Opinion Dynamics

MEMORANDUM

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

From: The Opinion Dynamics Evaluation Team

Date: June 24, 2024

Re: AIC 2023 Business Midstream Initiative – Lighting Channel Net-to-Gross Research

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INTRODUCTION AND KEY FINDINGS

As part of the 2023 evaluation of the Ameren Illinois Company (AIC) Business Midstream Initiative – Lighting Channel (referred to throughout this memo as "the Midstream Lighting channel"), Opinion Dynamics conducted research with distributors and end-use customers participating in the channel to update the net-to-gross ratios (NTGRs) for lighting equipment for application in 2025.

The evaluation team completed this research using the net-to-gross (NTG) methodology prescribed in version 12.0 of the Illinois Technical Reference Manual (IL-TRM V12.0) Attachment A (Illinois Statewide Net-to-Gross Methodologies) dated September 21, 2023, modified with a set of deviations approved by the Illinois Stakeholder Advisory Group (SAG).[1] Specifically, we used the IL-TRM's Midstream Free-Ridership (FR) Protocol[2], the Spillover (SO) from Active Trade Allies Protocol[3], and the Core Participant Spillover Protocol.[4] Per the FR protocol, FR in midstream offerings may be calculated using distributor, intermediary (contractor or installer), and/or end-use customer research based on the design of the offering, contractor or installer involvement/influence, end-use customer awareness, and constraints for conducting high-quality research. The NTGR estimates presented in this memo include FR and SO assessed from the distributor and participant (end-use customer) perspective but do not include the intermediary (contractor or installer) perspective on FR or SO. The results of the distributor and participant research were combined to produce a channel-wide NTGR using the triangulation protocol outlined in the IL-TRM.[5]

SUMMARY OF NTG RESULTS

The resulting FR and SO scores for the Midstream Lighting channel from the distributor research were 0.38 and 0.02, respectively (NTGR of 0.64); the FR and SO scores from the participant research were 0.06 and 0.03, respectively (NTGR of 0.97). The evaluation team triangulated results from these two research efforts based on several considerations, detailed in this document (see the Triangulation of Distributor and Participant Free Ridership & Spillover

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[1] https://www.ilsag.info/wp-content/uploads/AIC-Midstream-NTG-Deviation-Memo-2023-08-21.docx

[2] IL-TRM V12.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 5.4: Midstream Free-Ridership Protocol.

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

[4] IL-TRM V12.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 3.1.2: Core Participant Spillover Protocol.

[5] IL-TRM V12.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 5.1.2: Triangulation.

Scores section), to estimate overall FR and SO for the channel. The final FR and SO scores for the Midstream Lighting channel were 0.20 and 0.03, respectively (NTGR of 0.83). Table 1 summarizes the results of our NTG analysis.

Table 1. Research Specific and Overall NTG Results for the Midstream Lighting Channel

Research	FR	SO	NTGR (1 - FR + SO)
Distributors	0.38	0.02	0.64
Participants	0.06	0.03	0.97
Overall	**0.20**	**0.03**	**0.83**

DATA COLLECTION AND SAMPLING METHODOLOGY

The following sections include information on how the evaluation team collected data to estimate distributor and participant FR and SO scores.

DISTRIBUTOR RESEARCH

The evaluation team conducted phone interviews, performed by a trained evaluation analyst, with distributors between September and November of 2023. The evaluation team attempted a census sampling approach based on a population of 50 distributors who participated in the Midstream Lighting channel between January 2022 and May 2023, according to Initiative tracking data, of whom 48 distributors had an email address available. The evaluation team created the sample in August 2023, and outreach started in early September 2023 and continued through early November 2023. Distributors received an initial scheduling email and one follow-up email, along with two follow-up phone calls. As presented in Table 2, the evaluation team completed interviews with 18 distributors for a response rate of 38%. The evaluation team monitored interview completion from a savings perspective, and the interviewed distributors accounted for 30% of total electric energy savings.

Table 2. Representation of Savings in the Sample and Survey Completes for Distributor Research

Population		Sample		Completed Interviews	
n	Total kWh Savings	n	% kWh Savings	n	% kWh Savings
50	33,936,831	48	99%	18	30%

PARTICIPANT RESEARCH

The evaluation team fielded a web survey with participants from December 2023 through early January 2024. Of the population of 1,528 end-use customers who participated in the Midstream Lighting channel between January 2022 and May 2023, 912 had an email address available. The evaluation team attempted a census sampling approach and reached out to all 912 end-use customers. Participants were asked about only one of their purchases through the program. In cases where a participant made multiple purchases through the program, we prioritized the purchase of mogul LEDs—to facilitate the calculation of in-service-rates (ISR) for that equipment type as part of a separate research effort—and then, we prioritized the purchase contributing the highest electric energy savings, according to Initiative tracking data. Outreach started in early December 2023, continuing through early January 2024. Participants received an initial survey invitation email and three follow-up emails. As presented in Table 3, we received 72 valid responses to

the survey (i.e., participants passed screening and equipment verification questions), for a response rate of 8%.[6] The respondents accounted for 6% of the total electric energy savings of the population.

Table 3. Representation of Savings in the Sample and Survey Completes for Participant Research

Population		Sample		Completed Surveys	
n	Total kWh Savings	n	% kWh Savings*	n	% kWh Savings*
1,518	33,936,831	912	41%	72	6%

*Percentage of energy savings associated with the one purchase captured in the sample and survey responses relative to the total energy savings for the population.

MIDSTREAM FREE RIDERSHIP PROTOCOL

The IL-TRM Midstream FR Protocol directs evaluators to estimate FR for midstream offerings based on research with distributors, intermediaries (contractors or installers), and/or end-use customers dependent on the design of the offering, contractor or installer involvement/influence, end-use customer awareness, and constraints for conducting high-quality research. The NTGR estimates presented in this memo include FR assessed from the distributor and end-user perspective but do not include the intermediaries' (contractors or installers) perspective on FR.

The evaluation team determined that assessments of distributors' and participants' perspectives on FR were critical to assessing attribution for the channel based on multiple factors, including: (1) the design of the channel includes significant direct interactions with distributors and attempts to influence their behavior and (2) distributors have direct engagement with end-users more frequently when it comes to lighting equipment, compared to other channels (e.g., HVAC), where intermediaries (contractors or installers) often purchase equipment from distributors and/or have a high level of influence on the end-user's decision-making process. Therefore, the evaluation team determined that assessing the influence of the Midstream Lighting channel on distributors' sales strategies and practices and on end users' decision to purchase high-efficiency lighting equipment was the most effective approach to estimating program attribution. We decided not to field a separate research effort explicitly with intermediaries (i.e., contractors).

FREE RIDERSHIP ALGORITHM

The evaluation team used NTG methodology as prescribed in the IL-TRM V12.0, Attachment A, modified with a set of deviations approved by the Illinois SAG[7].

In this methodology, FR is defined as the average of two FR sub-scores: the Program Influence (PI) FR Score and the Counterfactual (CF) FR Score, which can be further modified by applying a quantity and timing adjustment if applicable. These two FR sub-scores are calculated based on responses to an overall program influence question and a percentage-based counterfactual question, respectively. These questions gauge the relative influence of the channel and the likelihood of comparable outcomes in the absence of the channel. Additional details on the two sub-scores and how they are calculated, and any applicable adjustments are provided for the distributor and participant research efforts in Appendix A and Appendix B, respectively.

