

July 15, 2015

VIA ELECTRONIC DELIVERY

Honorable Kathleen H. Burgess
Secretary
New York State Public Service Commission
Three Empire State Plaza, 19th Floor
Albany, New York 12223-1350

RE: Case 15-M-0252 – In the Matter of Utility Energy Efficiency Programs

**NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID
2016-2018 ELECTRIC AND GAS ENERGY EFFICIENCY TRANSITION
IMPLEMENTATION PLANS (ETIPs)**

Dear Secretary Burgess:

In accordance with the requirements set forth in the Order Adopting Regulatory Policy Framework and Implementation Plan issued by the Commission on February 26, 2015 in Case 14-M-0101 and the Order Authorizing Utility-Administered Gas Energy Efficiency Portfolios for Implementation Beginning January 1, 2016, Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”) hereby submits for filing the 2016-2018 Electric and Gas Energy Efficiency Transition Implementation Plans (“ETIPs”).

Please direct any questions regarding this filing to:

Phil Austen
Director, New York Program Strategy
National Grid
175 East Old Country Road
Hicksville, New York 11801
Tel.: 516-545-4753
Mobile: 631-599-0285
Email: pausten@nationalgrid.com

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National Grid looks forward to working collaboratively with Department of Public Service Staff to advance the Company's electric and gas energy efficiency portfolios.

Respectfully submitted,

/s/ Janet M. Audunson
Janet M. Audunson, P.E., Esq.
Senior Counsel II

Enc.

cc: Colleen Gerwitz, DPS Staff, w/enclosure (via electronic mail)
Debra LaBelle, DPS Staff, w/enclosure (via electronic mail)
Peggie Neville, DPS Staff, w/enclosure (via electronic mail)
Kevin Manz, DPS Staff, w/enclosure (via electronic mail)
Denise Gerbsch, DPS Staff, w/enclosure (via electronic mail)
Edward White, w/enclosure (via electronic mail)
Sean Mongan, w/enclosure (via electronic mail)
Cathy Hughto-Delzer, w/enclosure (via electronic mail)
Philip Austen, w/enclosure (via electronic mail)
Lynn Westerlind, w/enclosure (via electronic mail)
James Stapleton, w/enclosure (via electronic mail)
Lisa Tallet, w/enclosure (via electronic mail)
Melissa Piper, w/enclosure (via electronic mail)



Case 15-M-0252 - In the Matter of Utility Energy Efficiency Programs

Niagara Mohawk Power Corporation d/b/a National Grid

2016–2018

Electric and Gas

Energy Efficiency Transition Implementation Plan

July 15, 2015

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I. INTRODUCTION

On April 25, 2014, the New York State Public Service Commission (“Commission”) issued an order establishing the Reforming the Energy Vision proceeding (“REV proceeding” or “REV”),¹ “to reorient both the electric industry and the ratemaking paradigm toward a consumer-centered approach that harnesses technology and markets.”² The REV proceeding is separated into two tracks, with Track One focused on developing distributed energy resources (“DER”) markets, and Track Two focused on reforming regulatory and utility ratemaking practices.

The REV core policy outcomes include: knowledge and tools to enable customers to better manage their bills; animation of markets; fuel and resource diversity; system resiliency; system efficiency; and, carbon reduction. REV seeks to achieve these outcomes through transformation of the energy market place and increased the penetration of DER. DER includes distributed generation, distributed storage, demand response and end-use energy efficiency.³

In the Commission’s February 26, 2015 order (the “REV Track One Order”), electric utilities were directed to file Budgets and Metrics Plan and Energy Efficiency Transition Implementation Plan (“ETIP”) no later than July 15, 2015, describing electric energy efficiency programs and initiatives proposed for the 2016-2018 three-year period.⁴ The REV Track One Order authorized 2016 utility electric energy efficiency portfolio budgets and targets. These budgets and targets are at the same level as 2015 budgets and targets under the current Energy Efficiency Portfolio Standard (“EEPS”) program. The utilities were directed to also propose electric budgets and metrics for the remaining two years of the 2016-2018 program cycles.

To support the development and framework of utility ETIPs, on May 1, 2015 the New York State Department of Public Service Staff (“Staff”) through the Office of Clean Energy, issued a Clean Energy Guidance document entitled *CE-02: ETIP Guidance* to establish the content of utility ETIPs. This document was developed under the ETIP Guidance subcommittee, a collaborative effort between Staff and the utilities.

¹ Case 14-M-0101 – *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision* (“REV proceeding”), Order Instituting Proceeding (issued April 25, 2014).

² REV Proceeding, Order Adopting Regulatory Policy Framework and Implementation Plan (“REV Track One Order”) (issued February 26, 2015), Appendix B, at p. [1].

³ *Id.*

⁴ *Id.*

On June 19, 2015, the Commission issued Order Authorizing Utility - Administered Gas Energy Efficiency Portfolios for Implementation beginning January 1, 2016 (the “June 2015 Gas ETIP Order”),⁵ directing gas utilities to implement gas energy efficiency programs and for electric and gas utilities to file tariffs implementing electric and gas Energy Efficiency Tracker (“EE Tracker”) by July 20, 2015.

This document presents the electric and gas ETIPs of Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”). This document is designed to inform the Commission’s approval of National Grid’s 2016-2018 Budget and Metric Plan for its electric and gas energy efficiency portfolios for 2016-2018. The Company’s corresponding Energy Efficiency Budgets and Metrics Plan is being filed separately concurrent with this ETIP filing per Appendix C of the REV Track One Order.

II. ELECTRIC PORTFOLIO

A. ELECTRIC PORTFOLIO DESCRIPTION

National Grid’s electric energy efficiency portfolio is designed to support the progression of market-based solutions and the penetration of market transformative technologies. The Company has redesigned its existing EEPs electric portfolio to allow for increased customer awareness and education of energy efficiency resources and to allow for the reduction of barriers to the adoption of early market technologies.

National Grid has positioned its electric energy efficiency portfolio for growth. The REV Track One Order authorizes 2016 energy savings targets at 230,705 MWh for the Company with a corresponding budget of \$51,457,894. These authorizations represent 42% and 28% of the total authorized utility electric targets and authorized budgets, respectively. The authorized funding rate for National Grid’s electric portfolio is \$223 per MWh.

