

ICC Docket No. 18-0211
Ameren Illinois Company d/b/a Ameren Illinois’
Voltage Optimization Plan
Settlement Stipulation

I. INTRODUCTION

This Settlement Stipulation (“Stipulation”), when fully executed and accepted, will constitute a valid settlement agreement enforceable between Ameren Illinois Company d/b/a Ameren Illinois (“Ameren Illinois,” “AIC,” or the “Company”), the Staff of the Illinois Commerce Commission (“Staff”), the Illinois Attorney General’s Office (“AG”), the Citizens Utility Board (“CUB”), the Environmental Defense Fund (“EDF”), and the Natural Resources Defense Council (“NRDC”) (each a “Party” and, collectively, the “Stipulating Parties”).

Ameren Illinois’ voltage optimization plan (the “VO Plan”) is required to be filed with the Illinois Commerce Commission (“ICC” or “Commission”) pursuant to Section 8-103B of the Public Utilities Act (the “Act”), 220 ILCS 5/1-101 *et seq.* The Company’s proposed VO Plan has been the subject of testimony and settlement discussions among the Stipulating Parties with the goal of reaching consensus on the cost-effective voltage optimization (“VO”) investments to be made by the Company through December 31, 2024 as well as the Evaluation, Measurement & Verification (“EM&V”) of those VO investments.

This Stipulation is intended to memorialize that each and all of the Stipulating Parties are in agreement that the Company’s VO Plan, as modified by this Stipulation, satisfies the requirements of Section 8-103B, is supported by adequate evidence in the record, and, therefore, should be approved by the Commission. In addition, this Stipulation memorializes the compromise between and among the Stipulating Parties regarding certain disputed issues raised in the docket and during the course of settlement discussions as further detailed below. Compromise by any Party on any particular issue set forth in this Stipulation or in the VO Plan shall not constitute, and shall not be construed or interpreted to constitute, an endorsement of the resolution achieved by that compromise for any purpose other than as set forth in this Stipulation.

This Stipulation is the result of negotiation at arms’ length between and among the Stipulating Parties, all of whom have been represented by counsel, and memorializes the Stipulating Parties’ agreements. Thus, the Stipulating Parties, intending to be legally bound and acknowledging the benefit to be derived from the mutual promises and commitments contained herein agree as follows:

II. STIPULATION OVERVIEW

The Stipulating Parties agree that the Commission has the evidentiary and legal basis to approve the Company’s proposed VO Plan, as modified by this Stipulation, and that such approval is supported by the substantial record in this docket. The Stipulating Parties agree that the Company’s proposed VO Plan, as modified by this Stipulation, is consistent with and satisfies the statutory obligations included in Section 8-103B and, in particular, Section 8-103B(b-20). The Stipulating Parties agree to the Stipulation set forth below, and seek to have the Commission adopt the Stipulations, in their entirety, in the Final Order approving the Company’s proposed VO Plan.

To the extent the Stipulations are not adopted in their entirety, the Stipulating Parties agree that this Stipulation is null and void and the Stipulating Parties will be allowed to pursue their litigation positions.

III. STIPULATIONS

1. With respect to EM&V of the VO investments to be made by the Company pursuant to the Company's proposed VO Plan, the Stipulating Parties agree to the following:

(a) Ameren Illinois shall request its independent evaluator to evaluate, in 2019 through 2020, both the 19 circuits on which VO was installed in 2017-2018 and as many of the circuits on which VO will be installed in 2019 as can provide useful data for the evaluation for the purpose of updating the CVR factor and/or CVR factors, as appropriate. The Stipulating Parties agree that the savings methodology proposed by Ameren Illinois in this ICC Docket No. 18-0211, as it refers to the application of a CVR factor, as defined in paragraph 1(d) of this Stipulation, shall be the default methodology used to calculate savings unless a statistically valid alternative of similar or better reliability is identified to evaluate the accuracy of the savings through: (1) the consensus of the Stipulating Parties and the independent evaluator, which consensus shall not be unreasonably withheld; or (2) an Order of the Commission approving and applying the methodology to the VO installed by Ameren Illinois. Nothing in this paragraph describing the default methodology for CVR evaluations shall be interpreted to limit evaluator proposals for alternative approaches (*i.e.* beyond just adjusting CVR factors) to estimating VO energy savings if they believe such alternative approaches could produce more reliable or accurate VO energy savings estimates, but such proposals would be subject to the consensus process and/or Commission resolution process set forth in paragraph 1(d) of this Stipulation.

