

ComEd® Energy Efficiency Program



CY2019 FIRST QUARTER REPORT



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Portfolio Summary

266,461

Actual Net MWh YTD

1,632,725

CY2019 MWh Forecast

1,629,783

CY2019 MWh Filed Goal

\$71,987,805

Actual Spend YTD

\$351,334,190

CY2019 Spending Cap

PORTFOLIO

- Through Q1, the portfolio has achieved 16% of its CY2019 forecast of 1,632,725 MWh and 16% of its CY2019 filed goal of 1,629,783 MWh.
- Since its inception in 2008, the ComEd Energy Efficiency Program has saved ComEd customers over \$3.8 billion on their electric bills.

RESIDENTIAL PROGRAMS

- Through Q1, residential programs have achieved 29% of its combined CY2019 forecast of 229,055 MWh.
- Customers have received over 62,000 rebates, recycled over 8,700 appliances, and over 11,000 homeowners and tenants have received free direct install products from assessments through Q1.
- ComEd has collected and responsibly recycled more than 426,000 refrigerators and freezers since ComEd began to offer this service to our customers in June 2008.

INCOME ELIGIBLE PROGRAMS

- Through Q1, income eligible programs have achieved 23% of their combined CY2019 forecast of 76,922 MWh.
- Over 15,300 income eligible households have participated through Q1.

BUSINESS PROGRAMS

- Through Q1, business private sector programs have achieved 20% of their combined CY2019 forecast of 705,863 MWh; business public sector programs have achieved 10% of their combined CY2019 forecast of 166,624 MWh.
- Over 2,100 business private sector projects and 150 business public sector projects have been completed through Q1.

THIRD PARTY PROGRAMS

- Through Q1, third party programs have achieved 6% of their combined CY2019 forecast of 125,297 MWh.

Residential Programs

Home Energy Reports

Overview: The Home Energy Report provides select residential customers with information on how they use energy within their households. Reports and the online portal include usage comparison to that of similar, nearby households, personalized energy efficiency advice, program promotions, and application of behavioral principles and social norms to drive adoption of energy efficient behaviors.

- **4,680 MWh savings achieved (27% of forecast)**
- The program has reduced the number of print reports to reduce savings degradation impacts on future years. The average number of treated households has been reduced from 1.7 million to 1.455 million for 2019.
- The program continues to have a low opt-out rate, high customer satisfaction through customer inquiries and high digital communication engagement rate.
- During Q1, ComEd reviewed the High Usage Report research report and drafted a planning calendar for report modules for 2019.

Lighting Discounts

Overview: The Lighting Discounts Program provides instant in-store discounts to ComEd residential customers at participating retail stores on select ENERGY STAR® certified lighting: LEDs, LED trim kits, and LED integrated fixtures.

- **39,312 MWh savings achieved (38% of forecast) based on 1,404,585 units sold**
- Instant in-store discounts have been removed from all standard omnidirectional LEDs due to EISA legislation.
- The program expanded instant in-store discounts on other offerings such as specialty LEDs including candles and globes as well as integrated fixtures. There has been great participation from residential customers within these expanded lighting categories and the program is on-track to meeting energy savings goal.

Appliance Rebates

Overview: Appliance Rebates offers rebates to ComEd residential customers on the purchase of new, select ENERGY STAR® certified appliances/products including: air purifier, clothes washer, electric clothes dryer, refrigerator, freezer, dehumidifier, variable speed pool pump, room air conditioner, smart thermostat, and advanced power strip.

- **7,969 MWh savings achieved (22% of forecast) based on 56,405 appliance rebates issued**
- The program increased the rebate on ENERGY STAR certified dehumidifiers and freezers from \$25 to \$50 for program year 2019. This increase was possible because the IL TRM v 7.0 has defined increased energy savings on these two measures in comparison to the previous program year.
- In Q1, the program successfully processed a rebate request submitted by a multi-family building property management company for 200 smart thermostats. An on-site QA/QC process to verify installation was conducted as well.

Fridge and Freezer Recycling

Overview: The Fridge and Freezer Recycling Program provides ComEd customers free pickup and recycling of older, working refrigerators and freezers from residential customer homes. In addition to free pickup, customers receive a \$50 dollar incentive for fridge and freezer units and \$10 for AC units and dehumidifiers when collected in conjunction.

- **3,546 MWh savings achieved (16% of forecast) based on 8,717 units**
- Starting in 2019, old working dehumidifiers will be collected when recycling a qualifying fridge or freezer and customers will receive an additional \$10.
- The program continues to score a high mark in customer satisfaction at 95%.
- Weather in the first quarter caused several customer cancellations, which put the program behind on the quarterly goal regarding savings and units. The team anticipates recovering during the second quarter with the scheduled recycling events.

Residential Programs

Home Energy Assessment

Overview: Offered in partnership with Nicor Gas, North Shore Gas, and Peoples Gas, the Home Energy Assessment is a free walkthrough assessment with an energy advisor that determines the ways energy is used in the home. Customers receive personalized energy-efficiency recommendations, and the following energy-saving products are installed for free: ENERGY STAR® certified LEDs, programmable thermostats, WaterSense® certified showerheads, faucet aerators, and hot water pipe insulation. Advanced Power Strips are provided and left behind for the customer to install. Nest Learning and Nest E smart thermostats are also available for purchase at a discount and include free installation.

- **6,049 MWh savings achieved (21% of forecast) based on 4,947 assessments**
- The program is receiving positive responses from customers after their appointments with a customer satisfaction score of 4.8 out of 5.
- Savings per home are higher than expected with significant opportunities being found in LED installation.
- The smart thermostats offered at a discount were changed from EcoBee to Nest products in 2019.

Multi-Family Energy Savings

Overview: In partnership with Nicor Gas, North Shore Gas, and Peoples Gas, the Multi-Family Energy Savings Program provides multi-family tenants and property owners and managers with a variety of ways to save electricity and natural gas. The program will serve as a “one stop shop” to generate energy savings throughout the property. After an initial assessment, immediate energy savings are generated by the direct installation of energy-saving products in both tenant and common area spaces. The program further provides Service Provider installs of common area lighting measures.

- **2,239 MWh savings achieved (18% of forecast)**
- Completed direct install work in 6,439 tenant units and 123 common area spaces; completed 1 service provider project.

- The program has experienced greater demand, especially in the joint Nicor Gas service territory, compared to the initial forecast for the year and has a strong pipeline. Greater market saturation was anticipated, but viable opportunities continue to be discovered.
- The program now offers nest smart thermostats at a discounted price, which are installed for free.

Heating & Cooling Rebates

Overview: The Heating & Cooling Rebates Program promotes investment in long-term savings by providing rebates for the purchase and installation of high efficiency central air conditioners, air source heat pumps, ductless mini-split heat pumps, ECM furnace blower motors, smart thermostats, and ground source heat pumps.

- **2,148 MWh savings achieved (27% of forecast) based on 5,823 rebates**
- In 2019, the program has added or increased Google AdWords campaign, billboard and digital campaigns, distributor outreach, HVAC carousel on ComEd.com, eHER feature, EE Customer eNewsletter feature, and a bi-monthly Service Provider newsletter to drive additional program awareness and participation.
- Program Q1 participation was consistently high, helping to achieve savings.

Weatherization Rebates

Overview: The Weatherization Rebates Program promotes investment in long-term savings by providing rebates for the purchase and installation of weatherization measures including air sealing, duct sealing, and attic and wall insulation. The program is offered jointly with Nicor Gas, North Shore Gas and Peoples Gas.

- **81 MWh savings achieved (15% of forecast) based on 326 projects**
- Customers are reporting high satisfaction with the results of home weatherization work.

Residential Programs

Residential New Construction

Overview: In partnership with Nicor Gas, the Residential New Construction Program increases awareness and understanding among Home Energy Rating System (HERS) rating companies and home builders of the benefits of energy-efficient building practices with a focus on capturing energy efficiency opportunities available during the design and construction of new single-family homes. Incentives are provided to HERS-certified consultants that certify homes and builders who construct homes that are at least 20 percent more energy-efficient than what currently is required by the State of Illinois Energy Code. Incentives are also provided to RESNET/HERS-certified consultants for submitting homes to the program.

