

Nicor Gas Company
Energy Efficiency Program – Plan Year 2018
Quarterly Report: Fourth Quarter
(October 1, 2018 to December 31, 2018)

I. Introduction

Nicor Gas is filing this quarterly report as required by its Rider 30 – Energy Efficiency Plan Cost Recovery and in compliance with the Illinois Commerce Commission’s (“Commission”) directives in Docket No. 17-0310, which approved Nicor Gas’ four-year Energy Efficiency Plan (“EEP”); January 1, 2018 through December 31, 2021. This report first discusses EEP energy therm savings and program expenses for Plan Year 2018 (“PY2018”), January 1, 2018 through December 31, 2018, as of the end of the reporting quarter period. This quarter will be referred to as the “Fourth Quarter”. Secondly, the report discusses activity highlights for the quarter. Lastly, the Commission’s enumerated directives are discussed as appropriate.

II. Energy Therm Savings and Expenses

Attached hereto and made a part of this report is the Statewide Quarterly Report Template which shows, among other things, ex-ante results, costs, historical energy saved, and historical other – environmental and economic impacts for the period January 1, 2018 through December 31, 2018. As shown, Nicor Gas’ programs have accumulated net savings of 10.81 million net therms in PY2018, or about 65.5 percent of its planned energy savings of 16,509,651 therms for PY2018 as stated in its EEP filing. As of the end of the reporting quarter, Nicor Gas had achieved these therm savings with spending of approximately \$24.9 million.

III. Quarter Highlights

Residential Programs:

Home Energy Efficiency Rebates (HEER):

The objective of the Home Energy Efficiency Rebate (“HEER”) Program is to obtain energy savings by overcoming market barriers to the purchase, installation and maintenance of high efficient natural gas space-heating equipment as well as other targeted measures in residential applications.

Key Program Changes: None

Program Successes: We ended the year very close to our target. We saw the highest participation with furnace rebates, specifically the 95% AFUE furnace. Customers continue to take advantage of the rebates that are available to them, to increase efficiency in their home.

Program Challenges: Anticipated participation was lower within the Quality Install and Quality Maintenance portion of the Home Energy Efficiency Rebates program. This is due to a change of vendors and in their technology. This challenge is something that we are continuing to work through.

Home Energy Savings (HES):

The Home Energy Savings (“HES”) program is a whole house single family weatherization program with the objective to obtain natural gas and electricity savings in existing single-family buildings by overcoming market barriers to the installation of energy efficiency measures. The HES program provides weatherization and shell improvement opportunities using standard, prescriptive and whole-house approaches.

Key Program Changes: None

Program Successes: The Home Energy Assessments is a popular offering. Customers are engaged with the offering and we saw that in the participation for 2018. We exceeded our 2018 expectations with participation and are happy to see that customers enjoy the program

Program Challenges:

We were unable to launch one of our main focal points as planned in 2018, which was online scheduling. We encountered some technological challenges in 2018 but we will be launching online scheduling in 2019.

Multi-Family (MF):

The Multi-Family Program (“MF”) addresses residential (living units) and commercial (communal areas, central plants) energy efficiency opportunities available in multi-family buildings. The program aims to overcome market barriers to the installation of energy efficiency measures in multi-family buildings by offering comprehensive assessments, technical assistance and incentives. MF offers property owners with turnkey services to reduce energy and water use in both residential living units, communal areas building shell.

Key Program Changes: None

Program Successes: The direct installation portion of the program experienced a high level of participation. We were able to engage many property management companies and assist with making their properties energy efficient through the installation of energy saving measures.

Program Challenges: Participation in the prescriptive portion of the Multi-Family Program ended lower than anticipated. We worked with our marketing department, as well as our trade allies, but were unable to hit our target for 2018. This will be a main focal point in 2019.

Residential New Construction (RNC):

The objective of the Residential New Construction Program (“RNC”) is to obtain energy savings by increasing the energy efficiency in the new construction of single-family homes and duplexes beyond existing building codes.

Key Program Changes: The RNC program works with certified RESNET HERS Raters to determine the performance of homes in the program. Part of this process is the creation of an energy model that assesses the performance of the as-built homes vs. built-to-code minimum standards. Previously, HERS Raters across the U.S. have been largely using one software tool to complete this modeling; however, in the past couple years, a new software option has been gaining an increased market share. One of the RNC program’s raters reached out and asked us to evaluate this new software, Ekotrope, for approval in the RNC program. To complete this evaluation, the RNC team worked with Ekotrope to model 177 RNC homes from the current program year so the results could be compared to those submitted using the current software. While analysis of the results is still ongoing, the program team is anticipating being able to formally approve Ekotrope for use in the RNC program in Q1 2019.

