MEMORANDUM

To: Nick Warnecke, AIC; Nida Khan, CAMI Energy; Seth Craigo-Snell, SCS Analytics; and Elizabeth Horne, ICC Staff

From: Opinion Dynamics Evaluation Team

Date: September 21, 2023

Re: Ameren Illinois Standard Initiative Trade Ally Spillover Results

INTRODUCTION

As part of the 2023 evaluation of the Ameren Illinois Company (AIC) Standard Initiative, Opinion Dynamics conducted research with participating trade allies to estimate spillover associated with the Initiative. Spillover calculations are based on the protocols prescribed in a working version of the Illinois Technical Reference Manual (IL-TRM), Attachment A (Illinois Statewide Net-to-Gross Methodologies) dated April 27, 2023. Specifically, the evaluation team followed the methodology to estimate spillover from active trade allies.[1] This memo presents the research findings.

SUMMARY OF SPILLOVER RESULTS

The evaluation team found a spillover rate of 7.64% for kWh savings and 5.68% for therm savings, based on responses from 48 active trade allies who participated in AIC's Standard Initiative between January 1, 2022 and May 15, 2023. The following sections of this memo provide the detailed methodology for data collection and analysis used to calculate the spillover rate.

DATA COLLECTION AND SAMPLING METHODOLOGY

The evaluation team conducted a web survey with trade allies who participated in AIC's Standard Initiative between January 1, 2022 and May 15, 2023. The initiative's tracking data corresponding to the periods previously mentioned included projects associated with 211 unique participating trade ally companies. Of them, 176 companies had one or more trade ally contacts associated with them. For the purposes of the survey, the evaluation team worked with a sample frame of 216 unique trade ally contacts, of whom 213 had an email address available on file. Following a census sampling approach, the evaluation team created a sample composed of all 213 trade allies with an available email address.

As part of the outreach strategy, the evaluation team sent out an initial email invitation to trade allies in the sample, and two follow-up emails. The survey was fielded throughout August 2023. The final completed surveys included 48

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[1] IL-TRM V12.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 5.2: Spillover Measured Through Trade Allies.

trade allies, for a 15% response rate[2]. Table *1* shows the percentage of kWh and therm savings captured in the sample and the survey responses.

Table 1. Representation of Savings in the Sample and Survey Completes

Population			Sample			Survey Completed		
n	Total kWh Savings	Total Therm Savings	n	% kWh Savings	% Therm Savings	n	% kWh Savings	% Therm Savings
310	38,496,315	1,493,644	213	80.88%	77.64%	48	12.59%	19.31%

Note: The population values are based on the total of projects with a trade ally company associated with them, regardless of whether an individual trade ally contact was available.

TRADE ALLY SPILLOVER

METHODOLOGY

Trade ally spillover occurs when the program (in this case, AIC's Standard Initiative) influences trade allies' business practices and ultimately their sales/installations of high efficiency equipment that do not receive a program incentive. The evaluation team focused its research on active trade allies[3] because of their more relevant engagement with the initiative, including exposure to initiative messaging, training, and/or education. This direct engagement with the initiative is more likely to influence active trade allies' business practices and potential volume of sales/installations of energy-efficient equipment without receiving an incentive, compared to inactive trade allies.

The evaluation team estimated spillover using trade allies' responses to a web survey and following the protocols prescribed in a working version of the Illinois Technical Reference Manual (IL-TRM), Attachment A (Illinois Statewide Net-to-Gross Methodologies) dated April 27, 2023. First, the evaluation team determined whether each survey respondent produced spillover after their participation in AIC's Standard Initiative. In order to qualify as a trade ally who contributed spillover, survey respondents had to meet each of the following criteria:

1. The total volume or the percentage of eligible high efficiency projects sold/installed (during the evaluated period), both through and outside of AIC's Standard Incentive, is higher since first participating in the Standard Initiative.

2. The trade ally rated the Standard Initiative as important[4] in generating that increase in sales/installations of eligible high efficiency projects, specifically with AIC business customers.

3. The trade ally sold/installed at least some eligible high efficiency projects in the AIC service territory that did not receive an incentive or rebate (during the evaluation period).

4. The trade ally rated the Standard Initiative—including any related training, marketing, and/or technical assistance—as influential[5] in helping them persuade customers to implement eligible high efficiency projects without an incentive or rebate.