- **63 MWh savings achieved (23% of forecast) based on 157 homes**
- In Q1 the R-NC offering added two new builders, Pulte Homes and Finney Homes. Pulte Homes had participated previously in R-NC; however, when the minimum participation requirement was increased from 10 percent to 20 percent better than code they could no longer qualify. As their corporate culture evolved, and with the assistance of their HERS Rater, EnergyBusters, they have made improvements to their envelope, mechanicals, and construction process. These updates have translated into percent better than code results in the mid-20s putting Pulte solidly in the second rebate tier.
- Illinois is scheduled to adopt a modified version of the 2018 IECC in Q2 of 2019. This new code will increase the offering's baseline and will likely have an impact on participation and savings. The program team has conducted preliminary studies to assess the impacts of this code and are not showing a large impact on electric savings, however they are predicting a substantial reduction in gas savings.

Income Eligible Programs

Income Eligible Product Discounts

Overview: Income Eligible Retail Discounts provides deeper instant in-store discounts to ComEd residential customers at participating retail stores on select ENERGY STAR® certified lighting: LEDs, LED trim kits, and LED integrated fixtures as well as instant in-store discounts on select ENERGY STAR certified appliances such as air purifiers and room air conditioners. Instant in-store discounts are also available on advanced power strips. Instant Discounts are offered to minimize the burden on the target market by lowering barriers to participation.

- **14,851 MWh savings achieved (23% of forecast) based on 359,661 units sold**
- Through Q1, the program has sold 350,181 bulb/fixtures and 9,480 appliances
- The program has expanded instant in-store discounts beyond lighting products. The offering includes deeper instant in-store discounts on select ENERGY STAR certified air purifiers, room air conditioners, and advanced power strips at select participating retail stores.
- The program is seeing great momentum in new offerings on select appliance products.

Single-Family Retrofits

Overview: The Single-Family Retrofits Program is implemented by Resource Innovations and the Illinois Community Action Agencies, as well as Franklin Energy, the Chicago Bungalow Association (CBA) and the Chicagoland Vintage Home Association (CVHA). Implementers complete comprehensive home energy audits and work with contractors to make weatherization and additional upgrades at no cost to the customer. With Franklin/CBA/CVHA, CBA/CVHA identifies and determines qualified vintage homeowners located in the City of Chicago and coordinates Home Assessments to identify areas prone to air leaks or drafts and works with contractors to make weatherization updates at no cost to the customer. This program covers costs associated with completing Air Sealing, Attic and wall insulation, duct sealing, direct install measures (LEDs, water saving measures, programmable thermostats) as well as Health & Safety

improvements. This program is delivered in partnership with Peoples Gas. With Resource Innovation/CAA, ComEd, in coordination with the northern gas utilities is partially and, in some cases, fully funding whole home energy upgrades, in coordination with the State and its Illinois Home Weatherization Assistance Program. Measures may include all of those in the Franklin/CBA side, as well as mechanicals.

- **922 MWh savings achieved (19% of forecast) based on 523 homes**
- Chicago Bungalow Association:
 - 387 projects completed
 - Program is continuing to serve select communities including Oak Forest, Midlothian, Lansing and Posen with CVHA with a goal of completing 500 homes in CY2019. assess further expansion in future years. Through Q1, 95 projects were completed.
 - The program has seen greater participation than expected through Q1 and will remain a challenge as the year progresses. CBA is expecting to have all 1,000 joint projects in the City of Chicago identified by mid to late June 2019.
- Illinois Home Weatherization Assistance Program:
 - 136 projects have been completed in Q1. The break out of the projects are as follows:
 - 90 Braided with IHWAP projects
 - 34 Utility-Only projects
 - 12 Emergency Furnace projects
 - 2019 Q1 was focused on (1) executing signed agreement updates (addendums) with each community action agency (CAA) that participated in 2018, and onboarding new CAAs in the territory that did not participate in 2018; (2) close coordination with Community Action Agencies (CAAs) throughout ComEd service territory to develop and refine 2019 forecasts and production schedules to ensure each CAA achieves their goals, (3) achieving participation and production promptly in 2019 due to the pipeline developed in 2018 and limited changes in the program design and operations from 2018, and (4) launching the year with a renewed commitment to the partnership with DCEO through joint presentation at the 2019 kick-off event and in-person collaboration.

Income Eligible Programs

Multi-Family Retrofits

Overview: The Multi-Family Energy Upgrade Program is implemented by Elevate Energy, and Resource Innovations and the Illinois Community Action Agencies. The program is a one-stop shop for multi-family building owners and managers whose buildings serve income-eligible residents, including energy assessments, direct installation of energy-saving devices, and replacement of inefficient equipment/systems at no or very limited cost. The CAA work is jointly funded with the gas utilities and Elevate is joint with Peoples/NorthShore.

- **1,605 MWh savings achieved (27% of forecast)**
- Elevate
 - The program completed 230 projects and 4,004 residential units including 30 capital projects, 37 Service Provider lighting projects, 23 health and safety projects, 100 prescriptive projects, and 40 DI projects in income eligible apartment buildings.
- IHWAP
 - At North Lake Farms, a 222-unit MF community in Gurnee, the following measures have been completed in Q1 2019: 126 units received bathroom aerators, bathroom exhaust fans, custom air sealing, health and safety measures, hot water pipe insulation and indoor LEDs. 88 units received advanced thermostats, 44 units received attic insulation, 53 units received central air conditioning, 80 units received furnaces, 149 units received refrigerators, and 27 units received storage water heaters.
 - At Saratoga Towers, a 95-unit MF building in Morris, five refrigerator installations were completed in January, while roof upgrades and rooftop HVAC measures started in March.
 - Q1 was focused on (1) executing signed agreement updates (addendums) with each Community Action Agency (CAA) that participated in 2018, and onboarding new CAAs in the territory that did not participate in 2018; (2) close coordination with CAAs throughout ComEd service territory to develop and refine 2019 forecasts and production schedules to ensure each CAA achieves their goals, (3) achieving participation and production promptly in

2019 due to the pipeline developed in 2018 and limited changes in the program design and operations from 2018, and (4) launching the year with a renewed commitment to the partnership with DCEO through joint presentation at the February 4, 2019 kick-off event and in-person collaboration.

Affordable Housing New Construction

Overview: The Affordable Housing New Construction Program offers technical support and incentives for whole-building efficiency for new construction and rehab projects that increase the energy efficiency of income eligible households.

- **298 MWh savings achieved (17% of forecast) based on 3 projects**
- In Q1 of 2019, the AH-NC offering:
 - Accepted 5 new applications
 - Held 7 in-person meetings with customers to discuss their specific projects
 - Presented 1 lunch and learn
 - Attended 11 industry events
 - Referred 8 leads to other programs within the portfolio for projects that were not eligible for AH-NC partners across the housing and community development industry.
 - The program now offers existing customers that haven't yet started construction to switch to a single payment with a 5% incentive increase. This has been successful with 18 of 24 customers agreeing to the change. 2 customers declined, and 4 have not yet responded. The added incentive cost is expected to be offset by future program administrative labor cost reductions.

Business Programs

Standard

Overview: The Standard Program provides monetary incentives to customers on a "Standard" per-unit or per-fixture basis. Offered measures include LEDs, T-8 and T-5 lighting and controls, building automation systems, air- and water-cooled chillers and variable speed drives, ground source heat pumps, roof top units, Q-sync motors, energy recovery ventilators, absorbent air cleaners, as well as equipment with niche or targeted market applications, such as laboratory, farm and commercial food service equipment, and grocery refrigeration measures.

- **Private: 28,303 MWh savings achieved (14% of forecast) based on 453 projects**
- **Public: 2,725 MWh savings achieved (11% of forecast) based on 84 projects**
- In Q1, the program worked with a national retailer on the installation of interior and exterior LED upgrades in 17 stores. These projects resulted in incentives of over \$166K and first year savings of 1.37 GWWhs.
- Private and Public sectors saw a 42% and 12% increase, respectively, in the number of pre-applications submitted compared to Q1 2018.
- The program is seeing a more diversified measure mix compared to Q1 2018. EMS measure participation is up 172% compared with Q1 2018. Pre-applications for HVAC measures have doubled compared to all HVAC projects paid out in 2018.
- The program continues to achieve high customer satisfaction results with an average of 89% in Q1.
- Final programming and testing of the on-line application was completed in Q1. A soft launch of the on-line application is planned for mid-April with a full launch expected in June.