National Grid’s electric portfolio redesign under ETIP forecasts 2016 acquired saving to exceed the Commission’s authorized target. In addition, the Company’s 2017 and 2018 proposed portfolio reflects 34% and 53% increases, respectively, in energy savings targets over the 2016 authorized level. With these projected savings target increases in 2017 and 2018, the Company has increased the corresponding performance budgets by 30% and 50% respectively.

Achieving REV Core Policy Objectives Through Energy Efficiency

National Grid’s electric energy efficiency portfolio is designed to bring value to customers and achieve REV core policy outcomes through energy efficiency. Specifically, the Company’s electric portfolio enhances customer engagement across market sectors, increases reduction of greenhouse gas (“GHG”) emissions, animates markets through partnerships with third parties, and increases system efficiency through peak load reduction. National Grid’s electric energy efficiency portfolio is designed to help customers achieve efficiency improvements prior to

⁵ Case 15-M-0252, *et al.*, In the Matter of Utility Energy Efficiency Programs, *et al.*, Order Authorizing Utility-Administered Gas Energy Efficiency Portfolios for Implementation Beginning January 1, 2016 (issued June 19, 2015).

adopting renewable resources in efforts to enable the “right-sizing” of supply-side distributed resources, augmenting fuel diversity and supporting increased system efficiency and resiliency.

CUSTOMER ENGAGEMENT

Education is a key component to developing informed energy market participants in New York. Providing customers with information and opportunities to take action are the tenets of the Company’s electric energy efficiency offerings. For mass market customers, awareness and understanding are the first steps to managing energy consumption. Mass market programs, whether for residential or small business, inform and direct customers to solutions. For larger C&I customers that face market pricing, combining a knowledge and understanding of market pricing with site-specific energy use is invaluable. Through its electric energy efficiency offerings, National Grid seeks to provide energy saving information and opportunities to all customer classes.

REDUCTION OF GREENHOUSE GAS EMISSIONS

National Grid has adopted GHG emission reductions as an additional portfolio performance metric to be monitored in association with its energy efficiency activities. The reduction of GHG emissions is a key element of the vision of the 2015 New York State Energy Plan issued June 25, 2015. National Grid will use nationally recognized standards to convert savings achieved through its electric energy efficiency programs into GHG emission reductions.

Animation of Markets Through Partnerships with Third Parties

National Grid will enhance its relationships with existing partners and develop new relationships to support the growth of market-based electric energy efficiency opportunities for its customers. The Company is poised to work collaboratively with the New York State Energy Research Development Authority (“NYSERDA”), new market players, and peer New York utilities in areas where electric and natural gas service territories overlap. A cooperative approach will include:

- Accelerate market animation;
- Provide comprehensive energy solutions for electric and gas customers;
- Reduce program costs thus benefitting our customer base;
- Increase customer participation and satisfaction; and
- Eliminate customer confusion as to who is serving the market.

Preliminary strategies are under development among and between National Grid, NYSERDA and peer utilities to identify the best market segments and offerings for these joint initiatives. These combined efforts will allow for streamlined program implementation and reduce market confusion.

NEW YORK’S ENERGY INDUSTRY IN TRANSITION

National Grid recognizes that New York is in the foundational stages of enabling the REV transformation. The role of new and diverse market players and the regulatory structures to support those roles are still under development. Flexibility to keep pace with the evolution of the regulatory process and the development of new customer offerings is imperative for success.

National Grid continues to support these efforts and will continue to be an active leader in enabling the advancement of the REV transition.

REV TRACK TWO REGULATORY REFORMS

National Grid recognizes that REV Track Two outcomes may impact the ability to execute on ETIPs as currently proposed. The annual submission of three-year ETIPs and incorporation into future Distributed System Implementation Plans (“DSIPs”) will allow for mid-course adjustments to the Company’s deployment of energy efficiency offerings.

REV DEMONSTRATION PROJECTS

As part of REV, National Grid and peer utilities have proposed demonstration projects to inform the functionality of Distributed System Platform Providers (“DSPs”). These projects seek to measure and predict customer response to programs and prices through models that demonstrate public and private opportunities.

National Grid filed its REV Demonstration Project proposals on July 1, 2015. These demonstration projects will test various hypotheses of models associated with system resiliency, community solar PV, DPS nodal interfaces, and customer convenience. These proposed REV Demonstration Projects have been designed for scalability across New York upon their success. Initial lessons from these projects are expected to be available within 12 to 18 months of implementation and will help inform and educate future refinements to National Grid’s electric ETIP filings.

THE CLEAN ENERGY FUND

In May 2014, the Commission initiated the Clean Energy Fund (“CEF”) proceeding which combines the energy efficiency, renewable energy and technology and market development roles of NYSERDA under a single funding source, and addresses funding for the NY-Sun initiative and New York Green Bank (“NYGB”). National Grid recognizes the shift of NYSERDA’s role in the changing New York energy market which will continue to evolve with further development of REV and the role of utilities in REV. Flexibility to adjust to market developments will enable the REV transition.

MARKET TRANSFORMATION

The animation of markets will result in bringing new, market transformative products to market faster and more often. National Grid will work with market participants and NYSERDA to introduce emerging technologies to customers through the engagement channels of its electric energy efficiency portfolio is proposed in this ETIP.

AVAILABILITY OF FINANCING OPTIONS FOR CUSTOMERS

Whenever possible, National Grid will encourage customers to leverage resources to access alternative funding streams such as the NYGB, grants and awards through the United States Department Of Energy (“DOE”), United States Environmental Protection Agency, United States Housing and Urban Development, United States Department of Transportation, United States Department Of Justice, United States Department of Veterans Affairs and financing through

institutions in order to advance energy efficiency investments and/or behind-the-meter distributed energy resources (“DERs”).

NATIONAL GRID CUSTOMER RELATIONSHIPS

National Grid has a solid history of interacting with customers each day and month through multiple channels and touch points. Through this constant interaction and by conducting marketing research and leveraging market intelligence, the Company has developed a solid understanding of the diverse needs of its electric customers. Through primary research and syndicated studies, National Grid maintains a pulse on both the motivations and expectations of each of its customers.

