



MEMORANDUM

To: Nick Warnecke, AIC; Erin Daughton, ComEd; Randy Opdyke, Nicor Gas; Lilieric Florez Monroy, PGL/NSG; and Elizabeth Horne, ICC Staff

CC: Jeff Erickson, Parini Shah, Neil Curtis, Laura Agapay-Read, David Bluestein, Celina Aguilar, Nishant Mehta, Sagar Phalke, and June Fang, Guidehouse; Kumar Chittory, Verdant

From: The Opinion Dynamics Evaluation Team

Date: August 26, 2025

Re: 2024 Statewide Midstream Commercial Food Service Program Net-to-Gross (NTG) Research Results

INTRODUCTION AND KEY FINDINGS

As part of the 2024 evaluation of the Illinois Commercial Food Service Program, Opinion Dynamics conducted free-ridership (FR) research with participating suppliers and end-user customers to inform the development of net-to-gross (NTG) ratio recommendations for the 2025 SAG NTG update process in September 2025.¹ Ameren Illinois Company (AIC), Commonwealth Edison (ComEd), Nicor Gas, and Peoples Gas/North Shore Gas (PGL/NSG) jointly sponsored this study.

The Midstream Commercial Food Service program is a statewide program in Illinois that provides incentives to food service equipment suppliers to reduce the final sale price of equipment for end-users and to encourage suppliers to promote higher efficiency equipment. The four large energy efficiency program administrators in the state (AIC, ComEd, Nicor Gas, and PGL/NSG) all sponsor the program, which is implemented consistently across the state.

By providing incentives to suppliers, the program aims to increase the adoption of high-efficiency food service equipment without requiring customers to submit an incentive application. Suppliers are permitted to keep a portion of equipment incentives to support their internal data tracking and incentive submission processes, as well as their marketing, education, and outreach efforts. The program targets both national and local food service equipment suppliers. The intent is that the incentives are passed through as savings to the end-user through a lower purchase price, either directly from the participating supplier or through a contractor. The program is implemented by Frontier Energy, which is primarily responsible for setting incentive levels for the program, establishing eligibility criteria, and paying out the incentives to suppliers. They coordinate with each sponsoring utility to share transaction data used to estimate savings and track utility-specific program activity.

The evaluation team completed this research using the NTG protocols prescribed in version 13.0 of the Illinois Technical Reference Manual (IL-TRM V13.0) Attachment A (Illinois Statewide Net-to-Gross Methodologies), modified

¹ Each utility has a different name for this program – for example, ComEd refers to this program as Commercial Food Service (CFS), while AIC refers to it as the Food Service channel of the Midstream Initiative. For simplicity, we refer to the program throughout this memo as the Midstream Commercial Food Service program.

with a set of deviations approved by the Illinois Stakeholder Advisory Group (SAG).² Specifically, we used the IL-TRM's Midstream Free-Ridership Protocol.³ Per the FR protocol, FR in midstream offerings may be calculated using distributor/supplier, intermediary (contractor or installer), and/or end-use customer research based on the design of the program, contractor or installer involvement/influence, end-use customer awareness, and constraints for conducting high-quality research. The NTG ratio estimates presented in this memo include FR assessed from the supplier and end-user perspective, but do not include the intermediary (contractor or installer) perspective on FR, given the characteristics of the program. The results of the supplier and end-user research were combined to produce program-wide NTG ratios for electric and gas savings using the triangulation protocol outlined in the IL-TRM.⁴ The evaluation team limited the scope of this research to only FR. The NTG ratios presented throughout this memo reflect only the FR estimates developed through this research and do not include any spillover (SO) estimates. When scoping this research, the evaluation teams chose not to include spillover research given the recent launch of the program, as well as research constraints in appropriately estimating spillover for programs with a midstream design.

Our judgment is that the minimal savings coverage and small respondent sample size achieved through this research make the prospective use of these researched values inappropriate. Therefore, for the upcoming SAG NTG recommendation process, we will recommend continued use of the Illinois Energy Efficiency Policy Manual default NTG ratio of 0.80 for the Midstream Commercial Food Service Program for all four utilities. Nevertheless, we provide documentation below of our analysis of the survey results.

SUMMARY OF NTG RESULTS

For electric savings, the resulting FR score for the Illinois Commercial Food Service Program from the supplier research was 0.59 (NTG ratio of 0.41), and the FR score from the end-user research was 0.21 (NTG ratio of 0.79). For gas savings, the resulting FR score from the supplier research was 0.80 (NTG ratio of 0.20), and the FR score from the end-user research was 0.48 (NTG ratio of 0.52). The evaluation team triangulated results from the two research efforts based on several considerations, detailed in this document (see the Triangulation of Supplier and End-user Free Ridership Scores section), to estimate the program-level FR scores. The final FR score for the Illinois Commercial Food Service Program was 0.38 (NTG ratio of 0.62) for electric savings and 0.62 (NTG ratio of 0.38) for gas savings. Table 1 summarizes the results of our NTG analysis.

Table 1. Research Specific and Program-Level FR and NTG Ratio Results

Research Effort	Electric		Gas	
	FR	NTG Ratio (1-FR)	FR	NTG Ratio (1-FR)
Suppliers	0.59	0.41	0.80	0.20
End-users	0.21	0.79	0.48	0.52
Program-Level	0.38	0.62	0.62	0.38

DATA COLLECTION AND SAMPLING METHODOLOGY

The following sections include information on how the evaluation team collected data to estimate supplier and end-user FR scores.

² https://www.ilsag.info/wp-content/uploads/Statewide-Midstream-Food-Service-NTG-Deviation-Memo_2025-04-29.docx

³ IL-TRM V13.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 5.4: Midstream Free-Ridership Protocol.

⁴ IL-TRM V13.0 Attachment A: Illinois Statewide Net-to-Gross Methodologies, Section 5.1.2: Triangulation.

SUPPLIER RESEARCH

SAMPLING

The evaluation team attempted a census sampling approach based on a population of 45 suppliers who participated in the Illinois Commercial Food Service Program in 2024, according to the program tracking data provided by Frontier Energy, the program implementer. The evaluation team created the sample in April 2025.

FIELDING, OUTREACH, AND RESPONSE RATE

The evaluation team conducted outreach to suppliers via email, phone, and through the program implementer from May 30, 2025, to July 31, 2025. Suppliers received an initial scheduling email and two follow-up emails. The evaluation team also reached out to Frontier Energy to email suppliers when the response rate after the first few email invites was still low. Additionally, the evaluation team conducted phone outreach and reached out to non-responsive suppliers at least four times by attempting to contact up to two representatives from each company, when additional contacts were available in the data. Lastly, the evaluation team attempted more direct outreach through the program implementer to target the top four suppliers that accounted for the higher electric and gas savings. These efforts were unsuccessful, even after several attempts to connect with these suppliers.

As presented in Table 2, the evaluation team completed interviews with 9 suppliers for a response rate of 20%. Three suppliers contributed to both gas and electric savings and are therefore counted in both fuel type rows. The evaluation team monitored interview completion from a savings perspective, and the interviewed suppliers accounted for 10% of the program’s total electric energy savings and 9% of the program’s total gas energy savings.