Custom

Overview: The Custom Program identifies and implements site-specific and unique cost-effective energy efficiency opportunities that are not available via the Standard element. Customized incentives based on per kWh basis and calculated for specific customer projects are offered. Measures include process efficiency improvements, system upgrades, and those measures not covered by the Standard program.

- **Private: 1,995 MWh savings achieved (9% of forecast) based on 14 projects**
- **Public: 400 MWh savings achieved (7% of forecast) based on 6 projects**
- Key Program notables:
 - IT Virtualization became industry standard and was discontinued from the program.
- The team held a meeting with a major EESP who is responsible for the National Accounts of 7-eleven, Burlington Coat Factory and Walmart.

Combined Heat & Power (CHP)

Overview: The Combined Heat and Power (CHP) Program supports the investigation of CHP opportunities for conventional and waste heat to power (WHP) systems, existing systems that have been dormant for at least three years, and generation equipment that currently does not have waste heat recovery capabilities. The program provides an economic assessment of site-specific CHP opportunities and promotes implementation of CHP projects by customers.

- Currently, there are 5 EESP's with active or completed public or private sector focused Feasibility Studies compared to 3 in CY2018.
- Completed a feasibility study of the first industrial facility project during Q1.
- In Q1, the CHP offering hired an outreach specialist and the Outreach Plan was approved; this plan combines a webinar designed and targeted to hospitals, colleges and universities, manufacturing, and commercial buildings primarily due to their load shape and high demand, as well as being good candidates for the packaged CHP units.
- CHP still facing challenges related to long lead development and conversion times, with the earliest estimate of claimed savings occurring in 2021.
- Progress continues in the integration of the U.S. DOE CHP packaged unit Accelerator effort, designed to introduce packaged CHP units to customers that offer reduced cost and improved performance.

Business Programs

Small Business Energy Savings (SBES) & Small Facilities

Overview: The SBES Program and Public Small Facilities Program implement energy efficiency projects for customers under 100 kW peak demand. The program provides comprehensive energy savings solutions for customers including advanced lighting, refrigeration, HVAC, and compressed air.

- **Private: 33,980 MWh savings achieved (19% of forecast) based on 1,570 projects**
- **Public: 2,713 MWh savings achieved (22% of forecast) based on 56 projects**
- HVAC measures formerly offered through Aircar Plus were absorbed into the Small Business and Small Facilities Offerings to streamline the customer experience and drive comprehensiveness.
- The programs continue to collaborate with other portfolio and new third party offerings to encourage cross promotion and to assist customers with navigating through the growing number of offering available.
- In Q1, SBO implemented the first wave of the Service Provider Mentorship – Track 1 initiative, which focuses on partnering new service providers with long-standing complimentary network members as a path for growth and success.
- Public Small Facilities increased customer responsiveness by 25% in assessment scheduling through cross training efforts in Q1.

Business Instant Discounts

Overview: The Instant Discounts Program provides instant discounts on qualifying commercial screw-in, pin-base, HID, and exit signs. Linear fluorescent lamps can be replaced with reduced wattage T8 lamps or Tubular LED (TLED) lamps. All screw-in, pin-base and exit sign replacements are LED.

- **Private: 58,504 MWh savings achieved (33% of forecast) based on 580,869 products sold**
- **Public: 6,022 MWh savings achieved (24% of forecast) based on 104,168 products sold**

- The program is off to a strong start with Q1 savings and incentives tracking higher than forecasted and at a lower \$/kwh.
- ComEd ad campaigns are increasing program awareness and driving participation and interest from new and in-network distributors. Customers are increasingly aware of ComEd programs and are demanding contractors to get their incentives.
- The program added a new wall pack measure to the program in 2019, and increased incentives on some lamp categories by ~25%.

C&I New Construction

Overview: The New Construction Program provides technical assistance, support for the Leadership in Energy and Environmental Design (LEED) rating system, and incentives for efficient designs and measure implementation to influence building design practices during the design and construction of new buildings, major renovations of existing buildings, and tenant build-outs in the C&I market.

- **Private: 1,564 MWh savings achieved (9% of forecast) based on 11 projects**
- **Public: 155 MWh savings achieved (13% of forecast) based on 2 projects**
- In Q1 of 2019 the CI-NC offering:
 - Accepted 33 new, multiple-program year applications for private sector customers and 10 for public sector customers
 - Held 14 in-person meetings with private sector customers and 8 with public sector customers to discuss the program and their specific projects.
 - Presented 2 lunch and learns.
 - Attended 2 industry events.
 - Referred 13 leads to other programs within the portfolio for projects that were not eligible for New Construction.
- This program is currently under redesign to include a “self-serve” (or similar) delivery path for key building market sectors, providing key information to customers in real time and encouraging accountability by design teams to key energy efficiency parameters. The first building type in development is warehouses, expected to launch in Q2 of CY2019. Retail, office, and

Business Programs

multifamily will follow. The redesign is also exploring a high-performance path that supports and leverages technical assistance that design teams are doing to drive leading-edge projects.

Industrial Systems

Overview: The Industrial Systems offering is a study-based program for compressed air, process cooling, industrial refrigeration and wastewater treatment plant. The target customer is over 500 kW but under 10 MW. Because this is a study-based program, there are no predefined measures. Measures are a mix of no- to low-cost system optimization as well as capital improvements like custom measures.

- **Private: 1,846 MWh savings achieved (7% of forecast) based on 22 projects**
- **Public: 0 MWh savings achieved (0% of forecast)**
- Incentive for implementation of measures has increased from \$0.07/kWh to \$0.12/kWh
- In Q1, there were several successful service provider engagement sessions on process cooling, process efficiency, program details, and compressed air.
- Program held two training classes for process efficiency and compressed air that will provide more opportunities for industrial customers.
- The team is re-engaging the facility assessment team to generate and provide leads for the program.
- Projects identified in studies for public sector that require significant capital investment are difficult for public customers to secure financing.

Retro-Commissioning (RCx)

Overview: The RCx Optimization Program provides detailed engineering analysis of building systems designed to identify energy-saving operational improvements with a bundled simple payback of 18 months or less. Incentives are provided to customers who commit to implementing agreed-upon energy-saving equipment scheduling, optimization of economizer operations, and adjustment of heating, ventilation, and air conditioning (HVAC) setpoints.

- **Private: 12,117 MWh savings achieved (32% of forecast) based on 44 projects**
- **Public: 522 MWh savings achieved (6% of forecast) based on 11 projects**
- Program recognized nationally as Exemplary Program by ACEEE for the second time.
- A project at The Franklin (227 W Monroe/222 W Adams) was selected for national recognition by the Department of Energy's Smart Energy Analytics Campaign, achieving over 5 GWh in savings.
- A marketing video/case study for projects at Michigan Plaza (205/225 N Michigan) has been completed.

Strategic Energy Management (SEM)

Overview: Strategic Energy Management provides tools, coaching and technical resources to support customers' energy goals through a year-long series of workshops and one-on-one coaching. It draws on principles of continuous improvement and organizational change and integrates Lean, Six Sigma and other cost savings and operational excellence initiatives. SEM helps implement organizational structures, behavior changes, and systematic practices that can lead to reducing energy costs by up to 15% for both electricity and natural gas.

- **Private: 0 MWh savings achieved (0% of forecast) based on 0 customers**
- **Public: 0 MWh savings achieved (0% of forecast)**
- In Q1, the program held 4 workshops in the private sector and 2 in the public sector.
- Launched and/or actively recruiting new cohorts in Commercial Real Estate, Wastewater Treatment, Industrial Refrigeration and K-12 customer segments.
- Energy Champion and Alumni cohorts continue.
- A majority of the cohort energy savings are expected in Q4 as energy savings are verified.

Business Programs

LED Street Lighting

Overview: The program is to replace existing ComEd-owned mercury vapor (MV) or high-pressure sodium (HPS) fixtures with LED street lights. These street lights are installed and maintained by ComEd and the municipality pays a rental charge for the fixture as well as an energy charge. LED street lights provide energy efficient lighting which reduces operating costs and increases the life of street lighting.