(b) The Stipulating Parties agree that the evaluation approach identified in paragraph 1(a) shall be consistent with what is necessary to have results ready by May 1, 2020. Accordingly, Ameren Illinois shall request that its evaluator incorporate an alternating "on/off" days methodology and regression analysis or, as determined by the consensus of the Stipulating Parties and the independent evaluator, which consensus shall not be unreasonably withheld, a statistically valid alternative of similar or better reliability, to evaluate the accuracy of its CVR factor or CVR factors, as appropriate.

(c) The Stipulating Parties agree that for years in which the testing will occur on circuits that will also be evaluated for energy savings goal attainment under Section 8-103B, the on/off testing shall not be a basis to reduce the estimated savings, and the independent evaluator will estimate savings as if the VO investments were on for the entire evaluation year. However, if any circuits become inactive during the agreed-upon testing for any reason other than to support the agreed-upon testing methodology set forth in this Stipulation, this inactivity will be reflected as a reduction in the evaluated savings for the applicable evaluation year.

(d) The results identified in paragraphs 1(a)-1(c) above and this paragraph 1(d) shall be considered in the development of the Ameren Illinois VO measure for inclusion in the 2021 Illinois Statewide Technical Reference Manual for Energy Efficiency ("IL-TRM"),

which would be finalized by the Fall of 2020. The basic formulation of the algorithm proposed by Ameren Illinois in its VO Plan (*i.e.*, (A) CVR factor, multiplied by (B) percent voltage reduction, multiplied by (C) customer load absent voltage reduction, which is defined as the average annual customer energy use for each feeder over the 2014-2016 timeframe, less energy use by exempt customers) shall be used to estimate savings for Ameren Illinois VO measures in the IL-TRM unless changed pursuant to the terms of this Stipulation. Use of different CVR factors (*i.e.*, the first variable in Ameren Illinois' algorithm) for different categories of circuits, different levels of voltage reduction and/or for other relevant variables and/or different constructs for the CVR factor (including, but not limited to the CVR factor being expressed formulaically instead of just a single value) shall be deemed consistent with continued use of the Ameren Illinois algorithm as long as the other two variables in the algorithm (*i.e.*, percent reduction in voltage and customer load) remain. Evaluation results would be used to update and/or refine the construct of the CVR factor(s) used in this algorithm. All Stipulating Parties agree to consider and collaboratively discuss whether there is evidence to suggest there is a more accurate or reliable approach to estimating VO savings that would replace or otherwise modify the Ameren Illinois algorithm (*i.e.*, involving replacement or changing of the other two variables). If those discussions lead to consensus to change or replace the Ameren Illinois algorithm, such changes will be incorporated into the IL-TRM. If there is not consensus amongst all Stipulating Parties on the appropriateness of any such modifications to Ameren Illinois' algorithm, a petition to reopen may be filed with the Commission in this docket, and such disagreements shall be addressed before the Commission. The Commission's resolution on such disputed issue shall be applied prospectively. In the case of such disagreements, Ameren Illinois' algorithm as approved in ICC Docket No. 18-0211 as well as the updated CVR factor or CVR factors recommended in the evaluation, shall be included in the IL-TRM and used in the VO evaluation until the Commission resolves the dispute.

(e) The results identified in paragraphs 1(a)-1(d) above, as incorporated into the 2021 IL-TRM, shall apply to circuits on which VO was installed in 2020, which means the Company would begin to apply the evaluation results as incorporated into the 2021 IL-TRM to the 2021 energy savings estimates. These energy savings would be verified and reported in the first half of 2022.

(f) Notwithstanding anything else to the contrary in this Stipulation, Ameren Illinois' proposed deeming of its 0.8 CVR factor shall apply to 2019 and 2020 claimed savings, from circuits on which VO is installed in 2017, 2018 and 2019. Those planned circuits represent about 14% of the Company's planned circuit installs (*i.e.*, 149 out of 1047). However, if the Company installs VO on more than 165 circuits by the end of 2019, the updated results, including any updated CVR factor or CVR factors, if any, shall be applied retrospectively to the savings determined for the additional circuits in 2020 (*e.g.*, if VO has been installed on 200 circuits by the end of 2019, the deemed 0.8 CVR factor would apply only to the first 165/200 circuits that had VO installed of the 2020 savings, with any updated CVR factor or CVR factors, as appropriate, applying to the other 35/200 of the 2020 savings).