Table 2. Representation of Savings in the Sample and Completed Interviews for Supplier Research

Fuel Type	Population		Sample		Completed Interviews		
	n	Total Savings	n	% of Savings*	n	% of Suppliers Covered in Research*	% Savings*
Electric	35	2,287,222	35	100%	6	17%	10%
Gas	30	275,214	30	100%	6	20%	9%
Total	45	N/A	45	N/A	9	20%	N/A

*Relative to the population

END-USER RESEARCH

SAMPLING

The evaluation team fielded a web survey with Illinois Commercial Food Service Program end-users. The evaluation team drew the end-user sample frame from the tracking data provided by Frontier Energy, the program implementer. Our key sample development and standardization steps included the following:

- Restricting the sample frame to projects completed during 2024;
- Condensing measure-level purchases to the project-level, based on the customer information, participating supplier information, and estimated installation date;

- Restricting the sample frame to projects deemed as not eligible under the NTG Ratio for Disadvantaged Areas policy;⁵
- Reviewing customer names and email addresses to ensure consistent naming conventions, clean typos, and identify duplicates; and
- Selecting a single project per end-user based on fuel type, the highest amount of savings, and the estimated date of installation.

The resulting sample frame included 457 unique projects associated with 284 participating businesses. In cases where the same end-user completed multiple projects, the evaluation team prioritized those that were either gas or dual-fuel, due to the limited number of gas projects. If the participating businesses had multiple projects of the same fuel type, the project with the highest savings was prioritized. In the few cases that a business had multiple projects of the same fuel type and the same savings amount, projects with the most recent estimated installation date were prioritized.

Lastly, we limited the sample to end-users with available email addresses. Based on this approach, the resulting sample included 284 contacts associated with 284 unique projects: 227 that contributed electric savings and 79 that contributed gas savings.

FIELDING, OUTREACH, AND RESPONSE RATE

Survey outreach started June 18th, 2025 and continued through July 8th, 2025. End-users received an initial survey invitation and up to three follow-up emails. Outreach was conducted by Opinion Dynamics staff, and the subject line mentioned the program and a request for feedback. The initial outreach email is in Appendix C. Table 3 presents the final survey dispositions and response rate. The three partial completes were included in the analysis because the respondents answered all FR-related questions in the survey and only skipped the satisfaction section.

⁵ Illinois Energy Efficiency Policy Manual V3.0, Section 7.4. Accessed at: https://www.ilsag.info/wp-content/uploads/IL_EE_Policy_Manual_Version_3.0_Final_11-3-2023.pdf

Table 3. End-User Survey Dispositions

Disposition	Count
Completes (I)	25
Partial Completes (P)	3
Refusals/Break-offs (R)	66
Non-Contacts (NC)	155
Others (O)	0
Break-offs (with eligibility) (R1)	1
Unknown If Eligible for Survey (UH1)	65
Unknown If Eligible for Survey, Other (UO1)	0
Unknown If Eligible Household/Business/Respondent (UH2)	155
Unknown If Eligible Household/Business/Respondent, Other (UO2)	0
Unused Sample (UH3)	0
Ineligible for Survey (X1)	1
Ineligible Household/Business/Respondent (X2)	0
Ineligible Sample Units (X3)	34
Estimated proportion of sample that is eligible to complete survey (e1)	96.7%
Estimated proportion of sample that is eligible HH/BUS/R (e2)	100.0%
Estimated proportion of sample that is an eligible sample unit (e3)	88.0%

We received 28 valid responses (i.e., end-user responses that passed screening questions), for a response rate of 10%. Of those 28 responses, 24 were associated with electric-saving projects and 5 were associated with gas-saving projects, resulting in an 11% response rate for electric projects and a 6% response rate for gas projects. As presented in Table 4, respondents accounted for 3% of the total electric energy savings and 6% of the total gas savings relative to the population.

Table 4. Representation of Savings in the Sample and Survey Completes for End-user Research

Fuel Type	Population		Sample		Completed Interviews		
	n	Total Savings	n	% of Savings*	n	% of End-users Covered in Research*	% of Savings*
Electric	363	1,709,512 kWh	227	74%	24	7%	3%
Gas	122	189,269 Therms	79	64%	5	4%	6%
Total	457	N/A	284	N/A	28	6%	N/A

*Relative to the population

MIDSTREAM FREE RIDERSHIP PROTOCOL

The evaluation team determined that assessments of suppliers' and end-users' perspectives on FR were critical to assessing attribution for the program based on multiple factors, including: (1) the design of the program includes significant direct interactions with suppliers and attempts to influence their behavior and (2) suppliers have direct engagement with end-users more frequently when it comes to commercial food service equipment, compared to other programs (e.g., HVAC), where intermediaries (contractors or installers) often purchase equipment from suppliers 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 Illinois Commercial Food Service Program on suppliers' sales volume and on end-users' decision to purchase high-efficiency commercial food service 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

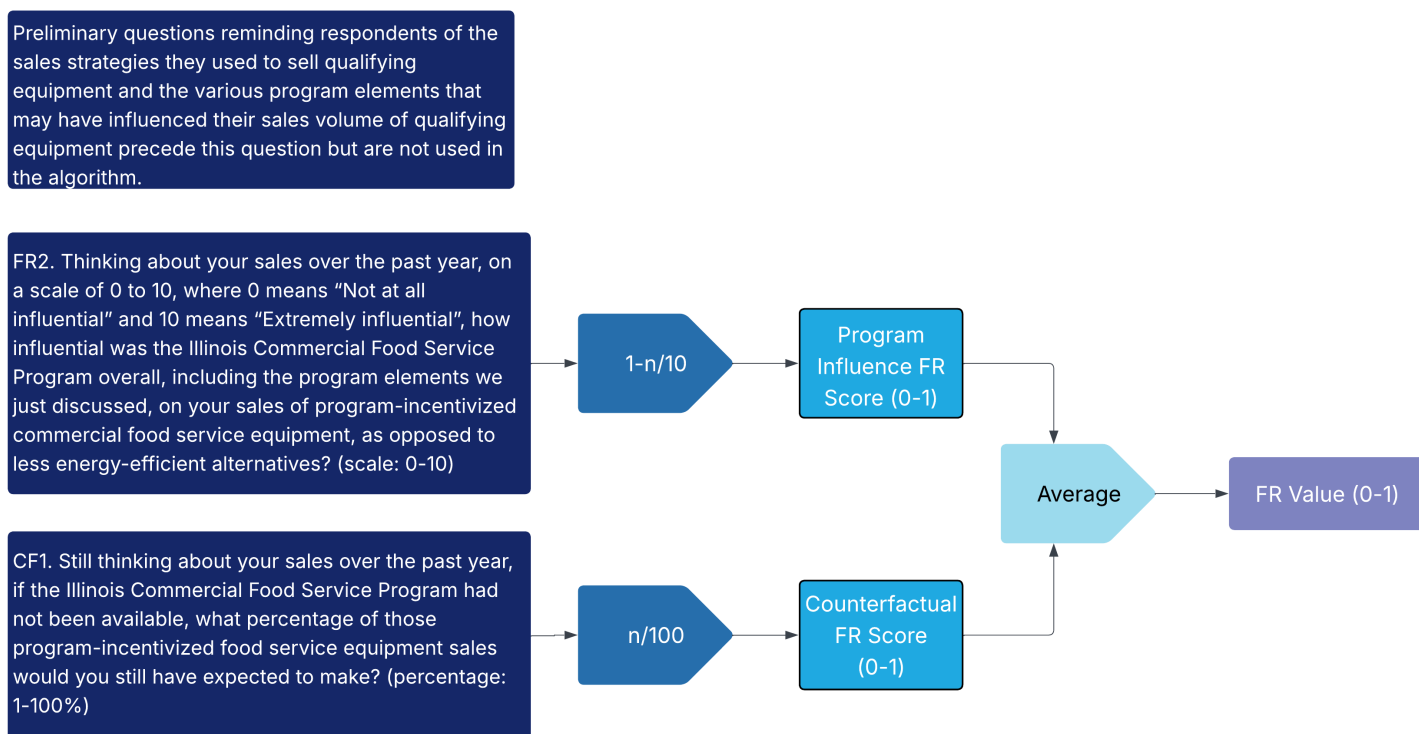
The evaluation team used NTG methodology as prescribed in the IL-TRM V13.0, Attachment A, modified with a set of deviations approved by the Illinois SAG.