- **Private (ComEd Owned): 0 MWh savings achieved (0% of forecast)**
- **Public (Municipality Owned): 2,264 MWh savings achieved (3% of forecast)**
- Program recognized nationally as an Exemplary Program by ACEEE.
- Program delivered a \$12M Big Check to the Mayor of Chicago covering 2 years of street light incentives.
- Private LED street lighting installations began in March, so no Q1 energy savings yet.
- Public LED street lighting installations, and corresponding incentive paperwork, slightly behind schedule without an impact to year-end energy saving expectations

Operational Savings

Overview: The Operational Savings Program identifies no-cost/low-cost opportunities that do not qualify for incentives. These opportunities are identified by engineers during various types of ComEd Energy Efficiency Program studies and Facility Assessments. Examples of such opportunities include shutting off idle equipment, optimizing the efficiency of existing systems and changes in the operating habits of occupants.

- **Private: 637 MWh savings achieved (21% of forecast) based on 40 implemented measures**
- **Public: 198 MWh savings achieved (51% of forecast) based on 9 implemented measures**
- In Q1 2019, the program completed 359 FAs and is on pace to surpass last year's record total of 1,147.

- An increased focus in Marketing and Outreach has contributed to more requests for facility assessments, resulting in the identification of more operational measures and the potential for more operational wins.
- In Q1, the program achieved 4x as many operational win MWhs in comparison to Q1 2018 due to greater focus on prospect project follow ups by outreach.

Business Energy Analyzer (BEA)

Overview: Business Energy Analyzer provides business customers with tools to visualize their energy usage over time, pinpointing high use periods and suggesting potential strategies to reduce energy costs. Customers receive personalized energy-efficiency solutions based on their unique energy use and the ability to compare usage patterns with similar businesses.

- BEA is being maintained until the new tool within My Account, part of the Business Intelligence and Data Analytics (BIDA) initiative, can demonstrate comparable performance.
- While the new tool is similar in function to BEA, a parallel review process is being developed, in which some BEA users will be transitioned to the new tool and others will remain on BEA. Once it has been demonstrated that the new tool successfully generates savings on the same level as BEA, the BEA will be phased out.

Public Housing Retrofits

Overview: The Public Housing Retrofits Program provides energy efficiency retrofits in Public Housing Authority (PHA) facilities in the ComEd service territory. The program offers energy assessments and incentives to upgrade most inefficient equipment in buildings owned and managed by a PHA, including residential units, and common areas at no cost. For energy efficiency projects requiring funding beyond program incentives, technical assistance will be offered to support implementation and identify financing options.

- **841 MWh savings achieved (31% of forecast)**
- Completed 21 projects and upgraded 4,832 residential units in Q1

Business Programs

- Projects included 1 capital project, 9 SPIA lighting projects, 11 prescriptive projects
- The program is employing a robust outreach strategy this year to engage more PHAs on their capital plans.

Third Party Programs

Elementary Energy Education

Overview: ComEd, Nicor Gas, North Shore Gas, and Peoples Gas have partnered to offer schools the opportunity to teach 5th grade students and their families how to use less energy at home. Students learn about valuable ways to save energy and money through in-class education. They also receive free take-home kits containing ENERGY STAR®-certified LEDs, faucet aerators, and other energy-saving products to install at home with their families.

- **911 MWh savings achieved (12% of forecast) based on 9,284 kits**
- Due to contract finalization, kits did not ship until March.
- The program incorporated marketing changes to the box design and will scale up to 74,000 kits in 2019 from 53,000 in 2018.

Small Business Kits

Overview: The Small Business Kits Program targets harder to reach electric energy savings in office, restaurant, or other general facilities located in ComEd's service territory. The program achieves savings through a kit of self-install energy efficiency measures delivered directly to customer facilities. A customer survey is used to determine installation rates for each measure.

- **0 MWh savings achieved (0% of forecast) based on 0 kits**
- Program was ramping up for most of Q1. Customer recruitment and participation will begin in April.
- In addition to securing kit participation, the offering will promote the Small Business Offering to further the customer's engagement with the portfolio.

Food Banks LED Distribution

Overview: The Food Banks Distribution Program provides ENERGY STAR® LEDs to food banks affiliated with Feeding America. The food banks then use their network of local food pantries to distribute the bulbs to utility customers in need, who may elect to receive a free 4-bulb pack.

- **4,633 savings achieved (9% of forecast) based on 190,944 products**

- The program was very successful in building program interest and participation from partners in Q1. Team members met with two food banks and volunteered at two food pantries to gain insight into their operations as well as learn about local needs from staff and community members.
- Team members tabled and networked at Northern Illinois Food Bank's Access Capability and Engagement conference.
- The program achieved placement in the newsletters of both Greater Chicago Food Depository and Northern Illinois Food Bank. This furthered the team's ability to get program information in front of food pantry decision makers, and in turn increase participation.

Income Eligible Kits

Overview: The Income Eligible Kits Program delivers energy efficiency kits to single family income eligible homes. The kits include (4) 9-watt LED bulbs, (2) 15-watt LED bulbs, (1) tier 1 advanced power strip, and general guidelines for energy savings. A portion of the kits will also contain (1) low-flow kitchen aerator, (1) low-flow bathroom aerator, and (1) low-flow showerhead.

- **2,182 MWh savings achieved (13% of forecast) based on 6,500 kits**
- In 2019, the program is offering 1 type of kit. The kit includes (4) 9watt LED bulbs (60watt equivalent), (2) 15watt LED bulbs (100-watt equivalent), (1) tier 1 advanced power strip, (1) LED nightlight, (1) low-flow kitchen aerator, (1) low-flow bathroom aerator, and (1) low-flow showerhead, and general guidelines for energy savings. The kits include installation instructions, educational information, and a ComEd brochure illustrating all Income Eligible programs.

New Manufactured Homes

Overview: ComEd's New Manufactured Home offering is designed to provide Income Eligible residents with the opportunity to lower electric bills by purchasing new manufactured homes that are upgraded with energy-efficient measures such as Energy Star® appliances, air source heat pumps, heat pump water heaters and low flow showerheads. The energy efficient measure upgrades are eligible for

Third Party Programs

instant discounts that are applied to the customer's bill of sale for the home purchase.

Rebates will also be provided to the customer, dealer, and manufacturer when a ComEd customer purchases an ENERGY STAR® Certified New Manufactured Home.

- **0 MWh savings achieved (0% of forecast) based on 0 projects**
- Q1 activities focused on program design development and contracting.
- The program is currently hiring outreach support staff to complete face to face outreach. Additional outreach support staff may also be brought on to assist.

Existing Manufactured Homes

Overview: The ComEd Manufactured Homes offering is available to income eligible residents of manufactured homes at no cost to the customer. If the customer is approved to participate in via a screening over the phone or during an onsite visit at the community park, an appointment will be scheduled with a program technician. Customers may receive an energy assessment, duct sealing and insulation, air sealing, belly insulation, installation of free energy-savings devices such as LED bulbs, faucet aerators, smart power strips, advanced thermostats, and some health and safety measures; and educational tips to save energy

- **24 MWh savings achieved (1% of forecast) based on 16 projects**
- In Q1, the program found success coordinating with local CAA's to address customer furnace issues encountered in the field and success with manufactured homes/mobile home park managers to increase program pipeline.

Grocery Program

Overview: The Grocery Program provides free customized assessments to identify energy-saving opportunities for lighting and commercial refrigeration

system retrofits and upgrades, along with financial incentives and implementation assistance.

- **0 MWh savings achieved (0% of forecast) based on 0 projects**
- The Grocery offer overlaps with existing portfolio offers (Standard and Small Business) which offer incentives for the same energy efficiency projects.
- The team is in development of strategies for addressing these overlaps prior to recruitment phase.

Non-Profit Offering (NPO)

Overview: The Nonprofit Organizations Offering is a new program designed for nonprofit, 501(c)3 organizations with a maximum peak demand of 400 kW and that provide direct services to at-risk populations. The Program provides free energy assessments, procurement assistance, project oversight and a comprehensive list of incentives. Direct install is available for LED lamps and vending machine misers.