The Company’s electric energy efficiency offerings are designed to serve the diverse needs of three broad market sectors: non-residential, residential, and multifamily. Within each of these sectors are sub-populations with unique needs which are addressed within National Grid’s electric energy efficiency portfolio.

NON-RESIDENTIAL

Large C&I customers have high energy demands and often have customized, specific energy solutions. Large business research shows that key priorities for C&I customers are ease of implementation, increased productivity, and financial savings. National Grid’s electric ETIP incorporates enhanced program designs reflecting site-specific needs for these customers, including the introduction of a “Self-Direct” option in 2017.

Small and medium businesses have more turnkey needs with ease of process and cost reassurance being key concerns when implementing energy efficiency measures. The electric energy efficiency portfolio provides a variety of delivery mechanisms and offerings combined with thoughtful research to support increased engagement and awareness opportunities for small and medium businesses.

RESIDENTIAL

Residential customers want to be informed energy consumers with pricing and solution options to help them better manage their energy use to achieve cost savings. National Grid has grown its residential electric energy efficiency offerings to enhance customer engagement, increase energy efficiency education, and provide customers more information on savings opportunities. While the Company’s residential offerings are designed to serve the mass market, they also address the landlord/tenant “split incentives” barrier and reach low to moderate income customers. National Grid will seek to collaborate with NYSERDA to avoid customer confusion and potential overlap of services for low income customers.

MULTIFAMILY

Multifamily customers are served by sector-specific electric energy efficiency offerings as well as qualifying non-residential and residential offerings. Along with multifamily direct-install opportunities, National Grid’s residential engagement tools will help breach the “split-incentive” barrier for renters by providing energy saving tips that are within their control. Additional savings opportunities can be achieved through qualifying non-residential and residential offerings.

National Grid believes in the importance of building customer engagement and participation through awareness. The Company has developed a balanced, forward-thinking portfolio of energy efficiency offerings for all customers to support the Commission’s vision under REV. National Grid will provide customers with positive, cohesive experiences in order to drive market-based solutions and help support customer awareness and pursuit of energy efficiency opportunities.

SELF-DIRECT PROGRAM

National Grid will implement a self-direct program as described in the REV Track One Order by January 2017. The program design will be informed by the Self-Direct Program Guidelines (“CE-03”) which is expected to be filed by DPS Staff by August 3, 2015. National Grid has participated in the development of these guidelines through its involvement with the Self-Direct Subcommittee. The Company anticipates that its self-direct program will be funded through resources allocated to its Electric Commercial & Industrial Program.

MARKETING OVERVIEW

There are a number of different energy saving measures customers can implement to make things that matter to them in their homes, buildings and businesses better. National Grid’s marketing and outreach will be aimed at reaching customers in the communities where they work and live and connecting to what matters to them most. We will begin with building awareness and interest through mass media advertising such as radio, print and outdoor advertising. This will be supported by digital, direct mail, bill inserts, email, website, social media and other grassroots tactics such as local events and sponsorships in order to drive participation.

According to “Customer Impact Report: Energy Efficiency Programs and Awareness” by JD Power⁶, the higher level of awareness customers have the more likely they are to participate in energy efficiency programs. Additionally, the more customers participate with their utility company the higher their satisfaction ratings.

National Grid’s marketing theme is aimed at generating awareness and driving participation by communicating to our electric customers in a consistent and clear manner which shows understanding of their unique needs. The Company will leverage customer intelligence and usage profiling information gained through research to deliver targeted, relevant information to each customer segment.

⁶ JD Power, “Customer Impact Report: Energy Efficiency Programs and Awareness,” 2014, pg. 4.

B. ELECTRIC BUDGET AND TARGET SUMMARY

The following tables provide the budgets and targets of the offerings with National Grid's electric ETIP.

TABLE: THREE-YEAR ELECTRIC BUDGETS

ELECTRIC PORTFOLIO	2016	2017	2018
<i>Non-Residential Sector</i>			
Electric C&I Program			
Incentives & Services	\$15,022,711	\$18,127,172	\$19,016,855
Program Implementation*	\$3,179,319	\$4,376,794	\$5,129,445
Total Budget	\$18,202,031	\$22,503,966	\$24,146,299
Electric C&I New Construction & Major Retrofit Program			
Incentives & Services	\$0	\$3,200,000	\$6,400,000
Program Implementation*	\$0	\$134,200	\$206,827
Total Budget	\$0	\$3,334,200	\$6,606,827
Electric Small Business Services			
Incentives & Services	\$13,907,501	\$15,444,628	\$15,886,614
Program Implementation*	\$578,306	\$664,022	\$683,765
Total Budget	\$14,485,807	\$16,108,650	\$16,570,379
Electric Small Business Engagement & Efficiency Platform			

ELECTRIC PORTFOLIO	2016	2017	2018
Incentives & Services	\$0	\$750,000	\$2,139,779
Program Implementation*	\$0	\$101,050	\$117,676
Total Budget	\$0	\$851,050	\$2,257,455
LED Street Lighting			
Incentives & Services	\$0	\$1,500,000	\$1,933,625
Program Implementation*	\$0	\$132,100	\$152,348
Total Budget	\$0	\$1,632,100	\$2,085,973
<i>Residential Sector</i>			
Electric Residential Engagement Program			
Incentives & Services	\$7,175,000	\$6,758,000	\$6,909,000
Program Implementation*	\$40,000	\$65,325	\$75,499
Total Budget	\$7,215,000	\$6,823,325	\$6,984,499
Electric Residential Efficiency Platform			
Incentives & Services	\$1,727,687	\$2,257,223	\$2,608,786
Program Implementation*	\$523,000	\$795,800	\$947,223
Total Budget	\$2,250,687	\$3,053,023	\$3,556,009
Electric Residential Consumer Products & Recycling			
Incentives & Services	\$421,040	\$550,089	\$635,765