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 program and the likelihood of comparable outcomes in the absence of the program. Additional details on the two sub-scores and how they are calculated, and any applicable adjustments, are provided for the supplier and end-user research efforts in Appendix A and Appendix B, respectively.

SUPPLIER FREE RIDERSHIP ALGORITHM

The supplier FR algorithm is graphically depicted in Figure 1 below. Evaluators asked suppliers to estimate the influence of the Illinois Commercial Food Service Program on their sales of program-incentivized commercial food service equipment. The evaluation team averaged the PI FR Score and the CF FR Score for each supplier to assess the degree of FR on a scale of 0 to 1, where 0 means the supplier is a non-free rider and 1 means the supplier is a full free rider.

Figure 1. Supplier Free Ridership Algorithm



The evaluation team calculated the fuel-specific program-level supplier FR score as the average of suppliers' individual FR scores weighed by the corresponding electric and gas savings associated with each supplier, according to the program tracking data.

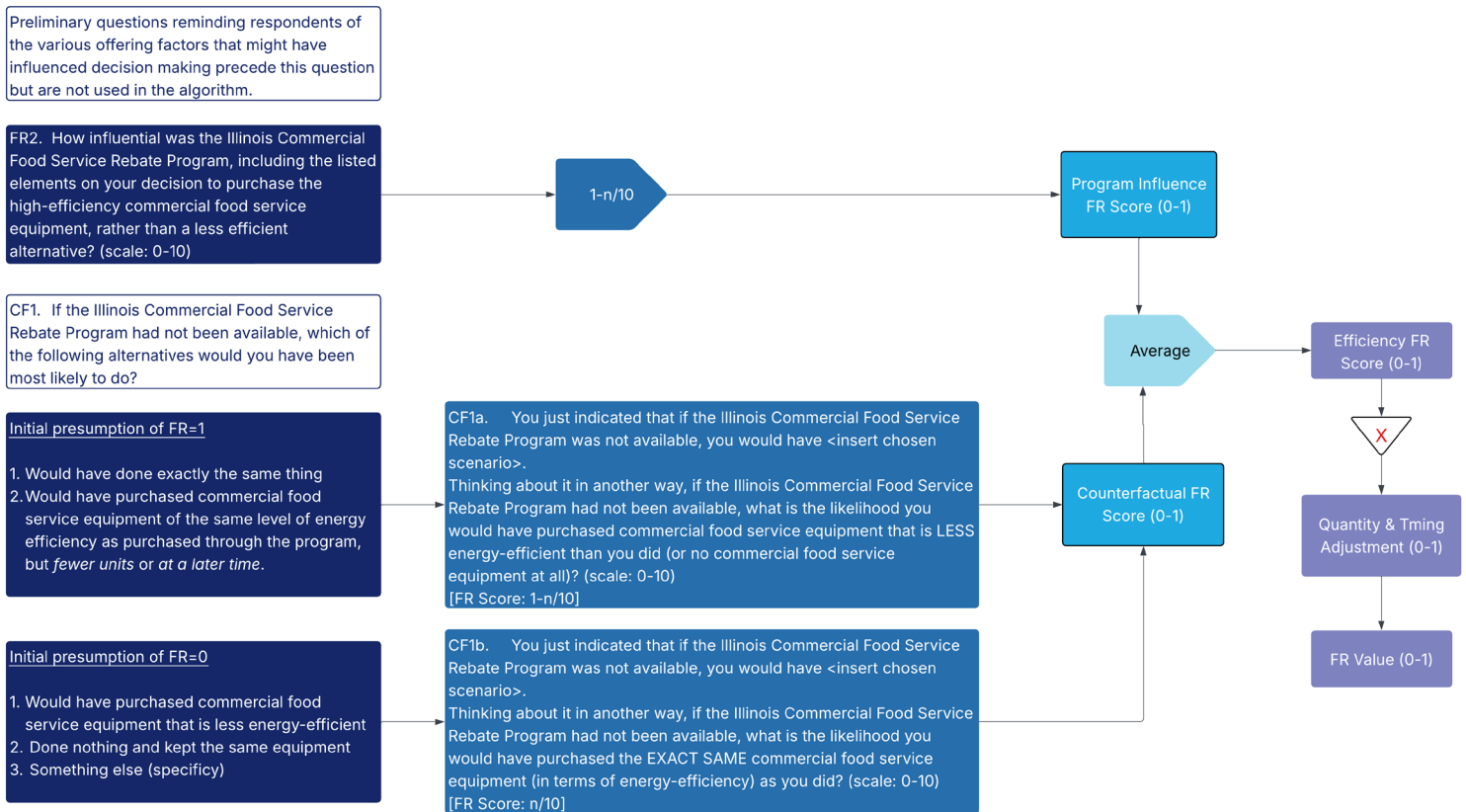
END-USER FREE RIDERSHIP ALGORITHM

The Illinois Commercial Food Service Program End-user FR algorithm is graphically depicted in Figure 2. Per the algorithm, the evaluation team calculated an Efficiency FR Score for each respondent by averaging their PI FR Score, as derived from the overall program influence question, and the CF FR Score.⁶ We then multiplied the Efficiency FR Score by a Quantity and Timing (Q&T) Adjustment value, which we calculated based on end-user responses to questions related to the scope and timing of their energy-saving purchase in the absence of the program.⁷ The resulting final FR value is measured on a scale of 0 to 1, where 0 means the end-user is a non-free rider and 1 means the end-user is a full free rider.

⁶ The evaluation team employed a consistency check question to determine if the PI FR Score and CF FR Score should be weighted equally in the calculation of the Efficiency FR Score.

⁷ Additional details on the Q&T Adjustment values and how they are calculated are provided in Appendix B.

Figure 2. End-User Free Ridership Algorithm



The evaluation team calculated the fuel-specific program-level end-user FR score as the average of respondents' individual FR scores, weighted by the corresponding electric and/or gas savings associated with their project, according to the program tracking data.

TRIANGULATION OF SUPPLIER AND END-USER FREE RIDERSHIP SCORES

In alignment with the IL-TRM, the evaluation team combined results from the supplier and end-user research to arrive at the final fuel-specific FR scores and NTG ratios for the Illinois Commercial Food Service Program. 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 5.