- **34 MWh savings achieved (1% of forecast) based on 1 project**
- There has been initial success in marketing the program and building pipeline. The first project was complete at Friendship House, a small childcare in Crystal Lake that serves many working families and children who receive State subsidies for childcare assistance.

Agriculture

Overview: The Agricultural offering is a specialized offering that targets the full vertical market including farms (dairy, poultry, hogs, cash crops, etc.), greenhouses, indoor agriculture facilities, supply houses, and on-site processing facilities. It serves both existing facilities and new construction and offers Standard and Custom type of incentives. Once a customer is engaged, the program will offer customers a free walk through assessment appropriate for their facility to identify energy efficiency opportunities and assist the customer with prioritizing projects and through the application process.

- **0 MWh savings achieved (0% of forecast) based on 0 projects**

Third Party Programs

- The full launch of this program and supporting material was delayed in Q1, but extra staff has been assigned to initiate outreach activities and schedule appointments with Energy Efficiency Service Providers (EESPs). A targeted post card mailing to dairy farmers is scheduled to go out in early April to raise awareness as part of the overall outreach plan.
- The team has identified and reached out to the following players in the agriculture sector: 80 EESP's, 43 Equipment Dealers, 33 Industry Associations, and 57 customers that have completed energy efficiency projects in the past.

Telecom

Overview: The Telecommunication program offers incentives for telecommunication and internet service providers and associated systems such as rectifiers, soft switches, air flow management, HVAC solutions, economization and lighting. This is a market that has been underserved by other programs due to the specialized technology and access to the facilities. Customer engagements are supported from the national and local levels with dedicated energy advisors and engineers providing individual customized assessments and reports on energy efficiency opportunities throughout the network infrastructures and facilities within ComEd's territory.

- **0 MWh savings achieved (9% of forecast) based on 0 projects**
- This is a first year with full engagement of the telecommunications industry. Initial efforts and deliverables have been focused on the creation and deployment of outreach processes, marketing materials, and education pieces associated with the market offerings and opportunities.
- Several of the largest national accounts including AT&T, TDS, US Cellular, Comcast, and CenturyLink have been engaged. This engagement ranges from initial outreach to educating them about the program. These efforts have resulted in performing site assessments and reports at nine of the largest facilities within ComEd territory to date. These initial interactions have provided the current pipeline of opportunities recorded in Salesforce and have paved the way for several weeks of scheduled assessments continuing into May 2019.

- Ongoing efforts will include the engagement of smaller local providers in the industry along with continued assessments at national account facilities.

Public Building in Distressed Communities

Overview: Public Building in Distressed Communities provides LED light kits for self-install, and the top 6 HVAC measures, to provide energy efficiency and safety to public buildings that do not have extra capital for these upgrades.

- **0 MWh savings achieved (0% of forecast) based on 0 projects**
- In Q1, completed the scope of work with the third party and received marketing materials for review.
- Forecasting a May start, with incentives beginning in June.

Voltage Optimization & Market Transformation Programs

Voltage Optimization

Overview: The Voltage Optimization Program deploys circuit voltage detectors and control equipment that will effectively assess and adapt the amount of voltage traveling across a power line at any given time. Once in place, these devices will allow ComEd to more precisely monitor, manage and deliver the voltage customers need. No additional effort by consumers will be required as the control equipment will automatically adjust to consistently deliver only the voltage each customer requires while providing energy savings.

- **20,129 MWh savings (10% of forecast)**
- Deployment work continues and is on-track to meet year-end goals.

Building Operator Certification (BOC)

Overview: This training and certification program for large commercial building managers is operated by the MEEA Team. Energy savings are attributed to both increased awareness of energy efficiency opportunities from the training and from participation in utility programs.

- BOC has 5 trainings scheduled for 2019 (Grayslake, Chicago Level 1, Springfield, Algonquin, Chicago Level 2) with an additional 1-2 available as needed, based on demand. 6 veterans' scholarships have been reserved, which is an increase from last year. 185 renewal scholarships were given out to IL graduates. Continuing education webinars will be taking place Spring – Fall. More information on training options and schedules is available at <http://www.boccentral.org/training/illinois>

Illinois Home Performance (IHP)

Overview: The Illinois Home Performance with ENERGY STAR® Program consists of processing ENERGY STAR® certificates for homeowners, training realtors and appraisers, and conducting a building science training series.

- The CY2019 IHP program is operating in Northern Illinois with funding from ComEd, Nicor Gas, and Peoples/North Shore Gas. Thus far through the program, 27 contractors have been trained through the Building Science Training Series, 44 realtors have been educated on IHP and 414 Home

Performance with ENERGY STAR certificates of completion have been issued. The program is currently scheduling realtor and appraiser training courses and continues to offer building science training courses to local contractors. More information on training options and schedules is available at <http://www.illinoishomeperformance.org>

Emerging Technology

The mission of the Emerging Technologies team is to identify, test, validate, and integrate new energy-saving technologies and program delivery strategies into the ComEd Energy Efficiency Program so that it continues to meet customers' needs and its energy savings goals cost-effectively.

Alternative Refrigerants

Overview: This pilot attempted to validate the energy savings associated with retrofitting commercial facility walk-in cooler and freezer refrigeration systems using HFC blend refrigerant R-404A. Alltemp-M refrigerant is marketed as a replacement product for R-404A, as 404A is no longer allowed for use in retrofits due to its high global warming potential. found that the capacity of both coolers and freezers was reduced when using the alternative refrigerant, and energy savings varied greatly across the five systems tested. Pilot partner Slipstream created a useful measurement and verification guide focused on alternative refrigerants generally.

- Status: Completed
- Target Sector: Commercial
- Completion Date: Q3 2018
- Next Steps: Based on the pilot results, the Emerging Tech team recommends not promoting the Alltemp product at this time.

Nest Seasonal Savings

Overview: During the summers of 2017 and 2018, several tens of thousands of Nest thermostat owners were offered the opportunity to opt-in to the Seasonal Savings program, which makes small set-point adjustments to deliver additional energy savings for the customer while balancing comfort requirements. The pilot was repeated in 2018 to quantify the persistence of savings. Navigant's impact analysis showed favorable savings and resulted in a recommended measure life of two years.

- Status: Completed
- Target Sector: Residential
- Completion Date: Q1 2019

- Next Steps: The Emerging Tech team may hold discussions with Nest about creating a novel kind of pay-for-performance model where Nest uses Seasonal Savings to guarantee a certain amount of savings over a period longer than two years. This could make this offering more attractive considering our CPAS goals.

Total Connected Savings

Overview: Throughout 2018, over 1,000 customers with a Honeywell Wi-Fi thermostat (a connected, but not smart, thermostat) were offered the opportunity to opt-in to the Total Connected Savings program managed by Whisker Labs, which provides cloud-based advanced analytics to control thermostats based on outside weather conditions to increase energy savings while maintaining occupants' comfort. Navigant's impact analysis showed unfavorable savings that were not statistically significant, and a measure life of one year.

- Status: Completed
- Target Sector: Residential
- Completion Date: Q1 2019
- Next Steps: No further action.

Condenser VFD

Overview: This project studied the impact of adding variable frequency drives (VFDs) to refrigeration system condenser fans in 23 condensers in four supermarkets. The pilot compared system performance pre- and post- condenser fan retrofit with VFD and will provide energy and cost impacts to the TRM. Navigant's impact analysis showed favorable savings.

- Status: Completed
- Target Sector: Commercial
- Completion Date: Q1 2019
- Next Steps: Update the existing "Variable Frequency Drives for Condenser Fans" TRM measure.

Emerging Technology

HVAC SAVE (Quality Installation)

Overview: The HVAC SAVE pilot provided training for Trade Allies to provide a Verified Quality Installation (QI) of Residential AC units to improve their performance. This pilot aimed to see 400 QI installs during summer 2018 and collect information on QI energy savings to validate a new Quality Installation TRM measure introduced to the TRM in 2019. The TRM claims a 10% de-rating factor on non-quality installations as well as the baseline. Only 120 homes were able to be recruited to participate, which was not a large enough sample size for Navigant to conduct an energy savings analysis. Several program delivery issues contributed to the less than expected participation levels.