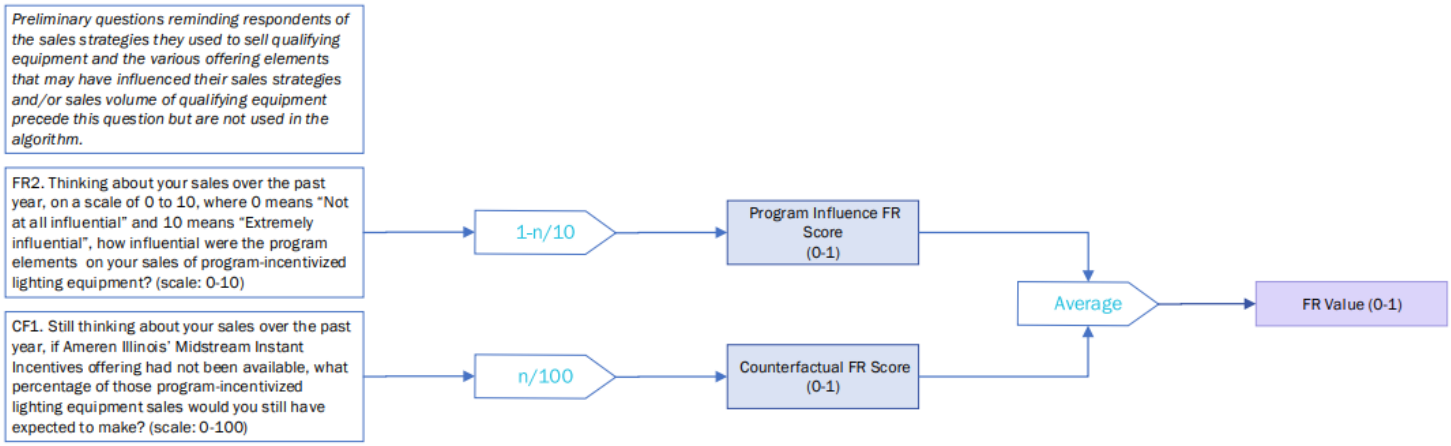
[6] We received 84 total responses to the survey, but 12 respondents did not pass the screening criteria to complete the survey.

[7] IL-TRM V12.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 5.4: Midstream Free-Ridership Protocol.

DISTRIBUTOR FREE RIDERSHIP ALGORITHM

The distributor FR algorithm is graphically depicted in Figure 1 below. Given the similarities in the sales strategies used by distributors to sell the various types of channel-qualifying lighting equipment to customers, the evaluation team determined that asking distributors to respond to measure-specific questions was unnecessary when determining the influence of the Midstream Lighting channel on their sales. The evaluation team averaged the PI FR Score and the CF FR Score for each distributor to assess the degree of FR on a scale of 0 to 1, where 0 means the distributor is a non-free rider and 1 means the distributor is a full free rider.

Figure 1. Distributor Free Ridership Algorithm



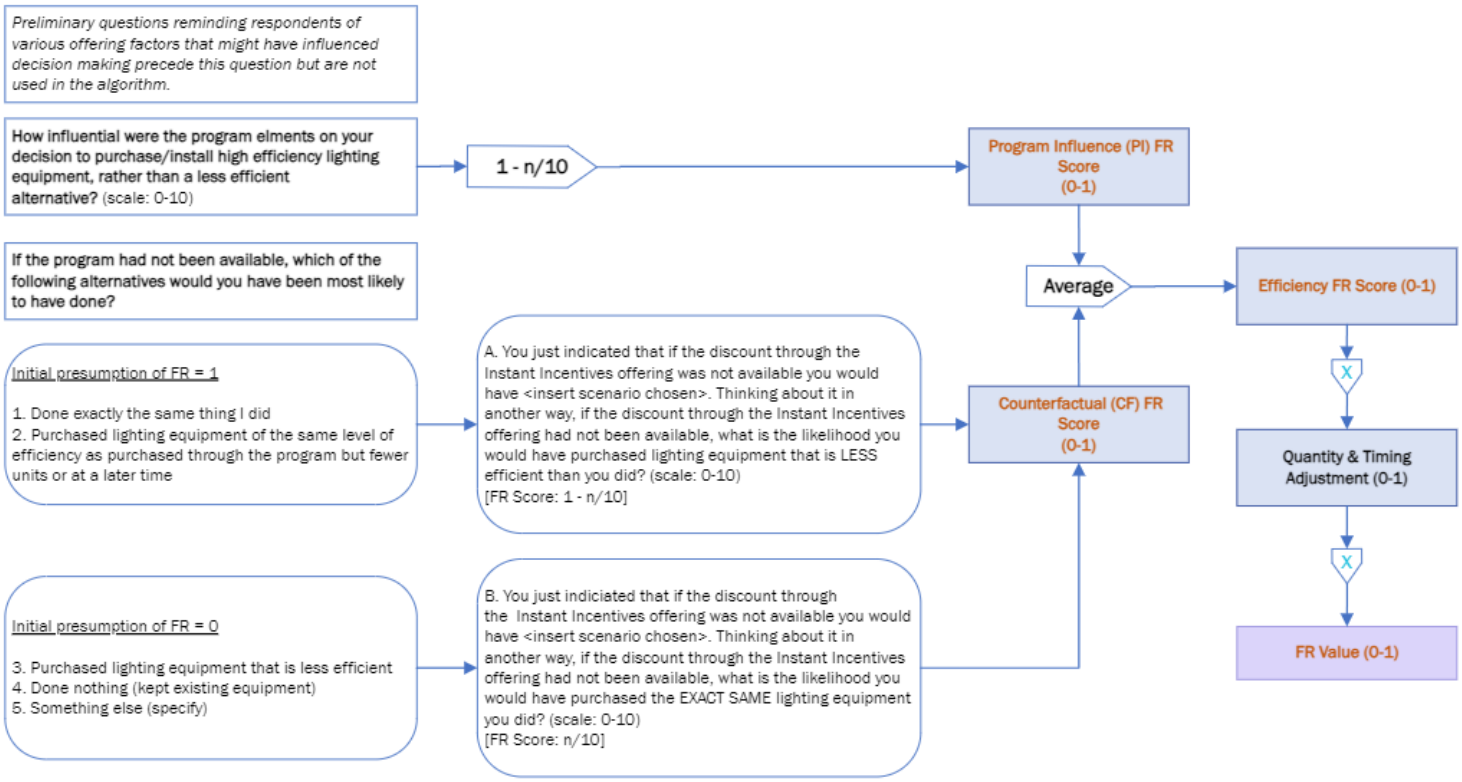
The evaluation team calculated the channel-level distributor FR score as the average of distributors' individual FR scores weighed by the electric energy savings associated with that distributor, according to the Initiative tracking data.

PARTICIPANT FREE RIDERSHIP ALGORITHM

The participant FR algorithm is graphically depicted in Figure 2 below. For the estimation of participant FR, the evaluation team asked participants about a single purchase they completed to answer FR-related questions. Per the algorithm, the evaluation team calculated an Efficiency FR score by averaging the PI FR Score and CF FR Score. We then multiplied this Efficiency FR score by a Quantity and Timing (Q&T) Adjustment value, which we calculated based on participant responses to questions related to the quantity and timing of measures purchased in the absence of the channel, to produce the final FR value on a scale of 0 to 1, where 0 means the participant is a non-free rider and 1 means the participant is a full free rider.[8]

[8] Additional detail on the Q&T Adjustment value, and how it is calculated is provided in Appendix B.

Figure 2. Participant Free Ridership Algorithm



The evaluation team calculated the channel-level participant FR score as the average of participants' individual FR scores weighed by the electric energy savings associated with the purchase in question, according to the Initiative tracking data.