Table 5. Illinois Commercial Food Service Program Supplier and End-user FR Score Triangulation

Consideration	Scale	Notes	Supplier Research	End-user 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)	<p>Sampling</p> <p><i>Supplier Sample:</i> Drawn from program tracking data from the implementor, Frontier Energy, for 2024. Includes all participating suppliers in that timeframe, as well as the associated energy savings.</p> <p><i>End-user Sample:</i> Drawn from program tracking data from the implementor, Frontier Energy, from 2024. Includes all participating businesses in that timeframe with available</p>	10	7	High

		<p>contact information, and one purchase associated with that end-user. The evaluation team prioritized gas purchases, followed by purchases with the highest energy savings, and then by the most recent purchase, when surveying end-users who made multiple purchases.</p> <p>Larger Implications <i>Supplier Research:</i> The savings associated with each supplier in our sample allowed the evaluation team to weight supplier-level FR scores to estimate a program-level FR score. <i>End-user Research:</i> The end-user sample required additional cleaning and re-structuring compared to the supplier sample; however, the evaluation team was able to identify multiple purchases associated with the same end-user and select one for them to focus on when completing the survey. The savings associated with that purchase allowed the evaluation team to weight end-users' FR scores to estimate program-level scores.</p>			
Which population is closer to the point of program influence in terms of distance from decision-makers?	0 (Far) - 10 (Close)	<p><i>Suppliers:</i> Suppliers are one step away from decision-makers since suppliers of commercial food service equipment often have direct engagement with end-users, in comparison to suppliers of other types of equipment (e.g., HVAC), where suppliers may interact more often with intermediaries. The direct touchpoints suppliers 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 suppliers specifically about the impact of the program on their sales of efficient equipment, which is what this research was designed to measure, and that is something directly observable by the suppliers and relevant to their operations.</p> <p><i>End-users:</i> End-users are the ones influencing/guiding their own purchasing decisions (only in rare cases, buyers can be contractors/representatives stocking a given measure to then sell it to the end-user). We did not identify any contractors in our sample.</p>	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)	<p><i>Suppliers:</i> In terms of program structure, there is a potential for bias in the suppliers' 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 suppliers, 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 to their undervaluing the influence of the program on their sales of efficient commercial food service equipment. In terms of the data collection approach, the supplier interviews included a battery of satisfaction questions, which were at the end of the interview, after influence scores were already collected, to avoid any bias in the</p>	4	8	Medium

		<p>scores based on feedback on program implementation.</p> <p><i>End-users:</i> One potential end-user bias might be that there is little direct involvement with the program. If they are unaware of the discount/program, they may not give full credit to it, despite the survey reminders as to which program components they should consider when answering the questions. 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.</p>			
<p>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?</p>	<p>0 (Low Granularity) - 10 (High Granularity)</p>	<p><i>Suppliers:</i> Questions were asked at the program level and were phrased to prompt suppliers to think of sales of commercial food service equipment as a whole. Given that the program includes several different types of food service equipment, suppliers could experience different levels of program influence on their sales at a more granular level.</p> <p><i>End-users:</i> Questions were asked at the purchase level after reminding the end-user of the commercial food service measures they purchased at a given time. End-users whose purchase included multiple commercial food service measures were asked to provide scores at the overall purchase level.</p>	4	8	Low
<p>How representative are those interviewed of the larger population?</p>	<p>0 (Low Representativeness) - 10 (High Representativeness)</p>	<p><i>Supplier Research:</i> Tracking data allowed the evaluation team to assess the proportion of overall electric and gas energy savings captured in the interviews. The interviewed suppliers accounted for 10% of total electric energy savings, 9% of total gas savings, and 20% of the supplier contact list. The suppliers that accounted for the highest electric and gas savings did not participate in the interviews. Additionally, in the supplier analysis, the results can be very sensitive to individual responses. This is especially true on the gas side, where one respondent has a weight of >60%.</p> <p><i>End-user Research:</i> Tracking data allowed the evaluation team to assess the proportion of overall electric and gas energy savings captured through the survey. The surveyed end-users accounted for 3% of total electric energy savings and 6% of total gas energy savings. Additionally, they accounted for 5% of the total number of end-users contributing to electric energy savings, and 1% of the total number of end-users contributing to gas energy savings. However, we attempted a census, and do not have reason to believe that end-users who responded to the survey are fundamentally different from those who did not respond.</p>	2	7	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” – 0.67, “Low” – 0.33. For each consideration, the evaluation team rated the supplier and end-user research on the relevant 0 to 10 scale. The evaluation team calculated the final supplier and end-user 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 supplier research and 0.56 for the end-user research.

DETAILED NTG RESULTS

Below are the fuel-specific FR scores and NTG ratios that the evaluation team calculated for suppliers and end-users, as well as the final FR scores and NTG ratios for the Illinois Commercial Food Service Program overall (Table 6).

The final program-level supplier NTG ratio is equal to $1 - \text{Program-Level Supplier FR Score}$. The FR scores from the supplier research were **0.59** for electric savings and **0.80** for gas savings, resulting in NTG ratios of **0.41** and **0.20**, respectively. The final program-level end-user NTG ratio is equal to $1 - \text{Program-Level End-user FR Score}$. The FR scores from the end-user research were **0.21** for electric savings and **0.48** for gas savings, resulting in NTG ratios of **0.79** and **0.52**, respectively.

The evaluation team applied the triangulation weights to the FR scores from each research effort to calculate a weighted average representing the overall FR scores for the program. The final FR scores for the Illinois Commercial Food Service Program were **0.38** for electric savings and **0.62** for gas savings, resulting in NTG ratios of **0.62** and **0.38**, respectively (Table 6).

Table 6. Research-Specific and Overall NTG Results for the Illinois Commercial Food Service Program

Research Effort	Electric		Gas	
	FR	NTG Ratio (1 - FR)	FR	NTG Ratio (1 - FR)
Suppliers	0.59	0.41	0.80	0.20
End-users	0.21	0.79	0.48	0.52
Program-Level	0.38	0.62	0.62	0.38

Our judgment is that the minimal savings coverage and small respondent sample size achieved through this research make the prospective use of these researched values inappropriate. Therefore, for the upcoming SAG NTG recommendation process, we will recommend continued use of the Illinois Energy Efficiency Policy Manual default NTG ratio of 0.80 for the Midstream Commercial Food Service Program for all four utilities.

APPENDIX A. SUPPLIER FREE RIDERSHIP DETAILED ANALYSES

FREE RIDERSHIP SUB-SCORES

The following sections describe in detail how phone interviews captured supplier 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 supplier a list of sales strategies they may or may not have used to sell qualifying equipment. This list identified the sales strategies that the Illinois Commercial Food Service Program seeks to promote among its participating suppliers. Suppliers were also asked to think of any other strategies they could have used to sell qualifying equipment that were not listed. This list was used to prime suppliers to think about the various sales strategies they employed to promote qualifying equipment and the role of the program in influencing any of those strategies.

To start, I am interested in hearing about the sales strategies your company has used to sell energy-efficient food service equipment that qualified for the Illinois Commercial Food Service Program in the past year.