(g) Another evaluation of either additional new VO circuits installed after 2019, or a sampling of all circuits operated during the period being tested, shall be completed in 2021, the results of which would be submitted as part of the 2023 IL-TRM Update Process, as appropriate. This additional evaluation shall include the utilization of sampling techniques and methodologies agreed to among the independent evaluator and the Stipulating Parties, such agreement not unreasonably withheld, that shall be statistically valid in number, and representative of the remaining Ameren Illinois circuits identified for VO installation. If only the newly installed VO circuits (that is, the 2020 installations) are evaluated, and the methodologies are such that the evaluation results can, in the independent evaluator's professional judgement, be properly combined, the additional evaluation results will be added to the evaluation results identified in paragraphs 1(a)-1(d) of this Stipulation, applied as part of the annual IL-TRM Update Process for the prospective application of future annual VO savings of future installed VO circuits. To the extent Ameren Illinois undertakes additional VO investments beyond 2024, any additional, future evaluations of the nature identified in this Stipulation will be discussed as part of the annual Illinois Energy Efficiency Stakeholder Advisory Group ("SAG") evaluation planning process. The Stipulating Parties will then work with the independent evaluator to determine appropriate evaluation plans going forward in terms of both timing and methodology.

The Stipulating Parties agree that the agreed-to EM&V plan set forth in paragraphs 1(a)-1(g) above does not impact the energy savings goals set in this ICC Docket No. 18-0211.

2. With respect to the evaluation of the savings achieved from peak demand reduction achieved by the VO investments, CUB, EDF, NRDC, Staff and AG accept Ameren Illinois' proposal of calculating the Total Resource Cost ("TRC") test without quantifying the peak demand savings in this docket at the planning stage (notwithstanding the parties' positions on whether such savings is quantifiable). The Company agrees to request that the independent EM&V evaluator include as part of the agreed-to EM&V plan an impact evaluation of the peak demand reduction savings at the time of the evaluation to determine what peak demand reduction has been achieved by the VO investments. The Stipulating Parties agree that such information would not impact the energy savings goals set in this ICC Docket No. 18-0211, but the information, if quantifiable, would be used to conduct future TRC calculations when considering future investments, including and in addition to those identified in the VO Plan approved in ICC Docket No. 18-0211. The peak demand savings evaluation results for VO will also be submitted to the IL-TRM Update Process.

3. Ameren Illinois hereby memorializes that its VO Plan is designed to serve all Ameren Illinois electric customers on cost-effective circuits, with prioritization given to circuits serving low and moderate income customers throughout the Ameren Illinois service territory. According to the Company's VO Plan and discovery responses issued in this case, locations identified as Tier One Communities serve as a proxy for geographic areas serving Ameren's low-income customers. The Company shall prioritize implementing voltage optimization measures at locations where there are cost-effective circuits that serve low income communities, focusing first on the Top 20 Tier One communities¹, and will accelerate the deployment of these cost-effective circuits to the extent

¹ Ameren Illinois defines Tier One communities as "Low-income communities, mostly single-family areas that are underserved by residential (energy efficiency) programs." The December 2017 Opinion Dynamics report cited by Ameren further characterizes Tier One communities as having:

practicable without significant adverse effects on the cost of deployment, or the projected ability of the Company to meet its savings goals established in ICC Docket No. 18-0211. Ameren Illinois shall investigate voltage optimization opportunities for low-income customers outside of its Tier One community designation, and develop a prioritization strategy that incorporates and prioritizes investment in voltage optimization equipment for circuits serving primarily low income customers, as best Ameren Illinois can determine. The low-income prioritization strategy shall be delivered to the Stipulating Parties within 8 months of the Final Order being entered in this docket, but no later than December 31, 2018, whichever is earlier, and the prioritization strategy shall also provide information on the distribution of low-income customers across its service territory on a circuit-level basis, and workpapers and studies supporting the strategy shall be made available to the Stipulating Parties at the time of the strategy delivery. After review and opportunity to comment by the Stipulating Parties, which comments shall be reasonably considered for inclusion as part of a discussion and negotiation designed to achieve consensus among the Stipulating Parties, the Company shall file the low-income prioritization strategy in this ICC Docket No. 18-0211 and send to the SAG facilitator for posting on the SAG website. The Stipulating Parties agree that the development and filing of the low-income prioritization plan does not impact the energy savings goals set in this ICC Docket No. 18-0211.