ELECTRIC PORTFOLIO	2016	2017	2018
Program Implementation*	\$1,027,598	\$1,420,625	\$1,669,380
<i>Total Budget</i>	<i>\$1,448,638</i>	<i>\$1,970,714</i>	<i>\$2,305,144</i>
<i>Multifamily Sector</i>			
Electric Multifamily Program			
Incentives & Services	\$900,777	\$1,176,865	\$1,360,162
Program Implementation*	\$148,297	\$261,250	\$318,426
<i>Total Budget</i>	<i>\$1,049,074</i>	<i>\$1,438,115</i>	<i>\$1,678,588</i>
<i>Total Portfolio</i>			
Total C&I Programs	\$32,687,838	\$44,429,966	\$51,666,933
Total Residential Programs	\$10,914,325	\$11,847,061	\$12,845,653
Total Multifamily Programs	\$1,049,074	\$1,438,115	\$1,678,588
Portfolio Administration	\$4,247,427	\$5,922,284	\$7,214,697
Portfolio EM&V	\$2,559,230	\$3,346,931	\$3,861,580
<i>Total Electric Portfolio Budget</i>	<i>\$51,457,894</i>	<i>\$66,984,357</i>	<i>\$77,267,450</i>

* Internal sales labor included

The Program Administration budget category is defined to include all portfolio-level (non-program specific) costs other than portfolio EM&V costs or labor costs of utility employees that are recovered through the Company’s base rates.⁷ Costs included in Portfolio Administration include, but are not limited to, staff salaries, employee benefit costs, exclusive of pension and other post-employment benefits (“OPEB”), company overhead (*e.g.*, supplies, computer and communication equipment, staff training and industry related sponsorships and memberships), program literature, advertising, promotion, internal and external communication and all forms of media such as direct mail, print, radio, television, and internet. However, as employee pension and OPEB, are currently recovered through the Company’s base rates, such costs are not reflected in the Program Administration budget category or the energy efficiency portfolio budgets. The program administration does not reflect expected changes beginning in 2017 when upon rate case approval, labor and benefits will be captured in base rates.

TABLE: THREE-YEAR ELECTRIC PRIMARY TARGETS

ELECTRIC PORTFOLIO - MWh	2016	2017	2018
<i>Non-Residential</i>			
Electric C&I Program	83,070	95,530	100,307
Electric Commercial & Industrial New Construction & Major Retrofit	0	10,667	21,333
Electric Small Business Services	61,869	68,056	70,098
Electric Small Business Engagement & Efficiency Platform	0	10,714	30,568
LED Street Lighting	0	3,750	4,833
<i>Residential Sector</i>			
Electric Residential Engagement Program	74,979	87,721	90,827
Electric Residential Efficiency	8,116	10,551	12,133

⁷ See CE-02: ETIP Guidance, New York State Department of Public Service - Office of Clean Energy, May 1, 2015.

ELECTRIC PORTFOLIO - MWh	2016	2017	2018
Platform			
Electric Residential Consumer Products & Recycling	13,107	15,073	15,827
<i>Multifamily Sector</i>			
Electric Multifamily Program	5,822	6,659	7,030
<i>Total Electric Portfolio</i>			
<i>MWh Total</i>	<i>246,963</i>	<i>308,721</i>	<i>352,957</i>

ADDITIONAL METRICS

In the REV Track One Order 2016 electric energy efficiency budgets and targets are authorized at 2015 levels. Electric utilities are to propose budgets and metrics for the remaining years of the 2016-2018 cycles. National Grid proposes to track a number of additional metrics to include: reduction of GHG emissions, peak electric reduction, lifetime electric energy savings, and engagement metrics. GHG emission reductions should be calculated based on an industry standard. Additionally, further discussion on defining electric peak reduction as system or local is warranted. The Company also recognizes that increased engagement activities may erode lifetime energy savings achieved under traditional resource acquisition energy efficiency programs, and that metrics valuing engagement will help measure the importance of such activities. Engagement metrics may be related to web activity, content of messaging, or uplift to traditional programs attributable to engagement tools.

C. ELECTRIC FORECASTED PORTFOLIO-LEVEL ACTIVITY

The following tables reflect the forecasted timing of program year expenditures and target achievements, which include expected levels of encumbered spending and committed savings associated with the 2016-2018 portfolios. Spending and achievement lags can be associated with natural program delivery lag and Evaluation, Measurement & Verification (“EM&V”) activities.

TABLE: ELECTRIC FORECASTED PORTFOLIO EXPENDITURES

Budgets (Electric)	Forecasted Expenditures			
	2016	2017	2018	2019
Proposed 2016	\$48,506,428	\$1,555,033	\$1,391,922	\$4,512
Proposed 2017		\$61,123,516	\$2,631,377	\$2,505,941
Proposed 2018			\$68,834,947	\$3,523,755
<i>Total Electric Portfolio</i>	<i>\$48,506,428</i>	<i>\$62,678,548</i>	<i>\$72,858,246</i>	<i>\$6,034,208</i>

Tables represent forecasted expenditures and achievements expected to be encumbered and savings expected to be committed at the end of the program year and are reflected in the future year in which funds are anticipated to be expended and savings are anticipated to be acquired.⁸ The tables do not reflect any provision for the Self-Direct Program commencing in 2017.

⁸ ETIP Guidance, May 1, 2015

TABLE: FORECASTED ELECTRIC PORTFOLIO ACHIEVEMENTS (PER METRIC)

Targets (MWh)	Forecasted Achievements			
	2016	2017	2018	2019
Proposed 2016	238,434	6,857	1,640	32
Proposed 2017		291,906	10,173	4,209
Proposed 2018			328,629	12,873
Total Electric Portfolio	238,434	298,762	340,441	17,115

D. ELECTRIC FUNDING

The proposed annual distribution of unspent EEPS 1 and EEPS 2 funds, to reduce future collections necessary to fund proposed 2016-2018 energy efficiency portfolio budgets, is shown in the table below. Unspent EEPS 1 funds are calculated using Commission-authorized budgets and include recovery from the Commission's March 4, 2015 Order Resolving Gas and Electric Energy Efficiency Matters⁹ and are net of utility EEPS funds transferred to the New York Green Bank.^{10 2} EM&V funds are forecasted amounts and will also reduce future collections to fund proposed 2016-2018 energy efficiency portfolio budgets. An EE Tracker will be established as the volumetric surcharge mechanism similar to the current SBC surcharge.

TABLE: EXPECTED SOURCES OF FUNDS FOR FUTURE ELECTRIC PROGRAMS

Source	2016	2017	2018
Unspent EEPS 1	\$5,615,636	\$5,615,636	\$5,615,636
Unspent EEPS 2	\$0	\$0	\$0
Unspent EEPS EM&V	\$1,264,783	\$1,264,783	\$1,264,783

⁹ Case 07-M-0548, *et al.*, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio, et al.*, Order Resolving Gas and Electric Energy Efficiency Matters (issued March 4, 2015).