Program Successes: Working with the rating company EnergyBusters, Pulte Homes (which had not participated in the program since 2013) has once again begun enrolling projects in the RNC program. Their first round of homes finished construction late in the year and we expect to see their first program completions in early 2019. To achieve the performance requirements of the program, Pulte worked with EnergyBusters to improve their insulation R-value and upgrade to higher efficiency HVAC equipment. Pulte Homes is currently active in 25 markets across the U.S. and constructed more than 22,000 homes in 2017.

Additionally, the new 15-19.99% “above code” rebate tier gained traction through Q4. While the new tier was only active for four months in 2018, 87 homes participated, accounting for over 14,000 gross therms saved. Due to the success of this new tier level, the program team approved continuing it for the 2019 program year.

Program Challenges: Illinois was scheduled to adopt the new IL Energy Conservation code, based on the 2018 IECC, late in 2018 with enforcement beginning March 1, 2019. Unfortunately, final approval and adoption are behind schedule, and they are now targeting mid-Q1 2019 as the publication timeframe. With the anticipated enforcement date remaining at March 1, this delay is not only frustrating for the program team, but also for the builder community as a whole. Each time a new, more stringent code is adopted, it makes the attainment of the required above-code participation thresholds more difficult to achieve. Without an approved code, the RNC team is not able to accurately forecast for the 2019 program year. However, the greater impact is that builders are not able to determine what process and material changes they will need to make to maintain compliance with the new code, as well as RNC program requirements. While it looks like we will kick off 2019 with some uncertainty around the requirements of the code, the RNC team is currently working with Rater and Builder participants to address anticipated code changes, such as the reduction of the allowable envelope leakage from 5ACH to 4ACH, and determine their impacts on program savings.

Energy Education and Outreach:

The energy education and outreach program are intended to enhance residential customer’s understanding of energy usage in their homes and educate these customers on available energy efficiency opportunities through energySMART. This program includes three offerings:

- Energy Saving Kits (“ESKs”)*
- Energy Education Kits (“EEKs”)*
- Behavior Energy Savings (“Behavior”)*

Key Program Changes: None

Program Successes: In Q4, 4,979 ESKs were distributed to customers, including 971 kits at customer events. These events included Scarecrow Fest in St. Charles, Boo! at the Zoo (Brookfield Zoo), Diwali Festival of Lights in Aurora, and 15 Fire Department Open House events across our service territory.

The fall 2018 Super Savers program concluded, with a distribution of 8,309 kits to the students; this brought the 2018 total to 18,040 kits distributed, which was 137% of participation goal.

The Behavior (Home Energy Reports) program was awarded to Ecotagious, which has a track record of delivering programs that achieve above-average energy savings. Savings will be realized through behavior change and gas-use reduction in the homes of select

customers that will receive mailed and emailed reports. The reports will include normative comparisons to similar homes, historical energy-use insights, energy-saving tips and targeted promotions. The HER program is a 3-year engagement (2019-2021) that will garner a minimum of 5.1 million gross therm savings. Additionally, Ecotagious has made a commitment to using diverse vendors for Call Center staffing, as well as for report printing and fulfillment services.

Program Challenges: None

Income Qualified Energy Efficiency: The objective of the Income Qualified Energy Efficiency (“IQ”) program is to provide broad and deep energy efficiency opportunities to the IQ customers living in single family homes, multi-family buildings and for the construction of new energy efficient affordable housing. This program includes:

*Single Family and Multi-Family Weatherization and Retrofits
PHA/Multi-family Buildings
Affordable Housing New Construction (AHNC)*

Key Program Changes: None

Program Successes: An AHNC project, Spring Hill Senior Residences (located in West Dundee), was provided with an initial incentive. This facility consists of 61 units of affordable senior housing. The energy efficiency measures installed will save the facility an estimated 9,868 therms annually. Construction will complete in Q1 2019.

Program Challenges: Within the *Single Family and Multi-Family Weatherization and Retrofits*, of the Income Qualified Program, our greatest challenge was the reduced production from the Community Action Agencies (CAA’s). We were provided a forecast at the beginning of 2018, but many CAA’s were unable to meet their forecasted numbers. Forecasting and incremental goal assessment is a main focus for us in 2019 to ensure that targets are met within the Income Qualified program.