- SS1. I am going to read a list of sales strategies; after each, please indicate if your company has or has not used that strategy to sell qualified food service equipment in the past year. [RANDOMIZE LIST]
- a. Upsold your customers (e.g., contractors, installers, design professionals, end-users) to purchase program-qualified energy-efficient equipment
 - b. Conducted training workshops for your customers (contractors/installers/design professionals)
 - c. Increased marketing of program-qualified food service equipment
 - d. Reduced the prices of program-qualified food service equipment
 - e. Discussed the benefits of program-qualified food service 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 food service 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 supplier a list of elements of the Illinois Commercial Food Service Program that may or may not have influenced their sales strategies and sales volume of qualifying equipment. This list identified the key elements the program staff employs to influence supplier behavior. Suppliers were also asked to think of any other elements of the program that helped them sell more qualifying equipment. This list and its associated follow-up were used to prime suppliers to think about the various elements of their participation that may have influenced their sales volume and prepare them for the mention of such influence in FR2, CF1, CC1, CC2, and CC3.

The Illinois Commercial Food Service Program has a number of elements designed to help suppliers like you sell more high-efficiency equipment. These program elements include:

- Incentives to help suppliers increase sales and/or reduce final sales prices for end-use customers
- including the SPIF (“Sales Performance Incentive Fund”– i.e., the portion of the incentive that goes directly to suppliers and doesn’t need to be passed on to customers)
- Marketing and promotional tools, materials, and trainings provided to suppliers
- Marketing directly to contractors/installers and/or end-users
- Supplier roundtables
- Support and training for contractors/installers

FR1. In the past year, were there any other elements of the Illinois Commercial Food Service Program that helped you sell more program-incentivized food service equipment?

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 program elements on their sales of program-qualified commercial food service 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 was the Illinois Commercial Food Service Program overall, including the program elements we just discussed, on your sales of program-incentivized commercial food service equipment, as opposed to less energy-efficient alternatives?

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

COUNTERFACTUAL FR SCORE

The Counterfactual Score was assessed by asking suppliers to consider how their sales volume of incentivized equipment would have differed if the program had not been available. The interviewer asked suppliers to consider what percentage of their incentivized sales they would have still expected to make if the program had not been available. If the supplier had difficulty answering this question or mentioned that the percentage would be different across equipment types, the interviewer would remind the supplier of the measure mix and the corresponding number of units the supplier sold to provide additional context about their sales.

CF1. Still thinking about your sales over the past year, if the Illinois Commercial Food Service Program had not been available, what percentage of those program-incentivized food service equipment sales would you still have expected to make? [NUMERIC OPEN END 0%-100%]

[*Note to the interviewer:* Have the measure mix and corresponding number of units the supplier sold available in the background to remind the supplier and provide additional context about their sales if the supplier has difficulty answering this question or mentions that the percentage would be different across equipment types. Keep track of the independent percentage values, estimate a simple average of the percentages, and enter it in CF1.]

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

CONSISTENCY CHECK

The interviewer completed a consistency check to see if a supplier’s PI FR Score and CF FR Score contradicted each other. This contradiction was defined as (1) a PI FR Score greater than 0.6 (suggesting high FR) and CF FR Score less

than 0.4 (suggesting low FR), or (2) a PI FR Score less than 0.4 (suggesting low FR) and CF FR Score greater than 0.6 (suggesting high FR).⁸

If a consistency check was triggered, the interviewer asked one follow-up question to gather more context on the influence of the program on the supplier's sales of qualified equipment:

[ASK IF (PI_FR_SCORE<0.4 AND CF_FR_SCORE>0.6) OR (PI_FR_SCORE>0.6 and CF_FR_SCORE<0.4)]

CC1. Can you describe how the Illinois Commercial Food Service Program did or did not influence your sales of program-incentivized commercial food service equipment in the last year? [OPEN-ENDED RESPONSE]

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

[ASK IF (PI_FR_SCORE<0.4 and CF_FR_SCORE>0.6) OR (PI_FR_SCORE>0.6 and CF_FR_SCORE<0.4)]

CC2. Overall, did the Illinois Commercial Food Service Program positively influence the number of program-incentivized food service equipment you sold within the last year?

1. Yes
2. No

The interviewer then asked those who indicated they would have still made more than 60% of their incentivized sales without the program how they would have achieved those sales without the incentive.

[ASK IF CF_FR_SCORE>0.6]

CC3. Your responses suggest that you would have sold a similar number of program-qualified food service equipment in the past year regardless of your participation in the Illinois Commercial Food Service Program. Can you elaborate on how you would have been able to achieve that number of sales without the Illinois Commercial Food Service Program, especially the financial assistance provided by it? [OPEN-ENDED RESPONSE]

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

Two suppliers triggered the consistency check for their responses regarding their sales of program-qualified food service equipment. The evaluation team calculated the Efficiency FR Score (the average of the PI FR score and the CF FR score) for those suppliers by weighting their sub-scores based on their answers to CC1, CC2, and CC3.

ADDITIONAL QUESTIONS

Lastly, the interviewer asked suppliers a few additional questions to gather useful information about suppliers' practices and to inform future discussions about NTG methodology among members of the IL SAG NTG Working Group. These questions only served to collect additional information and were not used in the FR calculation.

⁸ The IL-TRM V13.0 suggests the use of 0.3 and 0.7 as the threshold to trigger consistency check questions; however, the evaluation team implemented a wider range (0.4 and 0.6) to gather additional context from respondents whose scores were on the initial limits and adjust their scores to more accurately represent what they describe in their consistency check responses.

Next, I would like to ask a few more questions about the sales strategies and other practices <COMPANY> has used to sell energy-efficient food service equipment that qualifies for the Illinois Commercial Food Service Program.

STOCKING

DS0. Since <COMPANY> started participating in the Illinois Commercial Food Service Program, have you increased the stocking or assortment of program-qualified food service equipment?

1. Yes
2. No
98. Don't know

[ASK IF DS0 =1, OTHERWISE SKIP TO THE UPSELLING SECTION]

DS2. On a scale of 0 to 10, where 0 means "Not at all influential" and 10 means "Extremely influential", how influential has the Illinois Commercial Food Service Program been on your stocking decisions related to program-eligible food service equipment relative to your stocking practices before participating?

0	1	2	3	4	5	6	7	8	9	10
Not at all influential										Extremely influential

DS1. What proportion of your stock **is** program-eligible food service equipment? [NUMERIC OPEN END 0%-100%]

DS3. What proportion of your stock **would** be program-eligible food service equipment if the Illinois Commercial Food Service Program were not available? [NUMERIC OPEN END 0%-100%]

DS4. Thinking of the last year or so, if commercial food service **equipment** was not available, how long would it usually take to have it back in stock? [OPEN-ENDED QUESTION]

UPSELLING

[ASK IF EITHER SS1a, b, c, f =1]

D.UP1. How influential was the Illinois Commercial Food Service Program on **the effectiveness** with which you upsold program-eligible food service equipment in the last year, using a scale of 0 to 10, where 0 means "Not at all influential" and 10 means "Extremely influential"?

D.UP4. Using the same 0 to 10 scale, how influential was the Illinois Commercial Food Service Program on **the frequency** with which you upsold program-eligible food service equipment in the last year?

D.UP2. In what percent of cases do you **currently** recommend program-eligible food service equipment to your customers? [NUMERIC OPEN END 0%-100%]

D.UP3. In what percent of cases **would** you recommend program-eligible equipment if the Illinois Commercial Food Service Program were not available? [NUMERIC OPEN END 0%-100%]

D.UP4. What were the most important drivers that led you to upsell program-eligible food service equipment over the last year? [OPEN-ENDED RESPONSE] [Note to the interviewer: Examples could include SPIFs, higher revenue or profit on efficient equipment, easier to make a sale, etc.]