¹⁰ Case 13-M-0412 – Petition of New York State Energy Research and Development Authority, Order Establishing New York Green Bank and Providing Initial Capitalization (issued December 13, 2013).

EE Tracker Collections	\$44,577,476	\$60,103,939	\$70,387,031
Total Funding	\$51,457,894	\$66,984,357	\$77,267,450

E. ELECTRIC EVALUATION MONITORING AND VERIFICATION (EM&V)

The tables below outline the Company’s plan and schedule for all EM&V activities for 2016-2018. It identifies the information being sought, budget amounts, and the estimated timeframe by which EM&V will be obtained to support the overall program cycle. Rather than limiting evaluations to traditional studies such as process and impact evaluations, the plan also looks at the market as a whole, in order to maximize feedback to the energy efficiency program. The plan recognizes the potential opportunity to perform some of the work collaboratively across the state of New York, and will use local consulting firms and contractors wherever possible. The plan incorporates work needed to assist in maintaining the New York State Technical Reference Manual (“TRM”).

TABLE: ELECTRIC THREE-YEAR EM&V ACTIVITY SCHEDULE

EM&V Activity		Expected Start Date	Expected Completion Date	Cycle Year Informed
Electric Non-Residential – Large Commercial and Industrial				
1	Impact/Process/Net-to-Gross (“NTG”)/Market Effects Studies	2016	2018	2016 to 2018
2	Market and Technical Potential	2017	2017	2017 to 2018
3	Comprehensive Top Tier Customers and Self-direct EM&V	2016	2018	2016 to 2018
Electric Non Residential Small Business				
4	Impact/Process/NTG/Market Effects/Persistence Studies	2016	2018	2016 to 2018
Electric Non Residential General (*Electric and Gas)				
5	Technology & Market Potential and Cost & Savings Analyses	2016	2018	2016 to 2018
6	C&I M&V Activities	2016	2018	2016 to 2018
7	NYS Tech Manual Activities and Code Change Effects	2016	2018	2016 to 2018

EM&V Activity		Expected Start Date	Expected Completion Date	Cycle Year Informed
8	BCA Framework Activities *	2016	2018	2016 to 2018
9	C&I New Construction and Load Shape Management EM&V	2017	2018	2017 to 2018
Electric Residential (*Electric and Gas)				
10	Market Assessment	2016	2018	2016 to 2018
11	Appliance Recycling Evaluation	2016	2016	2016 to 2018
12	Behavioral Program Process & Impact Evaluation*	2016	2017	2016 to 2018
13	Customer Profile Study*	2017	2018	2017 to 2018
14	NYS Tech Manual, Benefit/Cost, Measure Costs, & Savings Impact Activities*	2016	2018	2016 to 2018
15	Supply Side Population Assessment*	2017	2017	2017 to 2018
16	Measurement & Verification (M&V)* Activities	2016	2018	2016 to 2018
Electric Multifamily (*Electric and Gas)				
17	Process & Impact Evaluation*	2016	2017	2016 to 2018

Table: Electric EM&V Activity Expenditures

EM&V Activity		2016	2017	2018
Electric Non-Residential – Large Commercial and Industrial				
1	Impact/Process/NTG/Market Effects Studies	\$ 370,000	\$ 560,000	\$ 600,000
2	Market and Technical Potential	\$ 0	\$ 120,000	\$ 0
3	Comprehensive Top Tier Customers and Self-direct EM&V	\$ 50,000	\$ 200,000	\$ 200,000
Electric Non-Residential Small Business				
4	Impact/Process/NTG/Market Effects/Persistence Studies	\$ 180,000	\$ 100,000	\$ 350,000
Electric Non-Residential General (*Electric and Gas)				
5	Technology & Market Potential and Cost & Savings Analyses	\$ 130,000	\$ 110,000	\$ 130,000
6	C&I M&V Activities	\$ 550,000	\$600,000	\$ 600,000
7	NYS Tech Manual Activities and Code Change Effects	\$ 100,000	\$ 50,000	\$ 50,000
8	BCA Framework Activities *	\$ 50,000	\$ 25,000	\$ 25,000
9	C&I New Construction and Load Shape Management EM&V	\$ 0	\$ 50,000	\$ 135,000
Electric Residential (* Electric and Gas)				
10	Market Assessment	\$ 120,000	\$ 140,000	\$ 230,000
11	Appliance Recycling Evaluation	\$ 100,000	\$ 0	\$ 0
12	Behavioral Program Process & Impact Evaluation*	\$ 26,079	\$ 24,265	\$ 0
13	Customer Profile Study*	\$ 0	\$ 48,531	\$ 49,908

EM&V Activity		2016	2017	2018
14	NYS Tech Manual, Benefit/Cost, Measure Costs, & Savings Impact Activities*	\$ 166,905	\$ 247,507	\$ 284,476
15	Supply Side Population Assessment*	\$ 0	\$ 36,398	\$37,431
16	Measurement & Verification (M&V)* Activities	\$ 52,158	\$ 48,531	\$ 99,816
Electric Multifamily (*Electric and Gas)				
17	Process & Impact Evaluation *	\$ 60,384	\$69,953	\$ 0
Total NMPC Electric EM&V Budget		\$ 1,955,526	\$ 2,430,185	\$ 2,791,631

Below is a brief description of each of the EM&V activities to be conducted for National Grid's electric energy efficiency programs:

1. Impact/Process Studies/net-to gross ("NTG")/Market Effect Studies: impact and some focused process evaluation of sampled sites. Mix of onsite, phone survey, documentation reviews, and perhaps limited billing analysis. Information sought: accuracy of electric energy savings, demand savings, peak demand, review of processes followed, effectiveness of those processes and recommendations. Different measure groups would be studied each year. A mix of various process studies could include telephone surveys and/or interviews, focus groups and site visits as needed. Information sought: effectiveness of program designs, marketing/outreach, implementation issues, and customer satisfaction, analysis of free rider-ship, spillover, and any market effects due to the electric energy efficiency programs.
2. Market and Technical Potential: Traditional market and technical potential studies to help inform electric program design.
3. Comprehensive Top Tier Customers and Self-direct EM&V: Comprehensive analysis of the top tier customers and potential self-direct customers. The analyses could include process evaluations focused on this customer segment, marketing/sales effectiveness, technical and measure potential for these customers as well as customer feedback.
4. Small Business Impact/Process/NTG/Market Effect/Persistence Studies: Impact evaluation and some focused process evaluation of sampled sites. Mix of onsite, phone survey, documentation reviews and perhaps limited billing analysis. Information sought: accuracy of electric energy savings, demand savings, peak demand, review of processes followed, effectiveness of those processes and recommendations. Different measure groups would be studied each year. Impact and some focused process evaluation of sampled sites. A mix of onsite, phone survey, documentation reviews and perhaps limited billing analysis. Information sought: accuracy of electric energy savings, demand savings, peak demand,

review of processes followed, effectiveness of those processes and recommendations. These studies would be focused on area effects of the program. Evaluation of the persistence of electric energy efficiency measures at previous participants.

5. Technology Market Potential, Cost and Savings Analyses: Review and analysis of the market and technology potential of various electric energy efficiency measures including any cost and/or savings research that is needed.
6. M&V Activities: Various M&V activities that will help improve program activities such as commissioning, peer reviews, more thorough metering and verification.
7. TRM and Code Change Effects: Analysis of state, federal and other energy code or appliance standard changes on the program designs and/or savings. Various technical Manual support activities as needed.
8. BCA Framework Activities: Various BCA Framework support activities as needed. Possible evaluation of ancillary benefits of electric energy efficiency measures. Information sought: quantification of various ancillary benefits such as power quality, gas savings, water/other savings
9. C&I New Construction and Load Shape Management EM&V.
10. Residential Market Assessment: The objective of this effort is to provide ongoing monitoring of the evolving residential market for a technology such as lighting or other. This study will use a multi-task approach that may include: consumer surveys, on-site saturation visits in National Grid's service territory, on-site saturation visits in two comparison areas, shelf-stocking surveys, lighting saturation surveys, supplier interviews, and development of a market adoption model. This assessment will build upon the information obtained in the statewide Residential Baseline Study conducted by NYSERDA.
11. Appliance Recycling Evaluation: The overall objective of this study is to review the savings assumed from the recycling efforts of the electric residential appliance program and measure the part use factor. The study could look at primary units as well since this has been an item of discussion in the NYS Technical Manual Subcommittee ("TMSC").
12. Behavioral Program Process & Impact Evaluation: Surveys and in-depth interviews will be used to measure actions customers are taking that are driving on-going electric savings, assess the value of the reports in generating persistent savings, and determine if customers are interested in additional program offerings or improvements.
13. Residential Customer Profile Study: The objective of this study is to compile customer and participation data on residential customers to provide insights into levels of participation, energy consumption, and energy savings.
14. TRM, Benefit/Cost, Measure Costs, & Savings Impact Activities: Many activities will be conducted to inform the TRM and Benefit Cost Analysis. One aspect of these activities may examine baseline conditions of the market for LED lighting in New York. Another component of the study will seek to understand the cost value, both full and incremental, of the efficient measure versus the baseline measure, existing or new. Another objective is to quantify NEIs that are associated with current or future program measures. In addition, a standard battery of questions to consistently and accurately assess participant free ridership

and non-participant spillover will be developed. This study will provide an update to the avoided energy supply costs (“AESC”) used by National Grid when conducting the benefit cost analysis of its program portfolio. The NY AESC values have not been updated since 2008. The effects of residential energy efficiency code changes will also be estimated.

15. Supply Side Population Assessment: The intent of this study would be to characterize the population of market actors that serve residential customers, and recruit market actors for possible participation in future EM&V efforts.

16. Residential M&V Activities.

17. Multifamily Process & Impact Evaluation: The objective of this study is to assess and monitor the current state of the electric Multifamily Program as a stand-alone offering, and to explore its evolution into an integrated offering with the commercial side through an ongoing examination of barriers, prior recommendations, program operations, and customer experience. Also, conduct surveys and in-depth interviews to determine if customers are interested in additional program offerings or program improvements.

Please note that for all the above residential activities, numbered 10 to 17, National Grid will consider the potential to conduct studies jointly with other program administrators in New York where applicable.

F. ELECTRIC BENEFITS COST ANALYSIS (BCA)

A benefit cost ratio at the portfolio level and for each electric program.

TABLE: THREE-YEAR ELECTRIC BENEFIT COST RATIO

ELECTRIC PORTFOLIO	2016	2017	2018
<i>Non-Residential Sector</i>			
Electric Commercial & Industrial Program			
Benefits	\$58,445,965	\$69,716,196	\$75,839,978
Costs	\$40,231,809	\$49,039,229	\$52,381,500
<i>Benefit Cost Ratio</i>	1.45	1.42	1.45
Electric Commercial & Industrial New Construction & Major Retrofit Program			
Benefits	\$0	\$5,819,534	\$12,075,970
Costs	\$0	\$7,681,833	\$15,297,045
<i>Benefit Cost Ratio</i>	N/A	0.76	0.79
Electric Small Business Services			
Benefits	\$35,293,622	\$40,422,161	\$43,261,438
Costs	\$21,978,200	\$24,443,806	\$25,160,525
<i>Benefit Cost Ratio</i>	1.61	1.65	1.72
Electric Small Business Engagement & Efficiency Platform			
Benefits	\$0	\$1,383,462	\$4,112,122

Costs	\$0	\$1,393,463	\$3,637,922
<i>Benefit Cost Ratio</i>	N/A	0.99	1.13
LED Street Lighting			
Benefits	\$0	\$2,227,332	\$2,982,736
Costs	\$0	\$2,905,965	\$3,674,480
<i>Benefit Cost Ratio</i>	N/A	0.77	0.81
<i>Residential Sector</i>			
Electric Residential Engagement Program			
Benefits	\$7,543,096	\$9,107,690	\$9,732,448
Costs	\$7,991,780	\$7,627,592	\$7,844,850
<i>Benefit Cost Ratio</i>	0.94	1.19	1.24
Electric Residential Efficiency Platform			
Benefits	\$3,904,798	\$5,263,460	\$6,269,538
Costs	\$4,760,782	\$6,331,498	\$7,340,783
<i>Benefit Cost Ratio</i>	0.82	0.83	0.85
Electric Residential Consumer Products & Recycling			
Benefits	\$3,737,941	\$4,442,409	\$4,819,204
Costs	\$1,913,293	\$2,568,293	\$2,983,465
<i>Benefit Cost Ratio</i>	1.95	1.73	1.62
<i>Multifamily Sector</i>			