5. The open-ended response about why customers with eligible projects did not receive incentives or rebates supported that the non-incented eligible high efficiency sell/installation can be considered spillover.

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[2] The response rate was calculated based on the total of projects with a trade ally company associated to them, regardless of whether an individual trade ally contact was available.
[3] Active trade allies are defined as those who were active in AIC's Standard Initiative during the evaluation period, and thus, appeared in the Initiative's tracking data.
[4] Using a 0-10 scale, where 0 means "Not at all important" and 10 means "Extremely important."
[5] Using a 0-10 scale where 0 means "Not at all influential" and 10 means "Extremely influential."

For screening criteria 2 and 4, which are based on a 0-10 scale, trade allies required an average score greater than five between the two questions to qualify for spillover.

Next, among those trade allies that qualified for spillover, the evaluation team collected information on the percentage of their total energy-related projects (in the evaluated period) that (1) were eligible high-efficiency and received an incentive or rebate from AIC's Standard Initiative and (2) were eligible high-efficiency and did not receive an incentive or rebate from AIC's Standard Initiative. The evaluation team then calculated the percentage of high-efficiency sales/installations that received an incentive for each individual trade ally following the equation below:

$$\text{\% of TA's High Efficiency Sales that Received Incentive} = \frac{\text{\% High efficiency that DID receive a program incentive}}{\text{\% High efficiency that DID receive a program incentive} + \text{\% High efficiency that did NOT receive a program incentive}}$$

The percentage of trade ally high efficiency sales that received an incentive and trade ally savings from the initiative's tracking data are then used in the calculation of savings of non-incented high efficiency equipment for each trade ally, as shown in the equation below. These are considered spillover savings.

$$\text{Savings of Non-Incented High Efficiency Equipment} = \frac{\text{Savings from Program Database}}{\text{\% of TA's High Efficiency Equipment that Received Incentive}} - \text{Savings from Program Database} * \text{Size Adjustment}$$

The formula above also includes a size adjustment term, which accounts for possible differences in savings between incented and non-incented equipment. This information was collected in the survey and equipment cost was used as a proxy for savings under the assumption that more expensive equipment usually translates into larger savings, and to appeal to a simpler concept among respondents.

Once the evaluation team estimated spillover savings for each individual (qualifying) trade ally, we calculated the Standard Initiative's overall spillover ratio by following the next steps:

- **Develop the spillover ratio for surveyed trade allies** by summing the spillover savings (of those who qualified for spillover) and dividing this total by the Initiative-tracked savings associated with all surveyed trade allies.
- **Develop spillover savings for the population of active trade allies** by applying the spillover ratio from the previous step to all program savings associated with a trade ally (whether a survey respondent or not).
- **Develop the overall spillover ratio for active trade allies** by dividing the trade ally spillover estimate from the previous step by total program savings (whether associated with a trade ally or not).

SPILLOVER RESULTS

Based on the responses to the web survey of 48 trade allies, four passed the screening criteria that qualified them for spillover and contributed a total of 518,444.41 kWh and 17,579.88 therms in spillover savings. Table *2* below shows details about the spillover savings contributed by qualifying trade allies.

Table 2. Spillover Savings Contributed by Qualifying Active Trade Allies (TA)

Qualifying Trade Ally	kWh Savings	Therm Savings
Respondent 1	324,816	0
Respondent 2	145,135	0
Respondent 3	48,494	17,580
Respondent 4	0	0
Total	**518,444**	**17,580**

Following the steps described above, the evaluation team found overall spillover ratios for active trade allies of 7.64% for kWh savings and 5.68% for therm savings. Table *3* below shows details on the results of each step in the calculation.

Table 3. Calculation of Initiative-Level Active Trade Ally Spillover

	Total Spillover Savings for Qualifying Surveyed TA	Total Initiative-Tracked Savings Associated with All Surveyed TA	Spillover Ratio for Surveyed TA	Total Initiative-Tracked Savings Associated with a TA	Spillover Savings for Population of Active TA	Total Initiative Savings (whether associated with a TA or not)	Overall Spillover Ratio
	(A)	(B)	(C) = (A/B)	(D)	(E) = (C x D)	(F)	(G) = (E/F)
kWh	518,444	5,069,194	10.23%	38,496,315	3,937,154	51,528,161	7.64%
Therms	17,580	288,461	6.09%	1,493,644	91,028	1,601,278	5.68%