APPENDIX B. END-USER FREE RIDERSHIP DETAILED ANALYSES

FREE RIDERSHIP SUB-SCORES

The following sections detail how the end-user survey captured end-user FR sub-scores (including extracts from the survey instrument) and any adjustments made to sub-scores due to inconsistencies in responses. Throughout these sections, we will refer to the Illinois Commercial Food Service Program as the Illinois Commercial Food Service Rebate Program or “the program” to align with the language used in the survey instrument.

PROGRAM INFLUENCE FR SCORE

The first section of the survey reminded respondents of the energy-saving measures/equipment purchased through the Illinois Commercial Food Service Rebate Program at a given facility and in a given time frame.

Next, end-users were 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 food service equipment, and whether they learned about the discount before or after finalizing the selection of the equipment they purchased. These questions were meant to remind end-users of the context around their purchase prior to answering the FR-related questions, as well as to provide the evaluation team with more information about the factors that went into the end-users’ decision-making process.

- S1. Our records indicate that <BUSINESS> purchased high-efficiency commercial food service equipment from <DISTRIBUTOR> with an instant discount through the Illinois Commercial Food Service Rebate Program around <DATE>. The purchase was part of a project completed at <ADDRESS> and included the following equipment type(s): <MEASURES>. Are you the person at <BUSINESS> who is most familiar with this purchase?
1. Yes [SKIP TO V1]
 2. No
 3. My company did not purchase that equipment [TERMINATE_TEXT2]

[ASK IF S1=2, THEN TERMINATE_TEXT1]

- S2. Who at <BUSINESS> could we reach out to who is most familiar with the purchase of incentivized commercial food service equipment from <DISTRIBUTOR> around <DATE>?
1. Name:
 2. Phone number:
 3. Email:
 98. Don't know [EXCLUSIVE]

[TERMINATE_TEXT 1: Thank you for taking the time to respond to our questions. We currently are looking to hear from the person at <BUSINESS> who is most familiar with the purchase of incentivized commercial food service equipment from <DISTRIBUTOR> through the Illinois Commercial Food Service Rebate Program. [SHOW IF S2<>98: "We will reach out to the contact you provided in the next few days."]

[TERMINATE_TEXT2: Thank you for taking the time to respond to our questions. No further responses are needed at this time.]

V1. Was the high-efficiency commercial food service equipment installed at your business' <ADDRESS> location?

1. Yes [SKIP TO A1]
2. No, at a different <BUSINESS> location [SKIP TO A1]
3. No, I purchased it for a **client** or **third-party** (such as installation, resale, stock for future contracting projects, etc.)
0. Other, please specify: [OPEN-ENDED RESPONSE]
98. Unsure [SKIP TO A1]

[ASK IF V1=3 OR 0]

V2. Are you a contractor?

1. Yes
2. No
98. Unsure

A1. At the time you purchased the <MEASURES> from <DISTRIBUTOR>, were you aware that you received a discount?

1. Yes
2. No [SKIP TO FRO]
98. Unsure [SKIP TO FRO]

[ASK IF A1=1]

A2. Did you learn about this discount **before** or **after** you finalized the selection of the specific equipment you purchased?

1. Before
2. After
98. Unsure

PROGRAM INFLUENCE

Next, end-users reviewed a list of program elements that may or may not have contributed to their decision to purchase high-efficiency commercial food service equipment. This list identified key components of the program designed to directly influence end-user decision-making. The list was included to prime end-users to think about the various elements of their participation that may have influenced their decision to purchase high-efficiency commercial food service equipment and prepare them for the mention of such influence in subsequent questions.

For the next few questions, please think about your purchase of the <MEASURES> from <DISTRIBUTOR> around <DATE>.

FRO. The following elements associated with the Illinois Commercial Food Service Rebate Program may have contributed to your decision to purchase high-efficiency commercial food service equipment as opposed to a less energy-efficient option:

- [IF A2=1: “The price discount”; IF (A2=2 OR 98) OR A1<>1: “The equipment price”]
- A recommendation from a vendor or <DISTRIBUTOR>
- Previous experience with the Illinois Commercial Food Service Rebate Program
- Informational materials from your utility
- Informational materials from <DISTRIBUTOR>

The survey prompted respondents to specify any other elements of the program that influenced their decision to purchase high-efficiency commercial food service equipment.

[DISPLAY ON SAME PAGE AS FRO]

FR1. Are there any other elements of the Illinois Commercial Food Service Rebate Program that influenced your decision to purchase high-efficiency commercial food service equipment?

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

The survey captured program influence by asking respondents about the influence of all applicable program elements on their decision to purchase high-efficiency commercial food service equipment rather than a less efficient alternative.

[DISPLAY ON SAME PAGE AS FRO]

FR2. On a scale of 0 to 10, where 0 means “Not at all influential” and 10 means “Extremely influential”, how influential was the Illinois Commercial Food Service Rebate Program, including the listed elements [IF FR1=1, “and any other elements you provided”] on your decision to purchase the high-efficiency commercial food service equipment, **rather than a less efficient alternative?**

The evaluation team calculated each end-user's Program Influence FR Score as $PI\ FR\ SCORE = 1 - (FR2/10)$.

Same as with the supplier research, evaluators incorporated a few additional questions in the survey that, while not included in the FR algorithm, served to collect useful information to inform future discussions about NTG methodology among members of the IL SAG NTG Working Group. One of those questions asked end-users how important different program elements were in their decision to purchase the high-efficiency commercial food service equipment.

E.ALL1. Now thinking about the individual elements associated with the program, how important were each of them in your decision to purchase the high-efficiency commercial food service equipment, **rather than a less efficient alternative?**

[FORMAT AS A MATRIX]

- a. [IF A2=1: “The price discount”; IF (A2=2 OR 98) OR A1<>1: “The equipment price”]
- b. A recommendation from a vendor or <DISTRIBUTOR>
- c. Previous experience with the Illinois Commercial Food Service Rebate Program
- d. Informational materials from your utility
- e. Informational materials from <DISTRIBUTOR>
- f. Equipment availability

1. Extremely important
2. Very important
3. Moderately important
4. Slightly important
5. Not important at all

COUNTERFACTUAL FR SCORE

The evaluation team assessed the CF FR Score by asking respondents to consider how their decision to purchase the high-efficiency commercial food service equipment would have differed if the Illinois Commercial Food Service Rebate Program had not been available. We first asked respondents to consider what alternative action they would have taken in the absence of the program.

Now, please think about what you would have done if the Illinois Commercial Food Service Rebate Program had not been available. Again, when thinking about the program, please consider [IF A2=1: “the discount you received”; IF (A2=2 OR 98) OR A1<>1: “the equipment price”], informational materials from your utility or <DISTRIBUTOR>, recommendations from <DISTRIBUTOR> or a vendor, or your previous experience with the Illinois Commercial Food Service Rebate Program.