Electric Multifamily Program			
Benefits	\$2,922,821	\$3,462,142	\$3,782,238
Costs	\$1,999,336	\$2,680,525	\$3,077,592
<i>Benefit Cost Ratio</i>	1.46	1.29	1.23
Total Portfolio			
Total Benefits	\$111,848,244	\$141,844,386	\$162,875,671
Total Costs	\$78,875,200	\$104,672,203	\$121,398,162
<i>Portfolio Benefit Cost Ratio</i>	1.42	1.36	1.34

G. DESCRIPTIONS OF OFFERINGS IN THE ELECTRIC PROGRAMS

This section provides description of each of National Grid’s electric energy efficiency offerings for 2016 - 2018. The program descriptions include the elements prescribed in the ETIP Guidance document. The Company’s electric energy efficiency offerings include:

- Electric Commercial & Industrial Program;
- Electric Commercial & Industrial New Construction & Major Retrofit Program;
- Electric Small Business Services;
- Electric Small Business Engagement & Efficiency Platform (online assessment and e-commerce);
- LED Street Lighting;
- Electric Residential Engagement Program (behavioral initiative);
- Electric Residential Efficiency Platform(online assessment and e-commerce); and
- Electric Residential Consumer Products & Recycling.

ENERGY EFFICIENCY MARKETING APPROACH

National Grid will promote its electric energy efficiency opportunities to all customers through a single cohesive campaign incorporating the message: “*Energy efficiency makes the things that matter better.*” While designed to have a common look and feel, this message will be tailored to each customer segment, incorporating insights and learnings specific to each market. National Grid’s marketing and outreach will reach customers in the communities where they work and live and connect them to the value of energy efficiency

Marketing and customer outreach will embody a simple, understandable and streamlined messaging. The Company will continue to build awareness and interest in electric energy efficiency through mass media advertising such as radio, print and outdoor advertising. This will be supported by digital, direct mail, bill inserts, email, website, social media and other grassroots tactics such as local events and sponsorships in order to drive participation. Through targeted messages and a multi-tiered media strategy, National Grid will engage customers with tailored, targeted and actionable information. The Company will leverage customer intelligence as well as usage information obtained through research to deliver targeted, relevant information to each customer segment.

The National Grid marketing and outreach strategy will:

- Provide a clear and easy path for contacting National Grid;
- Communicate compelling and relevant messages, clearly describing the benefits of electric energy efficiency with customer-focused language explaining how energy efficiency can make what matters most to our customers better;

- Deploy targeted marketing, demonstrating the understanding unique motivational differences of customer markets;
- Use diverse channels with consistent messages to reach customers and generate awareness, trust and interest;
- Ensure coordinated strategies that work together to achieve a consistent customer experience and increase knowledge and awareness of the electric energy efficiency programs, ultimately leading to higher participation rates; and
- Reach out to our customers directly through our sales and account development groups, and through our implementation vendors, to help our customers with their electric energy efficiency decisions

PROPENSITY MODELING

National Grid has developed highly sophisticated propensity modeling tools that predict the likelihood of customers to participate in electric energy efficiency programs. The tools have been successfully deployed in New York to identify and specifically target customers that are most likely to participate in energy efficiency programs. The models also identify customers who have not participated previously and are less likely to adopt electric energy efficiency measures. Through the use of these tools, the Company is able to develop strategies to engage hard-to-reach markets and enable participation by addressing barriers.

During the next three years, the Company will continue to use these tools to identify underserved customers, and target customers with a higher propensity to adopt measures. These tools, along with Company research addressing customer motivation, priorities and expectations, enable National Grid to be strategic and cost efficient in its outreach and education efforts.

COORDINATED PROGRAM DELIVERY

National Grid currently delivers electric and gas energy efficiency programs in a coordinated manner within the Company's dual fuel service territory. This approach will continue, and will be expanded to proactively coordinate with the other utilities where service territories overlap in efforts to best serve our customers. The Company will also be working with NYSERDA to deliver robust offerings that leverage the knowledge gained in their upstream activities and research of emerging technologies. National Grid views its relationships with peer utility program administrators and NYSERDA as partnerships in delivering valued market-based solutions to customers.

PROGRAM ELIGIBILITY

Per the ETIP Guidance document, current SBC/EEPS/RPS exemptions will be continued utilizing a similar surcharge collection mechanism called the EE Tracker. As a result, customers eligible to participate in the electric energy efficiency programs are those that contribute to the EE Tracker.

SELF-DIRECT PROGRAM

National Grid will implement a self-direct program as described in the REV Track One Order by January 2017. The program design will be informed by the Self-Direct Program Guidelines (CE-03) which will

be filed by DPS Staff by August 3, 2015. National Grid has participated in the development of these guidelines through its involvement with the Self-Direct Subcommittee. The Company anticipates that its self-direct program will be funded through resources allocated to its Electric Commercial & Industrial Program.

Descriptions of electric energy efficiency program offerings follow:

ELECTRIC NON-RESIDENTIAL PROGRAMS

ELECTRIC COMMERCIAL & INDUSTRIAL RETROFIT PROGRAM

Program Design

The Electric Commercial and Industrial (C&I) Retrofit program (the “program”) provides technical services along with prescriptive and custom incentives to encourage the installation of a wide variety of energy-efficient electric measures to upgrade everything from building systems to manufacturing processes. Program performance is continually monitored, and offerings and incentive levels are adjusted to reflect technological advancements and changes in the market place.

In addition to financial incentives, the program includes technical assistance services. Scoping studies and engineering analyses assist customers in identifying a variety of electric efficiency measures. Often these studies encourage and support customers in developing multi-year plans to improve their buildings and processes by incorporating energy projects into their annual budget planning process. Customers who undertake these multi-year plans are the ones that have moved beyond the easy, less expensive prescriptive measures and who are looking to achieve deeper savings through implementing custom projects.