BUSINESS PROGRAMS:

Business Energy Efficiency Rebates (BEER): The Business Energy Efficiency Rebates (“BEER”) program’s goal is to produce natural gas energy savings in the business and public sectors by promoting the purchase and installation of energy efficiency measures such as; high-efficiency space heating, water heating, food service technologies, tune-ups and upgrades. This is accomplished by providing the direct installation of free, energy-saving products and by completing free energy assessments of customers’ facilities and providing tailored energy efficiency project recommendations.

Key Program Changes: None

Program Successes: Public Sector interest continues to increase. We saw an influx of interest after the joint utility E3 Public Sector Expo (October), at the Donald E. Stephens Convention Center in Rosemont. Due to increased Public Sector education, we had a substantial amount of participation with our Assessment/Direct Installation offerings. Examples of Public Sector customers who received free Assessments/Direct Installs include: Batavia High School, Downers Grove School District 58, East Aurora School District 131, Kaneland Community Unit School 302 and Arlington Heights School District 25. We believe that our outreach efforts will continue to drive increased participation in 2019.

Program Challenges: Timing on large steam trap projects, which were originally forecasted to complete Q4 2018, have been delayed by the customer and pushed into Q1 2019. This will cause the program to be under the therm and spend goal for 2018 but will quickly recover. We implemented an outreach strategy to communicate to these annual steam trap customers early in 2019, with hopes to get their 2019 projects in sooner and mitigate a Q4 push.

Custom Incentives:

The purpose of the Custom Incentives (“Custom”) program is to assist medium to large commercial, multi-family non-prescriptive, public sector and industrial customers in identifying and implementing cost-effective natural gas energy efficiency measures that are not otherwise addressed in Nicor Gas’ BEER or SB Program. Participation is driven through our free energy assessments, which informs the customer on ways to be more efficient. These assessment recommendations can spill over into other commercial and industrial program participation as well. Additionally, the Custom program offers a Retro-Commissioning (RCx) offering, assisting participants with low-cost and no cost tune-ups and adjustments to their operating systems, building controls, energy management systems and HVAC of existing buildings. The aim of the retro-commissioning offering is to optimize operation and improve facility efficiency by returning to their intended operation or design specifications. The Custom program also includes a CHP offering.

Key Program Changes: The Nicor Gas led Retro-Commissioning offering went live and the program began to gauge interest of customers, who may want an RCx study performed on their facility.

Program Successes: This quarter, Nicor Gas continued to increase marketing strategies to build our assessment pipeline and perform more assessments than previous quarters. Nicor Gas incorporated additional marketing efforts through our

Trade Ally Newsletter, strategic email blasts to our largest customers and marketing bill inserts, which garnered a sizeable response. The program also saw an influx of assessment interest from the joint utility E3 Public Sector Expo (October) at the Donald E. Stephens Convention Center, Rosemont. A Sheridan Correctional Facility representative was a speaker at the natural gas session and their personnel spoke positively on their experience with the program and encouraged public sector attendees to participate. The program also plans to utilize tailored outreach messaging that targets its largest commercial and industrial customers into 2019. Our great relationship with Nexant/ComEd through ComEd's coordinated Retro-Commissioning program MOU, provided the opportunity for Nicor Gas to endorse public sector RCx projects in Q4, which filtered through the Custom program goals. Our coordinated MOU will be renewed in 2019. Also, the first joint ComEd/Nicor Gas CHP project began operation in November 2018, a second project to begin operation Q1 2020.

Program Challenges: The program will finish below its spend and therm goals, but has developed early 2019 promotions that will help realign all forecasted targets, and through outreach efforts has built a large assessment and project pipeline. The number of CHP Feasibility Study (FS) opportunities increased in Q4, and is expected to growth in 2019, one project completed its FS in December 2018.

Strategic Energy Management:

The objective of the Strategic Energy Management (“SEM”) program is to obtain energy savings by focusing on improving and optimizing commercial, industrial and public-sector operations, processes and energy equipment.

Key Program Changes: Nicor Gas continues to recruit for customers for: 1) the Practitioner's (re-named Alumni) Cohort – those customers returning for a 2nd, 3rd or 4th year on their continuous energy improvement journey and 2) two new SEM cohorts: MEGA (including large customers not eligible for EEP starting 1/1/2020) and Public Sector K-12. Nicor Gas is in the process of developing another first-year group of customers, Cohort #4, which will be contracted in Q1 2019 and is expected to begin in Q1 2019.