- CF1. If the Illinois Commercial Food Service Rebate Program had not been available, which of the following alternatives would you have been most likely to do?
1. **Done exactly the same thing** I did
 2. Purchased commercial food service equipment of the **same level of energy efficiency as purchased through the program**, but *fewer units or at a later time*
 3. Purchased commercial food service equipment that is **less energy-efficient**
 4. **Done nothing** (kept existing equipment)
 5. Something else [OPEN END]

Depending on the respondent’s answer to CF1, the survey prompted them to clarify the likelihood of two different outcomes in the absence of the program:

- If the respondent answered that they would have decided to do exactly the same thing as they did or that they would have decided to purchase commercial food service equipment of the same level of efficiency as purchased through the program, but fewer units, or at a later time, the survey prompted the respondent to indicate the likelihood that they would have purchased commercial food service equipment that was less energy-efficient than they did (or no commercial food service equipment at all).
- If the respondent answered that they would have decided to purchase commercial food service equipment that was less energy-efficient, decided to do nothing (and keep the existing equipment), or done something else, the survey prompted them to indicate the likelihood that they would have purchased the exact same commercial food service equipment (in terms of energy-efficiency) as they did through the program.

[ASK IF CF1=1 OR 2]

CF1a. You just indicated that if the Illinois Commercial Food Service Rebate Program had not been available, you would have [SHOW IF CF1=1, “**done exactly the same thing** as you did”; IF CF1=2, “purchased commercial food service equipment of the **same level of energy efficiency as purchased through the program**, but *fewer units or at a later time*”]. Thinking about it in another way, if the Illinois Commercial Food Service Rebate Program had not been available, what is the likelihood you would have **purchased commercial food service equipment that is LESS energy-efficient** than you did (or **no commercial food service equipment** at all)?

[ASK IF CF1=3 OR 4 OR 5]

CF1b. You just indicated that if the Illinois Commercial Food Service Rebate Program was not available, you would have [SHOW IF CF1=3, “purchased commercial food service equipment that was **less energy-efficient**”; IF CF1=4, “**done nothing**”; IF CF1=5, “**done something else**”]. Thinking about it in another way, if the Illinois Commercial Food Service Rebate Program had not been available, what is the likelihood you would have purchased the **EXACT SAME** commercial food service equipment (in terms of **energy-efficiency**) as you did?

The evaluation team calculated each end-user’s Counterfactual FR Score as:

- If CF1 = 1 or 2: CF FR SCORE = 1 - (CF1a/10)

- If CF1 = 3, 4, or 5: CF FR SCORE = CF1b/10.

EFFICIENCY CONSISTENCY CHECK

We asked respondents to answer a consistency check question if their responses to the PI and CF questions were in contradiction. An efficiency-related consistency check question was triggered when either of the following conditions was met:

- The difference between the PI FR Score and the CF FR Score was ≥ 0.4 (in either direction); or
- Inconsistent responses to the CF Scenario and CF Likelihood questions:
 - The respondent stated that without the program, they most likely would have done exactly the same thing or would have purchased equipment of the same efficiency, but fewer units or at a later time, AND the likelihood of purchasing lower efficiency equipment was > 5 .

OR

- The respondent stated that without the program, they would have purchased lower efficiency equipment, would have done nothing (i.e., kept existing equipment), or would have done something else, AND the likelihood of purchasing equipment with the same efficiency was > 5 .

If either efficiency-related inconsistency was observed, the evaluation team asked a follow-up question about how the program influenced the level of efficiency of the commercial food service equipment the respondent purchased.⁹

[ASK IF (PI_FR_SCORE - CF_FR_SCORE \geq 0.4) OR (CF_FR_SCORE - PI_FR_SCORE \geq 0.4) OR (CF1 = 1 OR 2 AND CF1a $>$ 5) OR (CF1 = 3, 4 OR 5 AND CF1b $>$ 5)]

CC1. Overall, how would you say the Illinois Commercial Food Service Rebate Program, including [IF A2=1: “the discount you received”; IF (A2=2 OR 98) OR A1 \leq 1: “the equipment price”], any informational materials/recommendations, and any previous experience with the program, influenced **the level of energy efficiency** of the commercial food service equipment you purchased? [OPEN-ENDED RESPONSE]

Of the 28 respondents across both fuel types, 19 triggered the efficiency consistency check question. The evaluation team used the additional context from the consistency check question to identify if there was sufficient evidence to suggest that the PI FR Score or the CF FR Score more accurately reflected the program’s level of influence and should, therefore, be weighted more heavily in calculating the respondent’s Efficiency FR Score. For respondents whose scores were consistent or whose consistency check response did not suggest that one FR Score was a more accurate reflection than the other, their scores were weighted equally. The evaluation team calculated the Efficiency FR Score as the sum of (1) the weighted PI FR Score and (2) the corresponding weighted CF FR Score.

QUANTITY AND TIMING ADJUSTMENT

The Quantity and Timing (Q&T) adjustment is a multiplicative factor that decreases the Efficiency FR Score if the respondent indicated that the program expedited all or some of the scope of their purchase. In the Q&T survey section,

⁹ The IL-TRM V13.0 suggests triggering the consistency check questions if the PI FR Score is greater than 0.7 AND the CF FR Score is less than 0.3, or the PI FR Score is less than 0.7 AND the CF FR Score is greater than 0.7. However, the approach used by the evaluation team was recently discussed and approved by the IL SAG NTG Working Group, and was in the process of being incorporated into the IL-TRM V14.0 at the time of this research.

we asked end-users to consider if they would have purchased the same number of high-efficiency commercial food service equipment at the same time they did, had the program not been available.¹⁰

End-users who indicated they would have fewer units of the high-efficiency commercial food service equipment without the program were asked what percentage of those units they would have purchased at the same time they did. We also asked end-users if they would have purchased the remaining portion of the high-efficiency commercial food service equipment at a later time, and if so, how much later relative to when they actually purchased it. End-users who indicated they would not have purchased any units of the high-efficiency commercial food service equipment at the same time they did, had the program not been available, were asked if they would have purchased all the equipment at a later time. If end-users indicated they would have purchased high-efficiency commercial food service equipment at a later time, they were asked how much later relative to when they actually purchased it.

¹⁰ Respondents did not receive the Q&T section of the survey if their existing PI FR Score and CF FR Score would result in a FR value of 0, as their final FR value could not be decreased any further.

[IF PI_FR_SCORE=0 AND CF_FR_SCORE=0, SKIP TO NEXT SECTION]

For the next questions, we would like you to think about the number of units of high-efficiency commercial food service equipment you purchased and the timing of your purchase.

[ASK IF TOT_NUM>1]

QT1. If the Illinois Commercial Food Service Rebate Program had not been available, would you have purchased the **same number** of high-efficiency commercial food service equipment around <DATE> (i.e., **at the same time as you did**) or fewer units?

1. I would have purchased the **same number** of high-efficiency commercial food service equipment around <DATE> [SKIP TO NEXT SECTION]
2. I would have purchased **fewer units** of the high-efficiency commercial food service equipment around <DATE>
3. I would **not** have purchased **any units** of the high-efficiency commercial food service equipment around <DATE> [SKIP TO QT4]
98. Unsure [SKIP TO NEXT SECTION]

[ASK IF QT1=2]

QT2. Thinking about the total number of discounted commercial food service equipment you purchased from <DISTRIBUTOR> around <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 Illinois Commercial Food Service Rebate Program? [0-100 NUMERIC RESPONSE; 998=Unsure]

[ASK QT2<100%]

QT3. If the Illinois Commercial Food Service Rebate Program had not been available, would you have purchased the **remaining** <100-QT2 RESPONSE>% of the high-efficiency commercial food service equipment at a later time?