SPILLOVER PROTOCOL

SO occurs when AIC's Midstream Lighting channel influences future purchases/installations of high-efficiency equipment beyond those directly incentivized through the channel. The IL-TRM includes protocols for estimating SO from both trade allies (distributors) and participants. Distributor SO occurs when the changes distributors make to their business practices as part of their engagement with the AIC's Midstream Lighting channel result in increased sales of high-efficiency equipment outside of the program. Participant SO occurs when participants purchase/install high-efficiency equipment, without receiving an incentive, due to their interaction with the Midstream Lighting channel. For participant SO, the evaluation team focused the analysis on non-lighting measures to avoid double-counting activity captured in the distributor SO analysis.

SPILLOVER ALGORITHM

The evaluation team estimated SO using distributor and participant responses and following the protocols prescribed in the IL-TRM V12.0, Attachment A. First, the evaluation team determined whether each respondent produced SO after their participation in AIC's Midstream Lighting channel. Then, the evaluation team calculated the energy savings associated with the SO action, which was ultimately used to calculate the SO rate.

Additional details on the SO results for the distributor and participant research are provided in Appendix A and Appendix B, respectively.

DISTRIBUTOR SPILLOVER ALGORITHM

According to the IL-TRM, distributors who supply equipment to different market actors are considered trade allies (TA). As such, the evaluation team followed the IL-TRM's Spillover for Active Trade Allies Protocol[9] to estimate distributor SO from AIC's Midstream Lighting channel.

The evaluation team first identified those distributors who produced SO after participating in AIC's Midstream Lighting channel. To qualify as a distributor who contributed SO, distributors had to meet each of the following criteria:

1. The total volume or the percentage of qualified lighting equipment sold (during the evaluated period), both through and outside of the Midstream Lighting channel, increased since first participating in the channel.
2. The distributor sold at least some high-efficiency lighting equipment in AIC's service territory that did not receive an incentive (during the evaluation period).
3. The distributor's sales strategies (such as direct recommendations, marketing, or stocking practices) were influential in the customer/contractor's decision to buy high-efficiency lighting equipment without an incentive.

Next, among those distributors that qualified for SO, the evaluation team collected information on the percentage of their total lighting equipment sales (in the evaluated period) that were (1) eligible high-efficiency and received an incentive or rebate from AIC's Midstream Lighting channel and (2) eligible high-efficiency and did not receive an incentive or rebate from AIC's Midstream Lighting channel. The evaluation team then calculated the percentage of high-efficiency sales/installations that received an incentive for each individual distributor 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 evaluation team used the percentage of distributor high-efficiency sales that received an incentive and the associated savings from the Initiative tracking data to estimate the savings from non-incentivized high-efficiency equipment for each distributor, as shown in the equation below. These are considered SO savings.

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

According to the IL-TRM, the above formula can include a size adjustment term that accounts for possible differences in the savings produced by incentivized and non-incentivized equipment. Given that there are no significant differences in savings across lighting equipment, the size adjustment is not applicable for this channel.

An attribution percentage (the proportion of non-incentivized high-efficiency sales that are attributable to the program) is applied to the SO savings based on distributor responses about how influential the Midstream Lighting channel was

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

on the sales strategies (such as marketing, stocking practices, and direct recommendations) they used in selling high-efficiency lighting equipment without an incentive.

Once the evaluation team estimated the SO savings attributable to the channel for each individual qualifying distributor, we calculated the overall SO ratio for the Midstream Lighting channel through the following steps:

- **Develop the SO ratio for interviewed distributors** by summing the SO savings (of those who qualified for SO attributable to the channel) and dividing by the total tracked savings associated with all interviewed trade allies.
- **Develop SO savings for the population of active distributors** by applying the SO ratio from the previous step to all channel savings associated with a distributor (whether they were interviewed or not).
- **Develop the overall SO ratio for active distributors** by dividing the distributor SO estimate from the previous step by total channel savings (whether associated with a trade ally or not).

PARTICIPANT SPILLOVER ALGORITHM

To estimate participant SO, the evaluation team included a battery of questions in the survey to assess whether participants had purchased/installed additional energy-efficient equipment for their business since participating in the Midstream Lighting channel, for which they did not receive an incentive. The evaluation team also collected basic information about the additional energy efficiency measures purchased/installed and established program attribution.

Per the IL-TRM, the evaluation team used the following questions to establish program attribution for each SO measure:

1. **Measure Attribution Score 1**: How important was your experience in the Midstream Lighting channel in your decision to purchase/install this measure? (using a scale of 0 to 10, where 0 is not at all important and 10 is extremely important)
2. **Measure Attribution Score 2**: If you had not participated in the Midstream Lighting channel, how likely is it that your organization would still have purchased/installed this measure? (using a 0 to 10 scale, where 0 means you definitely WOULD NOT have purchased/installed this measure and 10 means you definitely WOULD have purchased/installed this measure)

The IL-TRM lists two possible methods to calculate program attribution.[10] Based on our data collection and analysis approach, the evaluation team used Method 1 to calculate program attribution. According to this method, "program attribution is established if the average of Measure Attribution Score 1 and (10 – Measure Attribution Score 2) exceeds 5.0… If the average is greater than 5.0, 100% of the measure energy savings referenced in the question are considered to be attributable to the program. If the average is not greater than 5.0, none of the measure energy savings are considered to be attributable to the program".

Then, the evaluation team followed up with qualifying participants to gather additional information and technical specifications of the purchased/installed equipment to calculate the corresponding SO energy savings in accordance with the methods and algorithms specified in the IL-TRM V11.0.

To calculate the channel-level participant SO rate, the evaluation team summed the SO estimated savings associated with non-incentivized high-efficiency equipment that was attributed to the program across eligible participants and divided this sum by the total ex-ante gross savings for all purchases completed by surveyed participants, as shown in the formula below:

[10] IL-TRM V12.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 3.1.2.2: Approach for Identifying and Quantifying Spillover.

$$Participant\ Spillover\ Rate = \frac{\begin{array}{c} Sum\ of\ Spillover\ estimates \\ for\ respondents\ in\ the\ sample \end{array}}{\begin{array}{c} Ex\ Post\ Gross\ Impacts\ for\ all\ projects \\ by\ respondents\ in\ sample \end{array}}$$

TRIANGULATION OF DISTRIBUTOR AND PARTICIPANT FREE RIDERSHIP & SPILLOVER SCORES

In alignment with the IL-TRM, the evaluation team combined results from the distributor and participant research to arrive at a final FR score, SO score, and NTGR for the Midstream Lighting channel. The evaluation team weighted the results from each research effort based on a range of considerations in accordance with IL-TRM guidance. To develop these weights, the evaluation team identified five key considerations, detailed below in Table 4.

