7).

For the recovery of gas energy efficiency costs, Ameren Illinois proposes continuing Rider GER²¹ – Gas Energy Efficiency Cost Recovery, which was filed with the Commission on April 17, 2017, with an effective date of June 1, 2017. This filing was made to comply with the minor Section 8-104 revisions (e.g. change program years to calendar dates) resulting from the enactment of FEJA. Rider GER provides for the recovery of costs, fees and charges for approved gas energy efficiency measures implemented by Ameren Illinois and approved by the Commission. Moreover, pursuant to Section 19-140 of the Act, any gas charge applicable to Residential or Small Non-residential Retail Customers shall provide for the recovery of all costs prudently incurred by the company in association with its on-bill financing program.

²⁰ Section 8-103B(g)(6); Section 8-103B(g)(9); Section 8-103B(j); 8-104(f)(8)

²¹ See Matthew Noonan Testimony Exhibit 2.3

Ameren Illinois proposes Rider EE²² and Rider APM²³ as the tariffs called for under Section 8-103B. Rider EE – Energy Efficiency and Demand Response Investment was filed with the Commission on June 9, 2017 and is awaiting Commission approval. As outlined in Rider EE, its purpose is to provide for the recovery of costs, fees and charges for approved Energy Efficiency and Demand-Response Measures implemented in compliance with 8-103, 8-103B and 16-111.5B of the Act, as applicable, in addition to all costs prudently incurred by the company in association with on-bill financing described in Section 16-111.7, through a formula rate. In accordance with Section 8-103B(d)(2) and Section 8-103B(d)(3), the energy efficiency formula rate specifies the cost components that form the basis of the rate charge to customers with sufficient specificity to operate in a standardized manner and be updated annually with transparent information that reflects Ameren Illinois' actual costs to be recovered during the applicable rate year.

Rider APM – Annual Performance Modifier is filed with this Plan, for which Ameren Illinois also requests Commission approval. Rider APM's purpose is to provide for an adjustment to the return on equity component of Ameren Illinois' weighted average costs of capital in accordance with Section 8-103B(g)(8). The adjustment if any shall be based upon the applicable annual incremental goal compared to the annual incremental savings determined by the independent evaluator, in accordance with the Act.

6.2 Cost Allocations

In accordance with the gas and electric cost recovery mechanisms as outlined above and in consideration that the Ameren Illinois Plan is an integrated electric and gas Plan, Ameren Illinois requests Commission approval of certain Plan cost allocations. As noted within the cost recovery tariffs, incremental costs may also include portfolio level joint costs common to gas and electric energy efficiency where the proportion of joint costs allocated and recovered through the applicable gas or electric riders will be based on the proportion of the annual gas or electric portfolio budgets to the total gas and electric annual portfolio budgets. Additionally, non-incentive program costs will be allocated in a similar fashion based on proportion of total budgets. Program incentive costs will be allocated according to TRC benefits. Ameren Illinois will assign or allocate low income costs to the delivery service rate class that receives the benefit.

7.0 Conclusion

Ameren Illinois respectfully requests that the Commission approve its integrated electric and gas 2018-2021 Plan, the proposed cost recovery tariffs and other requests summarized herein.

²² See Keith Goerss Testimony Exhibit 5.1

²³ See Keith Goerss Testimony Exhibit 5.2

8.0 Appendices

Appendix A: Electric Budget

Appendix B: Electric Savings Goals

Appendix C: Electric Demand Response Goal

Appendix D: Gas Budget

Appendix E: Gas Savings Goal

Appendix F: Electric and Gas Budget and Modified Savings Goal Summary

Appendix G: Adjustable Goals Template (electric and gas)

Appendix H: Program Templates
Appendix I: Measure Level Inputs