- Status: Completed
- Target Sector: Residential
- Completion Date: Q1 2019
- Next Steps: The Emerging Tech team decided to not repeat the HVAC SAVE pilot in 2019 but is researching ways to achieve Verified Quality Installation through technology such as sensor-based residential HVAC fault detection systems.

Synchronous Motors

Overview: This pilot validated the energy savings of new synchronous motor technology. Q-sync motors from manufacturer QM Power are a new type of Permanent Magnet Alternate Current Motors that can replace shaded pole or EC motors in existing refrigerated cases and walk-in coolers/freezers. The pilot showed favorable savings estimates and a relatively straightforward retrofit experience.

- Status: Completed
- Target Sector: Cross-Cutting
- Completion Date: Q2 2019
- Next Steps: The pilot results are being used to update the existing Synchronous Motors TRM measure.

High-Efficiency Public Housing Retrofit

Overview: For this legacy DCEO R&D project, a team of stakeholders designed and deployed retrofit strategies incorporating new heating and cooling technologies for seven housing units located at Rockford Housing Authority's Blackhawk Courts in 2017. The new technologies include advanced heat pumps and low capacity furnaces. Data was collected on the performance of the new systems throughout 2018.

- Status: In Progress
- Target Sector: Public Housing and Multifamily
- Completion Date: Q2 2019
- Next Steps: Create final report and understand possible future implications.

Upstream Small Embedded Data Center Program Design

Overview: This five-month research project will evaluate the market potential for an upstream small embedded data center program for commercial customers in ComEd service territory. Pilot vendor Slipstream will develop a preliminary program design vetted through conversations with key market actors, including data center owners and operators and IT equipment suppliers and installers.

- Status: In Progress
- Target Sector: Commercial
- Completion Date: Q2 2019
- Next Steps: Complete stakeholder interviews and create recommendations for potential program designs.

All-Electric Net Zero Energy New Homes

Overview: This research project will quantify the current market size, home buyer demand and growth trajectory of the net zero energy homes market in Illinois. It will also estimate the associated program cost and energy savings potential and create recommendations for a future all-electric net zero energy homes offering.

- Status: In Progress
- Target Sector: Residential
- Completion Date: Q2 2019 (initial phase)

Emerging Technology

- Next Steps: Complete stakeholder interviews and create recommendations for potential program designs.

Commercial Geothermal Advancement

Overview: This pilot has aimed to introduce a new commercial geothermal TRM measure and develop a new prescriptive incentive to promote geothermal heat pump installations in the commercial and public sectors.

- Status: In Progress
- Target Sector: Commercial and Light Industrial
- Completion Date: Q3 2019
- Next Steps: Work with the Standard program team to inform and refine their new prescriptive incentive for commercial geothermal.

Baseline and Potential Study

Overview: This large-scale research project lead by Itron consists of two main components. The first is a Baseline Study, a statistically representative survey of ComEd residential, commercial and industrial customers to determine energy-using equipment stock, efficiency, age, and utilization. The second is a Potential Study, which will determine energy savings potential for more efficient equipment and behaviors and guide ComEd program design.

- Status: In Progress
- Target Sector: Cross-Cutting
- Completion Date: Q3 2019
- Next Steps: Complete commercial and residential surveys.

Leveraging AMI Usage Data for Program Enhancements

Overview: For this pilot, ComEd will provide EnergySavvy with historical and current customer energy usage data, firmographic and demographic data, and energy efficiency program participation data. The EnergySavvy software performs large-scale analyses to detect useful trends, and for this pilot, the ComEd Emerging Tech team will apply these analyses to the Residential HVAC and Small Business offerings.

- Status: In Progress
- Target Sector: Cross-Cutting
- Completion Date: Q4 2019
- Next Steps: Complete data transfer and create analytic dashboards.

Save and Share Mobile App

Overview: The Save and Share Mobile App leverages AMI data to provide day-after energy information to help residential customers save energy. It also provides the user with weekly energy usage predications based on AMI data. The pilot is aimed at income eligible residential customers within Chicago's Bronzeville neighborhood.

- Status: In Progress
- Target Sector: Residential, Income Eligible
- Completion Date: Q4 2019
- Next Steps: Recruit sufficient app users to measure energy savings impact.

Affordable Multifamily Passive House

Overview: The Latin United Community Housing Association's (LUCHA) Tierra Linda project is comprised of several new construction multifamily buildings intended for low income residents. Located along the 606 Trail in Chicago's Humboldt Park neighborhood, one of the six-unit buildings were constructed to Passive House Institute U.S. (PHIUS) standards. ComEd has installed energy and indoor air quality monitoring equipment, will survey residents, and will analyze construction cost data to better understand the potential for integrating Passive House standards into the Affordable New Construction program. The building will be compared to a similarly sized and similarly monitored building down the street but built to the more typical ENERGY STAR standard.

- Status: In Progress
- Target Sector: Multifamily, Income Eligible, Residential
- Completion Date: 2020; monitoring equipment was installed at end of 2018 Q2; first data analysis report June 2019
- Next Steps: Conduct tenant surveys once move-in is complete.

Emerging Technology

Water-Energy Nexus

Overview: A study has been completed to quantify the energy required to deliver water to a customer site. This value, introduced to the TRM in 2019, should allow ComEd to claim energy savings from water reduction measures (cold water included, not just hot water).

- Status: In Progress
- Target Sector: Cross-Cutting
- Completion Date: Ongoing
- Next Steps: Launching several new projects related to the water-energy nexus now that the TRM measure has been introduced, including a northern Illinois water usage market analysis (vendor Axiom) to understand where savings potential is highest, and green stormwater infrastructure research project (vendor Greenprint Partners) to assess the potential of runoff reduction programs.

Energy Efficiency Research and Development Laboratory

Overview: This partnership is a two-and-a-half-year agreement between ComEd and the National Renewable Energy Laboratory (NREL) to carry out various research projects at NREL's state-of-the-art Energy Systems Integration Facility (ESIF) testing laboratory. Located in Colorado, the ESIF provides a unique controlled platform on which research partners (like ComEd) can identify and resolve the technical, operational, and financial risks of integrating emerging energy technologies into today's complex buildings environment.

- Status: In Progress
- Target Sector: Commercial and Industrial
- Completion Date: Q4 2020
- Next Steps: A selection process is currently underway to identify promising equipment and systems to test.

Adsorbent Air Cleaner

Overview: This pilot is a multi-year effort to allow a full year of data collection post-installation. Pilot partner Slipstream will investigate and assess the energy

impacts of the HVAC Load Reduction Module manufactured by enVerid on a large office tower located in downtown Chicago. This technology adsorbs gas-phase contaminants from ventilation air, allowing outside air intake to be reduced.

- Status: In Progress
- Target Sector: Cross-Cutting
- Completion Date: Q1 2020
- Next Steps: Installation was completed in Q1 2019 and the equipment was turned on when the building switched into heating mode.

Low-E Interior Storm Windows

Overview: This pilot is a partnership between ComEd and Nicor Gas. Nicor Gas' Emerging Technologies Program administrator, Gas Technology Institute, will perform a one-year demonstration pilot targeting income qualified residences to retrofit existing windows with low-E interior storm windows.

- Status: In Progress
- Target Sector: Residential, Income Eligible, Multifamily
- Completion Date: Q1 2020
- Next Steps: Recruit additional participants.

Chicago Income Eligible Multifamily Benchmarking Outreach

Overview: For this pilot, Elevate Energy and the Institute for Market Transformation will partner with the City of Chicago to design and test a novel outreach strategy for the income eligible multifamily sector. The pilot team will analyze energy benchmarking results for large income eligible multifamily buildings in Chicago and target their owners with a unique support package.

- Status: In Progress
- Target Sector: Multifamily, Income Eligible
- Completion Date: Q2 2020
- Next Steps: Conduct benchmarking data analysis to identify target buildings.

Emerging Technology

BIT Neighborhood Pilot

Overview: The BIT Neighborhood pilot aims to apply BIT Building practices to unite energy efficiency projects and workforce development initiatives in these communities. The pilot will recruit and train FEJA-funded workforce initiative graduates to serve as energy performance improvement coaches, called "BIT Aides", using the BIT Building curriculum. BIT is a set of cost-effective industry standards for existing buildings that enables all types of property owners and operators (except single family residential) to understand and adopt high performance best practices.