Table 4. Midstream Lighting Channel Distributor and Participant FR & SO Score Triangulation

Consideration	Scale	Notes	Distributor Research	Participant Research	Importance Score
How was the sample created and what implications does the quality of the sample have on the execution of the research and analysis of results?	0 (Low Quality) - 10 (High Quality)	**Sampling** *Distributor Sample:* Drawn from program tracking data covering January 2022 through May 2023. Includes all participating distributors in that timeframe, as well as the associated energy savings. *Participant Sample:* Drawn from program tracking data covering January 2022 through May 2023. Includes all participating businesses in that timeframe with available contact information, and one purchase associated with that participant. The evaluation team prioritized purchases, including mogul LED bulbs, followed by the purchase that contributed the highest electric energy savings when surveying participants who made multiple purchases. The sample also includes the energy savings associated with the purchase. **Larger Implications** *Distributor Research:* The savings associated with each distributor in our sample allowed the evaluation team to weight distributor-level FR scores to estimate a program-level FR score, as well as to estimate a program-level spillover rate. *Participant Research:* The participant sample required additional cleaning and re-structuring compared to the distributor sample; however, the evaluation team was able to identify multiple purchases associated with the same participant and select one for them to focus on when completing the survey. The savings associated with that purchase allowed the evaluation team to	10	7	High

		weight participant's FR and SO scores to estimate program-level scores.			
Which population is closer to the point of program influence in terms of distance from decision-makers?	0 (Far) - 10 (Close)	*Distributors:* Distributors are one-step away from decision-makers since distributors of lighting equipment often have direct engagement with end-users, in comparison to distributors of other types of equipment (e.g. HVAC) where distributors may interact more often with intermediaries. The direct touchpoints distributors have with end-users can be directly at the time of purchase and/or in the form of any end-user facing marketing/outreach they do related to qualifying units/available incentives. Additionally, we asked distributors specifically about the impact of the channel on their sales of efficient equipment, which is what this research was designed to measure, and that is something directly observable by the distributors and relevant to their operations. *Participants:* For the most part, participants are the end-users influencing/guiding their own purchasing decisions (in a few cases, participants can also be contractors/representatives working for the end-user).	8	10	High
Where is there the potential for bias given the program structure and data collection approach?	0 (High Chance of Bias) - 10 (Low Chance of Bias)	*Distributors:* In terms of program structure, there is a potential for bias in the distributor responses because market actors often know what is at stake with research like this, and they may be motivated to give inflated program influence scores to try and ensure the equipment discounts continue to be available. On the other hand, with certain distributors, there is the potential for bias related to giving their business more credit in terms of their sales of energy-efficient equipment regardless of other factors, which could lead them to undervalue the influence of the channel on their sales of efficient lighting equipment. In terms of the data collection approach, the distributor interviews included a battery of satisfaction questions, which were at the end of the survey, after influence scores were already collected, to avoid any bias in the scores based on feedback on program implementation. *Participants:* The participant survey also included a battery of satisfaction questions; however, they were asked at the end of the survey, after influence scores were already collected.	4	9	Medium

What is the level of granularity of the scores given the data collection and analysis approach? How well does it match the granularity of program influence observable by the respondent?	0 (Low Granularity - 10 (High Granularity)	*Distributors:* Questions were asked at the program level and were phrased to prompt distributors to think of sales of lighting equipment as a whole. This aligns with the granularity of program influence observable to them. *Participants:* Questions were asked at the purchase level after reminding the participant of the lighting measures they purchased at a given time. Participants whose purchases included multiple lighting measures were asked to provide scores at the overall purchase level.	4	9	Low
How representative are those interviewed of the larger population?	0 (Low Representativeness) - 10 (High Representativeness)	*Distributor Research:* Tracking data allowed the evaluation team to assess the proportion of overall electric energy savings captured in the interviews. The interviewed distributors accounted for 30% of total electric energy savings and 36% of the contact list of distributors. However, one large distributor, who accounted for 43% of savings, did not participate in the interviews. *Participant Research:* Tracking data allowed the evaluation team to assess the proportion of overall electric energy savings captured through the survey. The surveyed participants accounted for 6% of total electric energy savings and 5% of the total number of participants in the population. However, we conducted a census approach, and do not have reason to believe that participants who responded to the survey are fundamentally different from those who did not respond.	4	9	Medium

We assigned each consideration an Importance Score of “Low”, “Medium”, or “High” based on its value to the overall quality of the research relative to the other considerations. These Importance Scores translated into the following weights: “High” – 1, “Medium” – 0.66, “Low” – 0.33. For each consideration, the evaluation team rated the distributor and participant research on the relevant 0 to 10 scale. The evaluation team calculated the final distributor and participant triangulation weights by calculating the weighted average score for each research effort and dividing each by the sum of the weighted averages. The resulting triangulation weights amounted to 0.44 for the distributor research and 0.56 for the participant research.

DETAILED NTG RESULTS

The following sections provide the FR and SO scores the evaluation team calculated for distributors and participants, as well as the final FR and SO scores for the channel.

DISTRIBUTOR NTG RESULTS

The final channel-level distributor NTGR is equal to *1 – Channel Level Distributor FR Score + Channel Level Distributor SO Score.* The FR and SO scores from the distributor research were **0.38** and **0.02**, respectively, resulting in a NTGR of **0.64**.

PARTICIPANT NTG RESULTS

The final channel-level participant NTGR is equal to *1 – Channel Level Participant FR Score + Channel Level Participant SO Score.* The FR and SO scores from the participant research were **0.06** and **0.03**, respectively, resulting in a NTGR of **0.97**.

OVERALL NTG RESULTS

The evaluation team applied the triangulation weights to the FR and SO scores from each research effort to calculate a weighted average representing the overall FR and SO scores for the channel. The final FR and SO scores for the Midstream Lighting channel were 0.20 and 0.03, respectively, resulting in a NTGR of **0.83** (Table 5).

Table 5. Research Specific and Overall NTG Results for the Midstream Lighting Channel

Research	FR	SO	NTG (1 – FR + SO)
Distributors	0.38	0.02	0.64
Participants	0.06	0.03	0.97
Overall	**0.20**	**0.03**	**0.83**

APPENDIX A. DISTRIBUTOR FREE RIDERSHIP & SPILLOVER DETAILED ANALYSES

FREE RIDERSHIP SUB-SCORES

The following sections describe in detail how phone interviews captured distributor FR sub-scores (including extracts from the interview guide) and any adjustments that were made to sub-scores due to inconsistencies in responses.

SALES STRATEGIES

In the first section of the interview, the interviewer read the distributor a list of sales strategies they may or may not have used to sell qualifying equipment. This list identified the sales strategies that the Midstream Lighting channel seeks to promote among its participating distributors. Distributors were also asked to think of any other strategies they could have used to sell qualifying equipment that were not listed. This list and its associated follow-ups were used to prime distributors to think about the various sales strategies they employed to promote qualifying equipment and prepared them for a mention of such strategies in FR2, CF1, CC1, CC2, CC3, and CC4.

SS1. I am going to read a list of sales strategies you may have used to sell qualified lighting equipment in the past year. After each, please indicate if your company has or has not used that strategy to sell qualified lighting equipment in the past year. [RANDOMIZE LIST]

a. Upsold your customers (e.g., contractors, installers, design professionals, end users) to purchase program-qualified lighting equipment
b. Conducted training workshops for your customers (contractors/installers/design professionals)
c. Increased marketing of program-qualified lighting equipment
d. Reduced the prices of program-qualified lighting equipment via the instant incentive
e. Increased the stocking or assortment of program-qualified lighting equipment
f. Discussed the benefits of program-qualified lighting equipment with your customers (contractors/installers/design professionals)

1. Yes
2. No

SS1a. Are there any other sales strategies your company used in the past year to sell program-qualified lighting equipment that I did not list?

1. Yes, please specify: [OPEN-ENDED RESPONSE]
2. No

PROGRAM INFLUENCE FR SCORE

Following the discussion of sales strategies, the interviewer read the distributor a list of elements of the Midstream Lighting channel that may or may not have influenced their sales strategies for and sales volume of qualifying equipment. This list identified the key elements the channel staff employ to influence distributor behavior. Distributors were also asked to think of any other elements of the channel that influenced their sales strategies or sales volume of qualifying equipment. This list and its associated follow-up were used to prime distributors to think about the various elements of their participation that may have influenced their sales strategies or sales volume and prepared them for the mention of such influence in FR2, CF1, CC1, CC2, CC3, and CC4.