Program Successes: 2018 Low-Cost-No-Cost SEM savings were 214% of the combined SOW goal for Cohort #3 and Participant Cohort.

Program Challenges: Customers had priority and staff challenges that impacted their ability to implement low cost/no cost savings and timely send us their production data. We are looking into making some incentive changes in 2019 to reward timely milestone completions.

Small Business: The Small Business Program’s (“SB”) objective is to obtain long-term natural gas energy savings from small business gas customers, including public sector, with energy efficiency retrofits and financial incentives to influence the installation of highly efficient natural gas equipment.

Key Program Changes: None

Program Successes: This program is continuing to see high participation with our Dry Cleaner Steam Trap measure. Majority of this participation is from the Korean dry cleaner community facilities. SB program is also seeing increased interest and Assessment/Direct Installation participation in the public sector. This increased participation is mainly due to the joint utility E3 Public Sector Expo (October) at the Donald E. Stephens Convention Center, Rosemont. Some of the public sector customers who received free Assessments/Direct Installs include: Berwyn Public School District, Fitness Club of Westmont, Kaneland School District, and the Churches of Evanston.

Program Challenges: This program experienced greater forecasted participation than expected due to the high quantity of dry cleaner steam trap projects. This has caused the program to exceed both the budget and therm goal in 2018. With limited incentive budgets, this program will need keep a close eye on participation, in order to strategically course correct and mitigate overspend in 2019.

Business New Construction (BNC): The objective of the Business New Construction (“BNC”) Program is to obtain energy savings during the design and construction of new buildings, major renovations of existing buildings, and tenant build-outs in the commercial, public sector and industrial market.

The business new construction offering provides education, financial incentives and technical assistance to help building owners and design teams exceed the current energy codes.

Key Program Changes: None

Program Successes: For the private sector, Northwestern University’s Welsh-Ryan Arena received an incentive from Nicor Gas for a 171,654-sq. ft. renovation project on the campus of Northwestern University in Evanston. An annual energy savings of 46,908 gross therms will be realized as the result of the installation of high-efficiency condensing boilers.

For the public sector, Hinsdale Middle School received an incentive from Nicor Gas for the construction of this 3-story, 158,385-sq. ft., K-12 school located in Hinsdale, IL. An annual energy savings of 11,696 gross therms will be realized as the result of the installation of high-efficiency condensing water heaters and energy recovery

ventilation. Additionally, Luther Burbank Elementary School also received an incentive from Nicor Gas for the construction of this 84,289-sq. ft., K-6 elementary school located in Burbank, IL. An annual energy savings of 1,316 gross therms will be realized as the result of the installation of high-efficiency condensing water heaters and energy recovery ventilation.

Program Challenges: None

Emerging Technology:

The primary mission of the Nicor Gas Emerging Technology Program (“ETP”) is to seek out new or unproven technologies that may be suitable for inclusion in the energySMART program and verify their natural gas-savings through field tests and *in-situ* pilot demonstrations.

Successful Measures:

No measures were finalized during the quarter, however, Nicor Gas added 3 additional pilots bringing the total to 8 active projects within the ETP initiative (as of February 2019).

IV. Program Operations

A. Budget Flexibility: Nicor Gas may adjust program budgets by up to 20% but may not shift budgets between residential and business programs by more than 10%.

Actions: Nicor Gas has not exceeded the flexibility provisions authorized by the Commission in its Final Order.

B. Program Activities: Nicor Gas shall summarize the following:

1. Program activities
2. Implementation modifications
3. Additions or discontinuations of specific measures or programs.
4. Spending and savings amounts compared to the Plan filing
5. How the Company responds to past evaluators’ recommendations and changes in the IL-TRM, NTG ratios, market research findings, and other relevant information the Company relies upon in making its decisions
6. Pilots completed and the results

Actions:

1. Please see the above section on the second quarter's highlights.
2. Please see the above section on the second quarter's highlights.
3. Please see Section C below and Appendix A for a discussion and list of new measures added to Nicor Gas' programs.
4. Spending and savings by program are shown in the attached Statewide Quarterly Report Template.
5. Please see Appendix B for actions taken in response to evaluators' recommendations.
6. Please see the above.

C. New Energy Efficiency Measures: Cost-effectiveness screening results for new measures.

Actions: Actions taken in PY 2018 in response to past evaluators' recommendations are shown in Appendix B.

D. Cost-Ineffective Measures: Explain reasons for including new cost-ineffective measures in programs.

Actions: There are no new cost-ineffective measures included in programs.