4. Ameren Illinois hereby memorializes that its VO Plan (and, specifically, its EM&V proposal) does not calculate the proposed savings goals using partial year savings at either the plan approval stage or the evaluation stage. Rather, Ameren Illinois is proposing to assess the savings achieved through the VO investments put into service in a calendar year starting January 1 of the following year.

5. All understandings and agreements between the Stipulating Parties prior to the execution of this Stipulation are superseded by and merged into this Stipulation, which alone fully and completely expresses the agreement among the Stipulating Parties relating to its subject matter, and the same is entered into with no party relying upon any statement or representation not embodied in this Stipulation. Any modification of this Stipulation may be made only by an instrument in writing signed by or on behalf of all parties to be bound by such modification.

6. The signatories below warrant and acknowledge that they have the lawful authority to bind the Stipulating Parties for whom they are signing to the terms of this Stipulation.

7. The Stipulating Parties agree that this Stipulation may be executed in counterparts and a signature by copy, facsimile or PDF is as binding as an original signature.

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- Over 50 percent low-income households;
 - Less than 10 percent multi-family households;
 - Less than 10 percent of households participating in previous energy efficiency programs.

The Opinion Dynamics report estimates that the Tier One communities represent approximately 10% percent of Ameren's customers, or approximately 106,000 of Ameren's total 1.06 million electric residential customers.

IN WITNESS WHEREOF, the Parties hereto have executed this Settlement Stipulation as of the date last set forth below.

Illinois Attorney General's Office

By: Karen Lunan
Title: Asst. Bureau Chief,
Public Utilities Bureau
Date: 3/22/18

Staff of the Illinois Commerce Commission

By: _____
Title: _____
Date: _____

Natural Resources Defense Council

By: _____
Title: _____
Date: _____

Environmental Defense Fund

By: _____
Title: _____
Date: _____

Citizens Utility Board

By: _____
Title: _____
Date: _____

Ameren Illinois Company

By: _____
Title: _____
Date: _____

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Illinois Attorney General's Office

By: _____

Title: _____

Date: _____

Staff of the Illinois Commerce Commission

By: Joseph K. Smith

Title: General Counsel

Date: March 22, 2018

Natural Resources Defense Council

By: _____

Title: _____

Date: _____

Environmental Defense Fund

By: _____

Title: _____

Date: _____

Citizens Utility Board

By: _____

Title: _____

Date: _____

Ameren Illinois Company

By: _____

Title: _____

Date: _____

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Illinois Attorney General's Office

By: _____
Title: _____
Date: _____

Staff of the Illinois Commerce Commission

By: _____
Title: _____
Date: _____

Natural Resources Defense Council

By: Elizabeth Joba Per Oman
Title: Staff Attorney
Date: March 22, 2018

Environmental Defense Fund

By: _____
Title: _____
Date: _____

Citizens Utility Board

By: _____
Title: _____
Date: _____

Ameren Illinois Company

By: _____
Title: _____
Date: _____

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By: _____

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Staff of the Illinois Commerce Commission

By: _____

Title: _____

Date: _____

Natural Resources Defense Council

By: _____

Title: _____

Date: _____

Environmental Defense Fund

By: Chris Givora

Title: Manager, Clean Energy

Date: 3/22/18

Citizens Utility Board

By: _____

Title: _____

Date: _____

Ameren Illinois Company

By: _____

Title: _____

Date: _____

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Staff of the Illinois Commerce Commission

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Date: _____

Natural Resources Defense Council

By: _____

Title: _____

Date: _____

Environmental Defense Fund

By: _____

Title: _____

Date: _____

Citizens Utility Board

By: Kristin Mensch

Title: Deputy Director

Date: 22 March 2018

Ameren Illinois Company

By: _____

Title: _____

Date: _____

IN WITNESS WHEREOF, the Parties hereto have executed this Settlement Stipulation as of the date last set forth below.

Illinois Attorney General's Office

By: _____

Title: _____

Date: _____

Staff of the Illinois Commerce Commission

By: _____

Title: _____

Date: _____

Natural Resources Defense Council

By: _____

Title: _____

Date: _____

Environmental Defense Fund

By: _____

Title: _____

Date: _____

Citizens Utility Board

By: _____

Title: _____

Date: _____

Ameren Illinois Company

By: Craig Nelson

Title: Senior Vice President

Date: 3-22-2018