There are a number of elements of Ameren Illinois' Midstream Instant Incentives offering that might have influenced your company's sales strategies and sales volume of high-efficiency equipment within the past year. These elements include:

- Incentives from Ameren Illinois to help distributors increase sales and/or reduce final prices for end-use customers, including the instant incentives that are passed through to customers
- Marketing and promotional tools, materials, and trainings provided by Ameren Illinois
- Increases in marketing by Ameren Illinois directly to contractors/installers and/or end-users
- Distributor roundtables hosted by Ameren Illinois
- Contractors/installers receiving support and training from Ameren Illinois

FR1. Are there any other elements of the Midstream Instant Incentives offering that influenced your sales strategies or sales volume of high-efficiency lighting equipment in the past year?

1. Yes, please specify: [OPEN-ENDED RESPONSE]
2. No

The Program Influence FR Scores were assessed by asking respondents about the influence of all the applicable channel elements on their sales of incentivized equipment.

FR2. Thinking about your sales over the past year, on a scale of 0 to 10, where 0 means "Not at all influential" and 10 means "Extremely influential", how influential were the program elements I listed [IF FR1=1, "and any other program elements you provided"] on your sales of program-incentivized lighting equipment?

Program Influence FR scores were then computed for each distributor as: PI FR Score = 1 - (FR2/10).

COUNTERFACTUAL FR SCORE

The Counterfactual Score was assessed by asking distributors to consider how their sales volume of incentivized equipment would have differed if the channel had not been available. The interviewer asked distributors to consider what percentage of their incentivized sales they would have still expected to make if the channel had not been available.

CF1. Still thinking about your sales over the past year, if Ameren Illinois' Midstream Instant Incentives offering had not been available, what percentage of those program-incentivized lighting equipment sales would you still have expected to make? [NUMERIC OPEN END 0%-100%]

Counterfactual FR scores were then computed for each distributor as: CF FR Score = CF1/100.

CONSISTENCY CHECK

The interviewer completed a consistency check to see if a distributor's PI FR Score and CF FR Score contradicted each other. In alignment with the IL-TRM, this contradiction was defined as: (1) a PI FR Score greater than 0.7 (suggesting high FR) and CF FR Score less than 0.3 (suggesting low FR), or (2) a PI FR Score less than 0.3 (suggesting low FR) and CF FR Score greater than 0.7 (suggesting high FR).

If a consistency check was triggered, the interviewer asked one of two questions, depending on the direction of the inconsistency, to gather more context on the influence of the channel on the distributor's sales of qualified equipment:

[ASK IF PI_SCORE<0.3 AND CF_SCORE>0.7]

CC1. When I asked how influential the Midstream Instant Incentives offering was on your sales of program-incentivized lighting equipment in the last year, you provided a response of <FR2_RESPONSE>, suggesting that the **Midstream Instant Incentives offering was highly influential**. However, your response to the question regarding what would have happened if the Midstream Instant Incentives offering had not been available suggests that you would have **sold a comparable number of program-qualified lighting equipment** regardless of your participation.

In your own words, can you describe how the Midstream Instant Incentives offering did or did not influence your sales of program-incentivized lighting equipment in the last year? [OPEN-ENDED RESPONSE]

[ASK IF PI_SCORE>0.7 and CF_SCORE<0.3]

CC2. When I asked how influential the Midstream Instant Incentives offering was on your sales of program-incentivized lighting equipment in the last year, you provided a response of <FR_REPONSE>, suggesting that the **Midstream Instant Incentives offering was not influential.** However, your response to the question regarding what would have happened if the Midstream Instant Incentives offering had not been available suggests that you would have **sold substantially fewer units of program-qualified lighting equipment** if you had not participated.

In your own words, can you describe how the Midstream Instant Incentives offering did or did not influence your sales of program-incentivized lighting equipment in the last year? [OPEN-ENDED RESPONSE]

To add additional clarification, the interviewer asked a straightforward, binary question about whether the channel did or did not positively influence the distributor's number of incentivized sales.

[ASK IF (PI_SCORE<0.3 and CF_SCORE>0.7) OR (PI_SCORE>0.7 and CF_SCORE<0.3)]

CC3. Overall, did the Midstream Instant Incentives offering positively influence the number of program-incentivized lighting equipment you sold within the last year?

1. Yes
2. No

At the request of the AIC team, the interviewer asked those who indicated they would have still made more than 70% of their incentivized sales without the channel how they would have been able to achieve those sales without the incentive.

[ASK IF CF_SCORE>0.7]

CC4. Your responses suggest that you would have sold a similar number of program-qualified lighting equipment in the past year, regardless of your participation in the Midstream Instant Incentives offering. Can you elaborate on how you would have been able to achieve that number of sales without the incentives from Ameren Illinois? [OPEN-ENDED RESPONSE]

The evaluation team used the responses to the consistency check questions to contextualize distributors' responses and determine if either the PI FR Score or the CF FR Score needed to be modified or dropped.

One distributor triggered the consistency check for their responses regarding their sales of high-efficiency lighting equipment. After being asked to clarify this inconsistency, the distributor indicated that their response to the counterfactual question was not accurate and asked the percentage to be changed from 75% to 50%, which was adjusted and noted in the analysis.

SPILLOVER

The following section details how phone interviews captured qualifying distributor SO savings (including extracts from the interview guide).

In alignment with guidance from the IL-TRM, distributors were asked the SO qualification questions to confirm if any portion of their sales since their participation in AIC's Midstream Lighting channel qualified for SO savings

PC1. What year did you start participating in Ameren Illinois' Midstream Instant Incentives offering?
1. 2018 or earlier
2. 2019
3. 2020
4. 2021
5. 2022
6. 2023
98 Don't Know

[COMPUTE YEAR_START= PC1]
[IF PC1 =1 OR 98: YEAR_START= "the year prior to when you first participated in the offering"]

SO1. Comparing the total number of Ameren Illinois' Midstream Instant Incentives qualified lighting equipment (i.e., high efficiency lighting equipment) you sold in the last year or so, both through and outside of the Midstream Instant Incentives offering, to that sold in **<YEAR_START>**, did you sell more, less or the same number of high efficiency lighting equipment after participating in the Midstream Instant Incentives offering?
1. More
2. Less
3. The Same
98. Don't Know

[ASK ALL]
SO2. Did you sell any Ameren Illinois Midstream Instant Incentives qualified lighting equipment (i.e., high efficiency lighting equipment) in the Ameren Illinois service territory that did not receive an incentive in the last year or so?
1. Yes
2. No
98 Don't Know

[ASK IF SO2=1; ELSE SKIP TO SAT1]
SO3. On a scale of 0-10 where 0 means "Not at all influential" and 10 means "Extremely influential", how influential were your sales strategies (such as marketing, stocking practices, and direct recommendations) in the customer/contractor's decision to buy high efficiency lighting equipment **without** an instant incentive over standard efficiency equipment? **[0-10 scale, 98=Don't know]**

The evaluation team identified distributors who contributed qualifying SO savings based on their answers to the following criteria: the total volume or the percentage of qualified lighting equipment sold (during the evaluated period), both through and outside of the Midstream Lighting channel, increased since first participating in the channel (SO1=1); the distributor sold at least some high-efficiency lighting equipment in the AIC service territory that did not receive an incentive (SO2=1); and their sales strategies were influential in the customer/contractor's decision to buy high-efficiency lighting equipment without an incentive (SO3>5).