- Status: In Progress
- Target Sector: Multifamily, Light Commercial, Income Eligible
- Completion Date: Q1 2021
- Next Steps: Train BIT Aides.

Breathe Easy US HUD Study

Overview: Breathe Easy is a study by the U.S. Department of Housing and Urban Development (HUD) in partnership with Elevate Energy and Illinois Institute of Technology that began in December 2016. Breathe Easy aims to investigate three approaches to upgrading the mechanical ventilation systems of Income Eligible ComEd customers to reduce indoor air pollution.

- Status: In Progress
- Target Sector: Residential, Income Eligible
- Completion Date: Q2 2020
- Next Steps: Begin to analyze data and issue surveys to pilot participants.

Ductless Heat Pumps

Overview: The pilot targets income eligible customers living in low-rise, all-electric multi-family buildings. During the 2018-19 winter, CMC and partners installed high-performance, cold-climate ductless heat pumps in 80 apartment units across seven low-rise multifamily buildings to test the performance and feasibility of DHPs in the ComEd market.

- Status: In Progress
- Target Sector: Multifamily, Residential, Income Eligible
- Completion Date: Q2 2020
- Next Steps: Begin to analyze data and issue surveys to pilot participants.

EcoAdvocates

Overview: EcoAdvocates is a two-year pilot starting in February 2019 that targets residences and small businesses in three income eligible neighborhoods. The pilot will recruit and train community residents to become trusted energy advisors in their neighborhoods to boost residential and small business participation in energy efficiency programs. Slipstream and Faith in Place will partner with community organizations to recruit engaged community residents to become an "EcoAdvocate" that promotes, helps implement, and tracks energy efficiency program participation within their community.

- Status: In Progress
- Target Sector: Income Eligible
- Completion Date: Q1 2021
- Next Steps: Finalize pilot design and recruit energy efficiency advocates.

Healthy Homes

Overview: The Healthy Homes pilot, led by Elevate Energy and the Green and Healthy Homes Initiative, targets income eligible residences with severe asthma patients. The team will partner with Presence Health Systems and complete joint health-energy assessments and retrofit delivery.

- Status: In Progress
- Target Sector: Multifamily, Residential, Income Eligible
- Completion Date: Q1 2020
- Next Steps: Finalize outreach plan, train joint EE-health assessors, and recruit participants.

Emerging Technology

Homebuyer Program Access

Overview: This pilot is focused on income eligible customers at time of home sale. In two phases, the pilot team will aim to expand the amount of home energy information available to these customers, and in turn expand access to energy efficiency programs.

- Status: In Progress
- Target Sector: Residential, Income Eligible
- Completion Date: Q2 2020
- Next Steps: Hold kickoff meeting and launch project.

Income Eligible High User Customer Needs Assessment

Overview: This ethnographic research project will characterize ComEd's income eligible residential high energy users and inform ComEd's implementation teams about any unique circumstances among this customer group that have implications for their energy consumption, use of existing programs, or benefit they derive from the programs.

- Status: In Progress
- Target Sector: Income Eligible
- Completion Date: Q3 2019
- Next Steps: Complete AMI data analysis and conduct interviews with a sample of identified study participants.

Data Analysis, Market Research and Segmentation to Improve Income Eligible Programs

Overview: The research team will conduct an affordability and occupancy analysis with tract-level breakdown of single and multifamily housing occupancy and household income, as well as a parcel-level breakdown that includes building characteristics such as age, size, construction type and energy use. This study will be used to create program recommendations specific to geography, housing type and income based on community and sub-market profiles that the research team will create.

- Status: In Progress
- Target Sector: Income Eligible
- Completion Date: Q1 2020
- Next Steps: Complete data transfer to initiate first phase of analysis.

Income Eligible Program Design & Testbed

Overview: The aim of this pilot is to define a framework for scalable program delivery through dedicated market providers and trade allies and therefore result in deeper savings, improved delivery and lower delivery costs for the income eligible residential sector. Franklin Energy will research, design and execute multiple implementation projects incorporating different combinations of housing stock, measures, market providers, and included services.

- Status: In Progress
- Target Sector: Income Eligible
- Completion Date: Q1 2020
- Next Steps: Execute first weatherization pilots in Joliet, Aurora and Elgin over the next several months.

Public Housing Authority Energy Efficiency Needs Assessment

Overview: For this six-month research project, SEDAC will conduct an energy efficiency needs assessment to identify barriers to PHA engagement and implementation and to develop solutions to increase participation in and savings from energy efficiency programs.

- Status: In Progress
- Target Sector: Public Housing
- Completion Date: Q3 2019
- Next Steps: Complete initiate phase (literature review of best practices nationally).

Emerging Technology

Savings for Income Eligible Seniors

Overview: For this pilot, Green Home Experts will target income eligible senior (aged 55 and older) residential ComEd customers for direct installation of a measure package including weather stripping, door sweeps, caulking, smart thermostats, LED lamps, and LED nightlights.

- Status: In Progress
- Target Sector: Public Housing
- Completion Date: Q3 2019
- Next Steps: Complete initiate phase (literature review of best practices nationally).

- Status: In Progress
- Target Sector: Residential, Income Eligible
- Completion Date: Q1 2020
- Next Steps: Secure and renovate Green Living Room space in Woodlawn.

Target Rank (Home Energy Reports)

Overview: Target Rank is an alternative user experience for 18,000 income eligible customers already receiving electronic Home Energy Reports. During the pilot, the Neighbor Comparison module will be replaced with a Target Rank module for six months. Target Rank provides the customer with a short-term achievable energy saving target (called a “challenge”) in the format of a score on a 100-point scale.

- Status: In Progress
- Target Sector: Residential
- Completion Date: Q3 2019
- Next Steps: Finalize sampling plan and prepare launch.

Blacks in Green (BIG) Street Operating System (SOS)

Overview: BIG, a longstanding and successful community organization, has developed a novel outreach pilot project that will increase awareness of ComEd’s energy efficiency offerings in Chicago’s Woodlawn neighborhood. SOS and the Green Living Room (a community destination, including free wi-fi and similar amenities) is a communications conduit—delivery system and feedback loop—through which climate, energy, emergency, community news, career connections, and conservation lifestyle tips can move.

Marketing Education & Awareness

General Outreach

- Participated in 162 events
- Interacted with approximately 5825 customers

E&A Residential – Lazy Susan

Overview: The campaign was created to promote awareness of the ComEd Energy Efficiency Program offerings with a call to action to learn more.

- In-market February 4 – December 22, 2019
- Included TV, Cinema, Radio, OOH, Social and Print
- Generated 3,940,143 digital impressions through March 31st.
- Drove 168,049 page visits to ComEd.com/HomeSavings

E&A Business – Saving Energy

Overview: The campaign was created to promote awareness of the ComEd Energy Efficiency Program offerings with a call to action to learn more.

- In-market February 4 – December 22, 2019
- Included TV, Digital, Social and Print
- Generated 3,364,750 digital impressions through March 31st.
- Drove 10,034 page visits to ComEd.com/SavingEnergy

Public Sector Campaign

Overview: The campaign was created to promote awareness of our public sector offerings for K-12 schools with a call to action to look at incentives available.

- In-market February 4 – December 31, 2019
- Includes TV digital, social and print
- Generated 11,798,223 digital impressions through March 31st
- Drove 1,018 page visits to ComEd.com/Schools

Fridge Recycling Campaign

Overview: The campaign was created to promote awareness of the fridge recycling through the ComEd Energy Efficiency program with a call to action to recycle your old, working fridge.

- In-market March 4 – December 31, 2019
- Included digital, radio, social and digital billboard
- Has generated 1,516,580 digital impressions through March 31st
- Drove 180,555 page visits to ComEd.com/FridgeRecycling

Lighting Discounts Campaign

Overview: The campaign was created to promote awareness of instant discounts on specialty LED bulbs at your local retailer through the ComEd Energy Efficiency Program with a call to action to find a retailer near you.