1. Yes
2. No
98. Unsure

[ASK IF QT1=3]

QT4. You indicated that if the Illinois Commercial Food Service Rebate Program had not been available, you would not have purchased any units of the high-efficiency commercial food service equipment around <DATE>. Would you have purchased the high-efficiency commercial food service equipment at a later time or never?

1. At a later time
2. Never [SKIP TO NEXT SECTION]
98. Unsure [SKIP TO NEXT SECTION]

[ASK IF TOT_NUM=1]

QT5. If the Illinois Commercial Food Service Rebate Program had not been available, would you have purchased the high-efficiency commercial food service equipment at the same time (i.e., around <DATE>) or at a later time?

1. Same time [SKIP TO NEXT SECTION]
2. Later
98. Unsure [SKIP TO NEXT SECTION]

[ASK IF QT3=1 OR QT4=1 OR QT5=2]

QT6. Which date range represents your best estimate of when you would have purchased the [SHOW IF QT3=1: "**remaining** <100-QT2 RESPONSE>% of"] the high-efficiency commercial food service equipment if the Illinois Commercial Food Service Rebate Program had not been available? *Please answer relative to the date that you **actually** purchased the equipment.*

1. Within 6 months
2. Between 6 months–1 year
3. Between 1–2 years
4. Between 2–3 years
5. 3 years or more
6. I would not have purchased the high-efficiency commercial food service equipment at all
98. Unsure

The Q&T Adjustment value could range from 0 to 1 and could only reduce the final FR value. 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:

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

Table 4 provides details on the Timing Adjustment values corresponding to the date ranges respondents could choose from.

Table 7. Timing Adjustments

End-user Survey Response	Timing Adjustment (2-year Time Horizon Adjustment)
Within 6 months	1.0
Between 6 months - 1 year	0.83
Between 1-2 years	0.33
Between 2-3 years	0
3 years or more	0
I would not have purchased the high-efficiency commercial food service equipment at all	0
Don't know	1 - (Average Number of Months Expedited - 6)/18

The evaluation team calculated the final Q&T Adjustment value for each end-user using the following formula:

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

End-users who reported that, in the absence of the program, they would have purchased the same number of high-efficiency commercial food service equipment at the same time they did, or that they were otherwise unsure what they would have done in the absence of the program, received a Q&T Adjustment of 1. This means that their FR value remained the same (i.e., was not reduced). End-users who indicated that they never would have purchased the high-efficiency commercial food service equipment in the absence of the program received a Q&T Adjustment of 0, meaning that their FR value would then also be 0.

TIMING AND QUANTITY CONSISTENCY CHECK

The evaluation team also incorporated a timing-and-quantity-related consistency check, that if triggered, respondents were asked to describe how the program influenced the timing of their food service equipment purchase or the number of units of equipment they purchased (if applicable). The timing-and-quantity-related consistency check was triggered if:¹¹

- [In cases where quantity is applicable] The respondent stated that without the program, they would have installed equipment of the same efficiency but fewer units or at a later time, AND the respondent later stated

¹¹ According to the IL-TRM V13.0, the timing consistency check is triggered if respondents (1) reported learning about the program after finalizing the details of their energy-saving project and (2) had a PI FR Score less than 0.4 and/or a CF FR Score less than 0.4 (all of which suggest low FR). However, the approach used by the evaluation team was recently discussed and approved by the IL SAG NTG Working Group, and was in the process of being incorporated into the IL-TRM V14.0 at the time of this research.

that without the program, they would have installed the same quantity of units at the same time they did (or indicated they are unsure).

OR

- [In cases where quantity is not applicable] The respondent stated that without the program, they would have installed equipment of the same efficiency but fewer units or at a later time, AND the respondent later stated that without the program, they would have completed the project at the same time they did (or indicated they are unsure).

[ASK IF (CF1 =2 AND QT1 =1 OR 98) OR (CF1 =2 AND QT4 =2 OR 98) OR (CF1 =2 AND QT5 =1 OR 98) OR (CF1 =2 AND QT6 =6)]

CC2. Overall, how would you say the Illinois Commercial Food Service Rebate Program, including [IF A2=1: “the discount you received”; IF (A2=2 OR 98) OR A1<>1: “the equipment price”], any informational materials/recommendations, and any previous experience with the program, influenced the timing in which you purchased the high-efficiency commercial food service equipment [SHOW IF TOT_NUM>1: “or the number of units of equipment you purchased”]?

The evaluation team used the responses to the timing and quantity consistency check question to contextualize end-users’ responses and decide if a Quantity and Timing Adjustment needed to be made for those respondents. Of the 28 respondents across both fuel types, one triggered the timing and quantity consistency check question. However, based on their responses, their Quantity and Timing Adjustment value remained unchanged (value of 1).

ADDITIONAL QUESTIONS

Lastly, the survey asked end-users a few additional questions to inform future discussions about NTG methodology among members of the IL SAG NTG Working Group. These questions only served to collect information about customer sensitivity to the stocking of efficient equipment, and were not used in the FR calculations.

STOCKING

E.S1 When you purchased your high-efficiency commercial food service equipment, did you have to wait due to equipment availability issues?

1. Yes
2. No

[ASK IF ES1 = YES]

E.S2 How long did you have to wait?

1. Less than 1 week
2. 1-2 weeks
3. 3-4 weeks
4. More than 4 weeks
98. Unsure

ES3. [IF ES1=NO: “How long”; IF ES1=YES: “How much longer”] would you have waited if the same high-efficiency commercial food service equipment had not been available at the time you purchased it?

1. I would NOT have waited, and I would have purchased less energy-efficient equipment if it was available
2. I would have waited for the same high-efficiency equipment for a few days
3. I would have waited for the same high-efficiency equipment for up to a week
4. I would have waited for the same high-efficiency equipment for up to two weeks
5. I would have waited for the same high-efficiency equipment for up to a month
6. Other; please specify: [OPEN-ENDED RESPONSE]
98. Unsure

APPENDIX C. INITIAL END-USER OUTREACH EMAIL

Subject Line: Share Your Feedback Regarding Your Commercial Food Service Rebate

Dear <CONTACT>,

Our records show that <BUSINESS> purchased high-efficiency commercial food service equipment from <DISTRIBUTOR> around <DATE>. You received an instant discount through the Illinois Commercial Food Service Rebate Program, an offering provided by Ameren Illinois, ComEd, Nicor Gas, Peoples Gas, and North Shore Gas. Opinion Dynamics, a third-party research company, is collecting feedback on behalf of the partner utilities about the Illinois Commercial Food Service Rebate Program.

We are interested in your feedback regarding your purchase of high-efficiency commercial food service equipment and the Illinois Commercial Food Service Rebate Program itself. By completing a short online survey, you will help us improve the offering for customers like you. The survey should take approximately 20 minutes to complete. As a thank you for participating in this research, we will send you a **\$50 gift card**.

Please click on the link below to begin the survey.

<LINK>

Your feedback will be kept confidential. If you have any questions about the survey or the research study, please contact me at taylor.williams@opiniondynamics.com.

Thank you very much for your feedback and time!

Sincerely,

Taylor Williams



Taylor Williams

Consultant

Opinion Dynamics

A: 130 Turner St, Building III, Suite 520
Waltham, MA 02453

AIC Survey Reference ID: MC 9001 SVY

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