Qualifying distributors were then asked what percentage of their total lighting equipment sales were standard efficiency, what percentage were eligible under the program and received an incentive, and what percentage were eligible under the program and did not receive an incentive.

[ASK IF SO1=1 AND SO2=1 AND SO3 >5; ELSE SKIP TO SAT1]
[DISPLAY SO5 THROUGH SO5C ON THE SAME SCREEN. IF NOT POSSIBLE, DISPLAY SO5 BEFORE EACH QUESTION A-C]
SO5. Thank you for your answers so far. Now please answer the following questions thinking of your total sales of Midstream Instant Incentives qualified lighting equipment to the Ameren Illinois business customer community – inside or outside of the Midstream Instant Incentives offering. Your best guess is fine.

SO5A. What percentage of your total lighting equipment sales (in terms of number of units sold) in the last year or so would you estimate were standard efficiency (i.e., base equipment, not high-efficiency)? **[0-100 NUMERIC OPEN ENDED, 998=Don't Know]**

SO5B. What percentage of your total lighting equipment sales (in terms of number of units sold) in the last year or so would you estimate were eligible under the program **AND RECEIVED** an incentive from the Midstream Instant Incentives offering? **[0-100 NUMERIC OPEN ENDED, 998=Don't Know]**

SO5C. What percentage of your total lighting equipment sales (in terms of number of units sold) in the last year or so would you estimate were eligible under the program **AND DID NOT** receive an incentive from the Midstream Instant Incentives offering? **[0-100 NUMERIC OPEN ENDED, 998=Don't Know]**

[SO5A + SO5B + SO5C must total 100]

Based on distributors' responses to these questions, the evaluation team calculated the percentage of qualifying high-efficiency sales that received an incentive and the savings associated with the non-incentivized high-efficiency equipment for each qualifying distributor, using the following formulas:

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

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

Qualifying distributors were also asked how influential the Midstream Lighting channel was on the sales strategies they used in selling high-efficiency lighting equipment without an instant incentive. Their responses were used to calculate a program attribution percentage—the proportion of non-incentivized high-efficiency sales/installations that are attributable to the program.

[ASK IF SO1=1 AND SO2=1 AND SO3 >5; ELSE SKIP TO SAT1]
SO4. Thinking about your experience with the Midstream Instant Incentives offering, including any related training, marketing materials, etc., how influential was the Midstream Instant Incentives offering on the sales strategies (such as marketing, stocking practices, and direct recommendations) you used in selling high efficiency lighting equipment **without** an instant incentive? Please use a scale of 0-10 where 0 means "Not at all influential" and 10 means "Extremely influential". **[0-10 scale, 98=Don't know]**

The evaluation team then applied the attribution percentage to the savings associated with non-incentivized high-efficiency equipment for each qualifying distributor, which resulted in the SO savings attributable to the Midstream Lighting channel.

Of the 18 distributors we interviewed, one passed the screening criteria that qualified them for SO. This distributor contributed a total of 207,684 kWh in SO savings to the Midstream Lighting channel, which resulted in a SO rate of 2.05%.

APPENDIX B. PARTICIPANT FREE RIDERSHIP & SPILLOVER DETAILED ANALYSES

FREE RIDERSHIP SUB-SCORES

The following section details how the web survey captured participant FR sub-scores (including extracts from the survey instrument) and any adjustments made to sub-scores due to inconsistencies in responses.

PROGRAM INFLUENCE FR SCORE

The first section of the survey asked participants to verify the lighting equipment their business purchased through the program based on the Initiative tracking data. Participants were shown a photo and description of each type of lighting equipment (mogul LEDs, linear LEDs, exit signs, wall packs, directional LEDs, downlight LEDs, decorative LEDs, and 4-pin base LEDs) and were asked to confirm if they purchased it or not. They also had the option to say they did not remember purchasing the equipment.

Participants were also asked some additional questions to verify the business location where the equipment was installed and the circumstances surrounding the discount: whether they were aware they received a discount when purchasing the lighting equipment, whether they learned about the discount before or after finalizing the purchase, and whether they were aware the discount was provided by Ameren Illinois. These questions were meant to remind participants of the context of their purchase before answering the FR-related questions.

Next, participants were asked to review a list of elements of the Midstream Lighting channel that may or may not have influenced their decision to purchase high-efficiency lighting equipment. This list identified key elements the channel staff employed to influence participants directly or those that participating distributors may have employed to engage participants. Participants were asked to think of any other elements of the channel that influenced their decision to purchase high-efficiency lighting equipment. This list and its associated follow-up were used to prime participants to think about the various elements of their participation that may have influenced their decision to purchase high-efficiency lighting equipment and prepared them for the mention of such influence in FR2, CF1, CF1a, CF1b, CC1, CC2, CC3, QT1, and QT2.

FR0. The following elements may have influenced your decision to purchase high efficiency lighting equipment as opposed to a less energy-efficient option:

- The discounted price:
  - [SHOW IF <V_LIN> > 0: "$3-$9 per tube discount for linear LEDs"]
  - [SHOW IF <V_MOG> > 0: "$30-$200 per lamp discount for mogul LEDs (based on the lumen output per lamp)"]
  - [SHOW IF <V_EXIT> > 0: "$12 per fixture discount for exit signs"]
  - [SHOW IF <V_WALLP> > 0: "$50/$200/$500 per fixture discount for wall packs (based on the lumen output per fixture)"]
  - [SHOW IF <V_FOURPIN> > 0: "$3 per lamp discount for 4-pin base LEDs"]
  - [SHOW IF ANY (<V_DIREC>, <V_DOWNLIGHT>, <V_DECORAT>) > 0: "$2-$9 per lamp discount for specialty LEDs (e.g., directional, decorative, and downlight LEDs)"]
- A recommendation from a vendor or <DISTRIBUTOR>
- Previous experience with Ameren Illinois' Instant Incentives offering
- Marketing materials from Ameren Illinois
- [SKIP IF **Error! Reference source not found.**=3] Information about the payback or return on investment on the lighting equipment, which you learned as part of your participation in the offering
- [SKIP IF <KAE>=0] Information provided by your Ameren Illinois Key Account Executive

[DISPLAY ON SAME PAGE AS FR0]

FR1. Are there any other elements of Ameren Illinois' Instant Incentives offering that influenced your decision to purchase high efficiency lighting equipment?

1. Yes, please specify: [OPEN-ENDED RESPONSE]
2. No

The PI FR Score was assessed by asking respondents about the influence of all the applicable channel elements on their decision to purchase high-efficiency lighting equipment.

[DISPLAY ON SAME PAGE AS FR0 AND FR1]

FR2. On a scale of 0 to 10, where 0 means "Not at all influential" and 10 means "Extremely influential", how influential were the listed elements [IF FR1=1, "and any other elements you provided"] on your decision to purchase/install high efficiency lighting equipment, rather than a less efficient alternative?

The Program Influence FR Score was then computed for each participant as: PI FR Score = 1 – (FR2/10).

COUNTERFACTUAL FR SCORE

The CF FR Score was assessed by asking participants to consider how their decision to purchase high-efficiency lighting equipment would have differed if the channel was not available. The survey asked participants to consider what alternative actions they would have taken if the channel had not been available.

