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# Ameren Illinois Energy Efficiency Market Potential Assessment

Report Number 1404

Volume 4: Program Analysis – DRAFT FOR FILING

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In cooperation with  
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# CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1-1</b>
	Background .....	1-1
	Objectives .....	1-1
	Report Organization .....	1-1
<b>2</b>	<b>ANALYSIS APPROACH.....</b>	<b>2-1</b>
<b>3</b>	<b>PLACEHOLDER FOR ELECTRICITY RESULTS.....</b>	<b>3-1</b>
<b>4</b>	<b>PLACEHOLDER FOR NATURAL GAS RESULTS.....</b>	<b>4-1</b>



## **LIST OF FIGURES**

**No table of figures entries found.**



## **LIST OF TABLES**

**No table of figures entries found.**



## INTRODUCTION

### Background

Ameren Illinois contracted with EnerNOC to conduct an electricity and natural gas Energy Efficiency (EE) Market Potential study covering the period of performance from June 1, 2014 through May 31, 2017 to aid the development of a three year plan for programs implemented by Ameren Illinois in Cycle 3. In addition, the analysis also included the period of performance from June 1, 2017 through May 31, 2024 to aid in benchmarking and other tasks related to future analyses. This study identifies the potential to achieve the kWh and therm annual load reduction targets within the rate caps identified in Sections 8-103 and 8-104 of the Illinois Public Utilities Act. In addition, the electric component of the study identifies the potential to achieve additional kWh savings per Section *5/16-111.5Bnew* of the Act absent rate cap limitations. This comprehensive study includes primary market research, a full demand side management (DSM) potential analysis for electricity and natural gas, energy efficiency program design, supply curve development, and analysis of wasted energy.

EnerNOC teamed with YouGov|Definitive Insights and Washington University in St. Louis to perform saturation surveys and program-interest research with Ameren Illinois customers. The EnerNOC team worked in collaboration with Applied Energy Group who, under separate contract with Ameren Illinois performed the program analysis presented in this volume. This report represents the combined effort of these four organizations.

### Objectives

The study addresses energy efficiency potential and informs the program design process in the following ways:

- Develop three-year plan for electric and natural gas EE programs implemented in Cycle 3 (2014-2017)
- Develop EE potential estimates for 2017-2024 for benchmarking and future analyses
- Conduct market research to better represent customers in the Ameren Illinois service territory
- Quantify wasted energy due to customer behavior

### Report Organization

This report is presented in six volumes as outlined below. This document is **Volume 4: Program Analysis**.

- Volume 1, Executive Summary
- Volume 2, Market Research Report
- Volume 3, Energy Efficiency Potential Analysis
- Volume 4, Program Analysis
- Volume 5, Supply Curves
- Volume 6, EE Potential Analysis Appendices



## ANALYSIS APPROACH

The attached spreadsheet contains the program analysis and results. Text describing the analysis approach and detailed results is forthcoming.



Ameren Illinois  
Potential Study Progr



## **PLACEHOLDER FOR ELECTRICITY RESULTS**



## **PLACEHOLDER FOR NATURAL GAS RESULTS**

## About EnerNOC Utility Solutions Consulting

EnerNOC Utility Solutions Consulting is part of EnerNOC Utility Solutions group, which provides a comprehensive suite of demand-side management (DSM) services to utilities and grid operators worldwide. Hundreds of utilities have leveraged our technology, our people, and our proven processes to make their energy efficiency (EE) and demand response (DR) initiatives a success. Utilities trust EnerNOC to work with them at every stage of the DSM program lifecycle – assessing market potential, designing effective programs, implementing those programs, and measuring program results.

EnerNOC Utility Solutions delivers value to our utility clients through two separate practice areas – Program Implementation and EnerNOC Utility Solutions Consulting.

- Our Program Implementation team leverages EnerNOC’s deep “behind-the-meter expertise” and world-class technology platform to help utilities create and manage DR and EE programs that deliver reliable and cost-effective energy savings. We focus exclusively on the commercial and industrial (C&I) customer segments, with a track record of successful partnerships that spans more than a decade. Through a focus on high quality, measurable savings, EnerNOC has successfully delivered hundreds of thousands of MWh of energy efficiency for our utility clients, and we have thousands of MW of demand response capacity under management.
- The EnerNOC Utility Solutions Consulting team provides expertise and analysis to support a broad range of utility DSM activities, including: potential assessments; end-use forecasts; integrated resource planning; EE, DR, and smart grid pilot and program design and administration; load research; technology assessments and demonstrations; evaluation, measurement and verification; and regulatory support.

The EnerNOC Utility Solutions Consulting team has decades of combined experience in the utility DSM industry. The staff is comprised of professional electrical, mechanical, chemical, civil, industrial, and environmental engineers as well as economists, business planners, project managers, market researchers, load research professionals, and statisticians. Utilities view our experts as trusted advisors, and we work together collaboratively to make any DSM initiative a success.