- In-market March 4 – December 1, 2019
- Included TV, digital, radio, social, OOH
- Has generated 279,343 digital impressions through March 31st

Lighting Discounts Campaign – Income Eligible Discounts

Overview: The campaign was to promote awareness of instant discounts on LED bulbs at your local retailer through the ComEd Energy Efficiency Program with a call to action to find a retailer near you.

- In-market February 25 – November 24, 2019
- Included TV, digital, radio, social, OOH
- Has generated 304,526 digital impressions through March

Lighting Discounts Campaign - Business Offerings

Overview: The campaign was to promote awareness of lighting discounts for business customers through the ComEd Energy Efficiency Program with a call to action.

- In-market March 4 – December 29, 2019
- Included TV, digital, radio, social, OOH
- Has generated 2,295,468 digital impressions through March

Stipulations

Commitments Regarding Interactions with the Income-Qualified Advisory Committee (Settlement Stipulation § IV(D)(1))

ComEd agrees to report on a quarterly basis to both the Income-Qualified Energy Efficiency Advisory Committee and the SAG on the development of reporting metrics on the following topics:

- Identification of budget, savings, and number of participants served through Income-Qualified Plan funding, separately tracking by single-family and multi-family programs:
 - For budget and savings, please refer to the Income Qualified Programs section on the “Ex Ante Results” tab of the statewide quarterly report template. Total Income Qualified homes served is captured on the “Other” tab of the statewide quarterly report template.
 - The Single-Family Retrofits program has completed projects in 523 income-qualified homes through Q1.
 - The Multi-Family Retrofits program has completed direct install work in 4,004 tenant units through Q1.
 - The Public Housing Retrofits program has completed direct install work in 4,832 tenant units through Q1.
 - The Affordable Housing New Construction program has completed 3 projects through Q1.
 - The Income Eligible Kits program has distributed 6,500 kits to income-qualified single-family homes through Q1.
 - The Food Banks Distributions program has distributed 190,944 products through Q1.
- Income-Qualified pilot program results:
 - The Emerging Technology program has several projects specific to income eligible and public housing customers: High Efficiency Public Housing Retrofit, Affordable Multifamily Passive House, Low E Interior Storm Windows, Chicago Income Eligible Multifamily Benchmarking, EcoAdvocates, Healthy Homes, Income Eligible High User Customer Needs Assessment, Income Eligible Program Design and Testbed, Public Housing Authority Energy Efficiency Needs Assessment, Savings for Income Eligible Seniors.
 - Please refer to the Emerging Technology section on page 18 of this report for additional information
- Identification of implementation vendors who receive funding designated for Income-Qualified programs, indicating whether each vendor is an independent third party that has demonstrated capabilities to serve such households, including not-for-profit entities and government agencies that have existing relationships with or experience serving Low-Income communities in the State:
 - Single-Family Retrofits – Chicago Bungalow Association (not-for-profit), Chicagoland Vintage Home Association (not-for-profit), Franklin Energy (for-profit), Illinois Association of Community Action Agencies (not-for-profit), Resource Innovations (WBE for-profit), 15 community action agencies in the ComEd territory (not-for-profits)
 - Multi-Family Retrofits – Elevate Energy (not-for profit), Franklin Energy (for-profit), Resource Innovations (WBE for-profit), Shelton Solutions (WMBE for-profit), 15 community action agencies in the ComEd territory (not-for-profits)
 - Public Housing Retrofits – Elevate Energy (not-for-profit), Franklin Energy (for-profit), University of Illinois at Chicago Energy Resources Center (not-for-profit)
 - Affordable Housing New Construction – Seventhwave (not-for-profit)
 - Income Eligible Lighting Discounts – CLEAResult (for-profit)
 - Low Income Kits – University of Illinois at Chicago Energy Resources Center (not-for-profit), 15 community action agencies in the ComEd territory (not-for-profits)
 - Food Bank – CLEAResult (for-profit), Greater Chicago Food Bank (non-for-profit), Northern Illinois Food Bank (non-for-profit), Riverbend Food Bank (non-for-profit)
 - Outreach & Marketing – Eire (WBE for-profit), Franklin Energy (for-profit), Ignition (for-profit), PACO (MBE for-profit), Surge Solutions (MBE for-profit)
- Job training in economically disadvantaged and diverse communities within its service territory that is supported by ComEd’s efficiency program portfolio funding, including training offered through the IHWAP program necessary to increase capacity to deliver services in ComEd’s territory
 - ComEd intends to develop metrics for this area in coordination with the Income Eligible Advisory Committee. There have been preliminary

Stipulations

- conversations on this topic at 4 of the 5 meetings in 2018. A new Workforce & Business Development Working Group will be established in 2019 to finalize these metrics
- ComEd agrees to work with the Income-Qualified Advisory Committee in the development of a metric to be added to quarterly energy efficiency reports filed with the Commission that reports the number of businesses and employees based in economically disadvantaged communities hired to assist in the delivery of energy efficiency programs
 - ComEd intends to develop metrics for this area in coordination with the Income Eligible Advisory Committee. There have been preliminary conversations on this topic at 4 of the 5 meetings in 2018. A new Workforce & Business Development Working Group will be established in 2019 to finalize these metrics

Total Resource Cost (TRC)

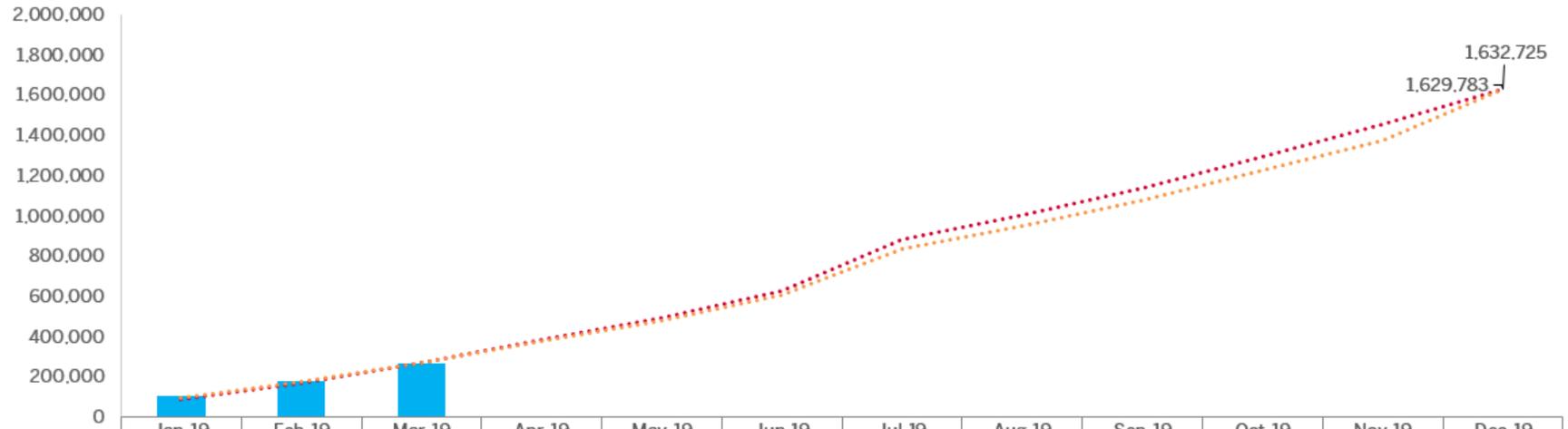
CY2019 New Measures

All measures in the table below were launched in CY2019.

MEASURE TOTAL RESOURCE COST (TRC)		
	Sector	TRC
Ground Source Heat Pump	Business	5.47
Rooftop Units	Business	2.74
Q-Sync Motors	Business	1.69
Energy Recovery Ventilators	Business	1.50
Adsorbent Air Cleaner	Business	1.19

Portfolio Net MWh Chart

PORTFOLIO NET MWH



	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Actual YTD	105,702	177,951	266,461									
Forecast YTD	90,901	171,481	274,409	383,437	495,206	630,616	886,491	1,007,569	1,138,948	1,297,415	1,457,348	1,632,725
Filed Goal YTD	97,398	175,635	273,418	376,192	482,270	610,821	835,997	950,840	1,077,548	1,227,344	1,377,505	1,629,783