CF1. Thinking of the discount you received through Ameren Illinois' Instant Incentives offering: [SHOW IF <V_LIN> > 0: "$3-$9 per tube discount for linear LEDs,"; IF <V_MOG> > 0: "$30-$200 per lamp discount for mogul LEDs (based on the lumen output per lamp),"; IF <V_EXIT> > 0: "$12 per fixture discount for exit signs,"; IF <V_WALLP> > 0: "$50/$200/$500 per fixture discount for wall packs (based on the lumen output per fixture),"; IF <V_FOURPIN> > 0: "$3 per lamp discount for 4-pin base LEDs,"; IF ANY (<V_DIREC>, <V_DOWNLIGHT>, <V_DECORAT>) > 0: "$2-$9 per lamp discount for specialty LEDs (e.g., directional, decorative, and downlight LEDs),"] which of the following alternatives would you have been most likely to do if the discount had not been available?

1. **Done exactly the same thing** I did
2. Purchased lighting equipment of the **same level of efficiency as purchased through the program** but *fewer units or at a later time*
3. Purchased lighting equipment that is **less efficient**
4. **Done nothing** (kept existing equipment)
5. Something else [OPEN END]

Depending on respondents' answers to CF1, the survey prompted respondents to clarify the likelihood of two different actions in the absence of the program:

- If the survey respondent answered they would have done exactly the same thing as they did, or answered that they would have purchased lighting equipment of the same level of efficiency but fewer units or at a later time, the survey prompted respondents to indicate the likelihood they would have purchased less efficient lighting equipment in the absence of the program;
- If the survey respondent answered they would have purchased lighting equipment that was less efficient, done nothing, or done something else, the survey prompted respondents to indicate the likelihood they would have purchased the exact same lighting equipment in the absence of the program.

[ASK IF CF1=1 OR 2]

CF1a. You just indicated that if the discount through the Instant Incentives offering was not available, you would have [SHOW IF CF1=1, "**done exactly the same thing** as you did"; IF CF1=2, "purchased lighting equipment of the **same level of efficiency as purchased through the program** but *fewer units or at a later time*"]. Thinking about it in another way, if the discount through the Instant Incentives offering had not been available, what is the likelihood you would have **purchased lighting equipment that is LESS efficient** than you did?

[ASK IF CF1=3 OR 4 OR 5]

CF1b. You just indicated that if the discount through the Instant Incentives offering was not available, you would have [SHOW IF CF1=3, "purchased lighting equipment that was less efficient"; IF CF1=4, "**done nothing**"; IF CF1=5, "**done something else**"]. Thinking about it in another way, if the discount through the Instant Incentives offering had not been available, what is the likelihood you would have purchased the **EXACT SAME** lighting equipment you did?

The Counterfactual FR Score was then computed for each participant as:

If CF1= 1 OR 2; CF SCORE = 1 - (0/10).

If CF1= 3 OR 4 or 5; CFSCORE = **Error! Reference source not found.**/10.

CONSISTENCY CHECK

Respondents were asked to answer consistency check questions if their PI FR Score and CF FR Score contradicted each other. In alignment with the IL-TRM, this contradiction was defined as: (1) a PI FR Score greater than 0.7 (suggesting

high FR) and CF FR Score less than 0.3 (suggesting low FR), or (2) a PI FR Score less than 0.3 (suggesting low FR) and CF FR Score greater than 0.7 (suggesting high FR).

If the consistency check was triggered, respondents were asked one of two questions, depending on the direction of the inconsistency, to gather more context on the influence of the channel on the participant's purchases:

[ASK IF PI_SCORE<0.3 AND CF_SCORE>0.7]

CC1. When asked how influential the discount through Ameren Illinois' Instant Incentives offering was on your purchase of high efficiency lighting equipment from <DISTRIBUTOR>, you provided a response of <FR2 RESPONSE>, suggesting that the discount through Ameren Illinois' Instant Incentives offering **was highly influential**. However, your responses to the questions regarding what would have happened if the discount had not been available suggest that you would have **purchased lighting equipment of the same level of efficiency as you purchased through the program,** regardless of the discount.
In your own words, can you describe how the discount through Ameren Illinois' Instant Incentives offering did or did not influence your purchase of high efficiency lighting equipment from <DISTRIBUTOR>? [OPEN-ENDED RESPONSE]

[ASK IF PI_SCORE>0.7 AND CF_SCORE<0.3]

CC2. When asked how influential the discount through Ameren Illinois' Instant Incentives offering was on your purchase of high efficiency lighting equipment from <DISTRIBUTOR>, you provided a response of <FR2 RESPONSE>, suggesting that the discount through Ameren Illinois' Instant Incentives offering **was not influential**. However, your responses to the questions regarding what would have happened if the discount had not been available, suggest that you would have **purchased lighting equipment that was less efficient** without the discount.
In your own words, can you describe how the discount through Ameren Illinois' Instant Incentives offering did or did not influence your purchase of high efficiency lighting equipment from <DISTRIBUTOR>? [OPEN-ENDED RESPONSE]

To add additional clarification, respondents were asked a straightforward, binary question as to whether the channel did or did not positively influence the participant's decision to purchase high-efficiency lighting equipment.

[ASK IF (PI_SCORE<0.3 AND CF_SCORE>0.7) OR (PI_SCORE>0.7 AND CF_SCORE<0.3)]

CC3. Overall, did the discount through Ameren Illinois' Instant Incentives offering positively influence the level of efficiency of the lighting equipment you purchased from <DISTRIBUTOR> in <DATE>?
1. Yes
2. No

The evaluation team used the responses to the consistency check questions to contextualize participants' responses and determine if either the PI FR Score or CF FR Score needed to be modified or dropped.

Of the 72 respondents, 15 participants triggered the consistency check questions. The evaluation team calculated the Efficiency FR Score (the average of the PI FR score and the CF FR score) for those participants by weighting their sub-scores based on their answers to CC1, CC2, and CC3.

QUANTITY AND TIMING ADJUSTMENT

In the Quantity and Timing (Q&T) section of the survey, participants were asked to consider the quantity of high-efficiency lighting equipment they would have purchased at the same time that they did (i.e., on the same date) in the absence of the program, as well as the timing around when they would have purchased any remaining equipment not purchased in that scenario. Participants were asked what percentage of units they would still have purchased at the same time (for those participants who purchased more than one lighting equipment type) if the channel had not been

available. They were also asked for the estimated date range for which they would have purchased the remaining percentage of the lighting equipment.

[ASK IF TOT_NUM>1]

QT1. Thinking about the total number of incentivized lighting equipment you purchased from <DISTRIBUTOR> in <DATE>, what percentage of those units would you have purchased **at the same time that you did** (i.e., on the same date) without the discount from the Instant Incentives offering? [0-100 NUMERIC RESPONSE]

[ASK IF TOT_NUM = 1 OR QT1<100%]

QT2. Which date range represents your best estimate of when you would have purchased the [SHOW IF TOT_NUM>1 AND QT1 <100: "other <100-QT1 RESPONSE>% of"] high efficiency lighting equipment if the discount from Ameren Illinois' Instant Incentives offering had not been available? *Please answer relative to the date that you **actually** purchased the LEDs.*

1. [HIDE IF TOT_NUM>1] At the same time
2. Within 6 months
3. Between 6 months–1 year
4. Between 1–2 years
5. Between 2–3 years
6. Between 3–4 years
7. I would not have purchased the high efficiency lighting equipment at all

98. Don't know

The Q&T Adjustment value could range from 0 to 1 and could only reduce FR. The Timing Adjustment was calculated using a midpoint of the date range selected by the respondent, also known as the "number of months expedited." The midpoint was estimated within a time frame between six months and two years, consistent with IL-TRM guidance, and was calculated using the following formula:

$$\text{2-year Time Horizon Timing Adjustment} = 1 - (\text{Number of Months Expedited} - 6)/18$$

Seventeen participants selected "Don't know" when asked to choose among the date ranges for which they would have purchased the remaining percentage of the lighting equipment. For those participants, the evaluation team applied the average number of months expedited across all other respondents (27.41 months). Table 6 provides details on the Timing Adjustment values corresponding to the date ranges respondents could choose from.

Table 6. Timing Adjustments

Participant Survey Response	Timing Adjustment
At the same time	1.0
Within 6 months	1.0
Between 6 months-1 year	0.83
Between 1-2 years	0.33
Between 2-3 years	0
Between 3-4 years	0
I would not have purchased the high efficiency lighting equipment at all	0
Don't know	0

The Q&T Adjustment value for each participant was calculated using the following formula:

$$\text{Q\&T Adjustment} = (\text{\% Not Installed at Same Time} * \text{Timing Adjustment}) + \text{\% Installed at Same Time}$$

SPILLOVER

The following section details how the web survey captured qualifying participant SO savings (including extracts from the survey instrument).

In the SO section of the survey, respondents were asked whether they had purchased/installed additional energy-efficient equipment for their business since participating in the Midstream Lighting channel, for which they didn't receive an incentive. The survey provided a list of possible energy-efficiency equipment from which respondents could choose.

SP1. Since your purchase of incentivized lighting equipment through Ameren Illinois' Instant Incentives offering, did you purchase and/or install any OTHER energy-efficient equipment at <BUSINESS>'s <ADDR> location that **did not** receive an incentive or rebate from Ameren Illinois?

1. Yes
2. No [SKIP TO NEXT SECTION]

[ASK IF SP1=1]

SP2. What was the **first** type of energy-efficient equipment you purchased/installed after your purchase of incentivized lighting equipment through the Instant Incentives offering, that **did not** receive an incentive or rebate from Ameren Illinois?

1. Linear LEDs
2. Non-linear LEDs
3. Occupancy sensor(s) or other lighting controls
4. Unitary/Split air conditioning system(s)
5. Room air conditioner(s)
6. Variable Frequency Drives VFD/VSD on HVAC Motor(s)
7. Efficient motor(s)
8. Strip curtain(s)
9. Anti-sweat control(s)
10. EC motor(s) for walk-in cooler/freezer
11. EC motor(s) for reach-in cooler/freezer

96. I did not make any other energy-saving improvements
98. Unsure
00. Other, please specify: [OPEN END]

[IF SP2 = 96, 98, SKIP TO SATISFACTION SECTION; HIDE RESPONSE SELECTED IN SP2, EXCEPT IF 00 WAS SELECTED]

SP3. What was the **second** type of energy-efficient equipment you purchased/installed after your purchase of incentivized lighting equipment through the Instant Incentives offering, that **did not** receive an incentive or rebate from Ameren Illinois?

1. Linear LEDs
2. Non-linear LEDs
3. Occupancy sensor(s) or other lighting controls
4. Unitary/Split air conditioning system(s)
5. Room air conditioner(s)
6. Variable Frequency Drives VFD/VSD on HVAC Motor(s)
7. Efficient motor(s)
8. Strip curtain(s)
9. Anti-sweat control(s)
10. EC motor(s) for walk-in cooler/freezer
11. EC motor(s) for reach-in cooler/freezer

96. I did not make any other energy-saving improvements
98. Unsure
00. Other, please specify: [OPEN END]

[IF SP3= 96, 98, SKIP TO 0_INTRO; HIDE RESPONSE SELECTED IN SP2 AND SP3, EXCEPT IF 00 WAS SELECTED]

SP4. What was the **third** type of energy-efficient equipment you purchased/installed after your purchase of incentivized lighting equipment through the Instant Incentives offering, that **did not** receive an incentive or rebate from Ameren Illinois?

1. Linear LEDs

2. Non-linear LEDs
3. Occupancy sensor(s) or other lighting controls
4. Unitary/Split air conditioning system(s)
5. Room air conditioner(s)
6. Variable Frequency Drives VFD/VSD on HVAC Motor(s)
7. Efficient motor(s)
8. Strip curtain(s)
9. Anti-sweat control(s)
10. EC motor(s) for walk-in cooler/freezer
11. EC motor(s) for reach-in cooler/freezer
96. I did not make any other energy-saving improvements
98. Unsure
00. Other, please specify: [OPEN END]

Survey respondents were then asked a set of questions for each category of energy efficient equipment they purchased/installed regarding how important the channel was on their purchase/installation, and the likelihood of them still purchasing/installing that equipment if they had not participated in the channel, so the evaluation team could identify and calculate program attribution.

0_INTRO. For the next few questions, please think of the first energy-efficient equipment you purchased/installed: "**<SP2 RESPONSE>**".

SP2a. How important was your experience with the Instant Incentives offering in your decision to purchase/install the <SP2 RESPONSE>? Please use a scale of 0 to 10, where 0 is "Not at all Important" and 10 is "Extremely Important".

SP2b. Can you explain how your experience with the Instant Incentives offering influenced your decision to purchase/install the <SP2 RESPONSE>? [OPEN-ENDED RESPONSE]

SP2c. If you had not participated in the Instant Incentives offering, how likely is it that your organization would still have purchased/installed the <SP2 RESPONSE>? Please use a 0 to 10 scale where 0 means you "Definitely WOULD NOT have purchased/installed this equipment", and 10 means you "Definitely WOULD have purchased/installed this equipment".

The response to the first question cited above was defined as "Measure Attribution Score 1," and the response to the second question cited above was defined as "Measure Attribution Score 2". The evaluation team calculated program attribution for each category of energy efficiency equipment as:

$$(Measure\ Attribution\ Score\ 1 + (10 - Measure\ Attribution\ Score\ 2))/2 > 5$$

The evaluation team also gathered basic information about the additional energy efficiency equipment purchased/installed, such as the quantity, and whether the space where the equipment was installed was heated, cooled, or both. The evaluation team also asked why the participant did not go through the channel to purchase the equipment at the request of the AIC team. Additionally, the evaluation team followed up with qualifying participants via email to request more specific information about the purchased/installed equipment, to better estimate the associated energy savings.

0_INTRO. For the next few questions, please think of the first energy-efficient equipment you purchased/installed: "**<SP2 RESPONSE>**".

SP2d. How many <SP2 RESPONSE> did you purchase/install without receiving an incentive or rebate? [NUMERIC OPEN END 0-995; 998=Unsure]

SP2e. Which of the following best describes the space where the majority of <SP2 RESPONSE> were installed?

1. Space is only cooled
2. Space is only heated
3. Space is both cooled and heated
4. Space is neither cooled nor heated
98. Unsure

SP2f. Can you explain why you decided to purchase/install this energy-efficient equipment on your own, rather than going through an Ameren Illinois offering?

1. It takes too long to get approval
2. I didn't have time to participate because I needed to make the improvement immediately
3. The equipment did not qualify
4. The incentive or rebate amount was not large enough
5. I did not know about an Ameren Illinois offering being available
6. There was no Ameren Illinois offering available [EXCLUSIVE]
0. Other, please specify: [OPEN END]

Of the 72 survey respondents, 14 reported purchasing/installing additional energy efficiency measures, but only two met the SO attribution threshold. Those two participants contributed 168,010 kWh in SO savings to the Midstream Lighting channel, which resulted in a SO rate of 2.93%.