National Grid is looking to enhance its current electric C&I program beginning in 2016 with new measures, technologies, and offerings to help increase energy efficiency of equipment via regular maintenance and tune-ups. The Company is also looking for new and innovative way to engage federal agencies and large C&I customers through strategic partnerships that foster long term energy planning to achieve comprehensive benefits. National Grid is committed to creating innovative ways to provide customers access to data and information. Using big data and analytics to understand customers’ needs and their buildings, the Company will be able to more effectively target electric energy efficiency offerings to the customer.

New Enhancements:

Utility Energy Service Contract (“UESC”) - The United States Department of Energy (“DOE”) has established Utility Energy Service Contracts with approximately 150 electric, gas and water utilities across the county to help federal agencies implement energy-efficiency, renewable-energy and water-efficiency projects. National Grid is an active partner in this program providing project management services to implement energy efficiency measures at federal, state and local government facilities. The UESC program allows governments to expedite the identification and installation of energy saving measures in their facilities.

Strategic Energy Management Plans (“SEMP”) - This initiative provides customers with an

ELECTRIC COMMERCIAL & INDUSTRIAL RETROFIT PROGRAM

opportunity to conduct a multi-year approach to planning energy efficiency opportunities that map more closely to their budgeting process. SEMP creates an opportunity to go deeper into a customer's operations and reach the technical and achievable savings potential that comes from master planning and execution over a multi-year design and construction process. This strategy will make it possible to give customers the tools to address the technical, financial, and operational barriers to achieving deeper and broader savings, helping them significantly reduce costs and remain competitive in their business environments.

Customer Engagement through Load Shape Management and Investment Package - To engage the largest C&I customers, National Grid will explore methods to educate customers on their electric load shape to help identify opportunities for energy and peak reduction. All National Grid customers with peak demands of 250 kW or greater have interval meters which capture the energy data needed to generate a unique load shape profile for each customer. The energy analysis will allow customers to make more informed energy management decisions as they progress from a scoping study to making the business case for energy efficiency investment in their facilities. The load shape analysis and measure approach may be customized for specific market segment such as manufacturing, healthcare, college and universities, and retail buildings.

Self-Direct Initiative– National Grid will introduce a Self-Direct program in 2017 to allow large C&I customers to self-direct their energy efficiency EE Tracker contributions toward their unique energy management investments. All savings associated with these projects will count toward the utility's goals. National Grid is a member of the statewide committee to develop guidelines for the Self-Direct program, working with Staff, large C&I customers, and other utilities.

National Renewable Energy Laboratory (“NREL”) Market Potential - National Grid proposes to leverage big data coupled with advanced analytics to gain valuable market insights to enable the targeting of commercial customers with optimal energy-efficiency program offerings. National Grid is partnering with NREL to build a four-stage process (Figure 1) to understand the energy efficiency potential of its customers', enable its Sales and Marketing Team to best serve its customers' needs, set energy efficiency program goals from a more informed standpoint, and aid in new program development.

ELECTRIC COMMERCIAL & INDUSTRIAL RETROFIT PROGRAM

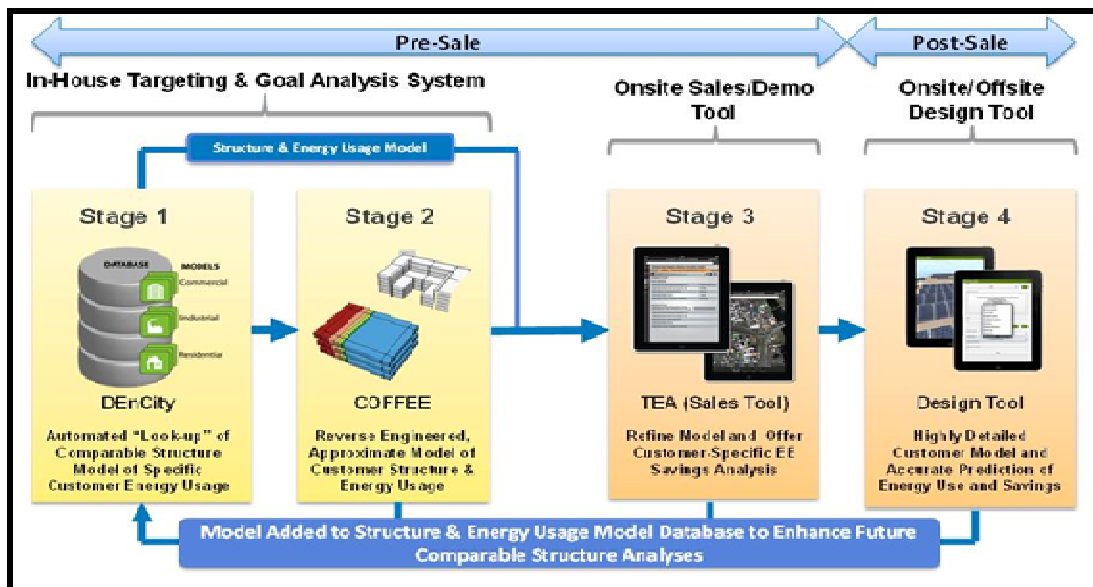


Figure 1

National Grid's initial efforts revolve around Stage 2 of Figure 1, which entails the reverse engineering of existing commercial buildings to understand how the buildings are configured from an energy use stand point. A significant amount of external data, advance analytics, and on demand high performance analytical computing that is cloud based, is being leveraged to enable Stage 2. National Grid intends to leverage open source tools to the fullest in the development of this environment, to minimize development costs.

Once the development of this suite of tools is complete, the Company's Sales and Marketing Team will have access to energy performance insight into buildings and an optimized energy efficiency program offering before the first visit to a customer's facility, reducing the time needed on-site to develop an optimal energy efficiency plan for the customer. The process will have a feedback loop to continuously improve the tools with insights learned from each customer interaction.

This research will provide National Grid's sales and marketing team with energy performance insight into customers' buildings allowing an optimized energy efficiency plan to be developed before the first visit to a customer's facility. This will reduce the time needed on-site to meet the customer's energy efficiency needs.

Alignment with REV - Energy reports, online assessments and load shape education will increase customer engagement. Higher incentives for emerging technologies will accelerate customer acceptance of innovative equipment, and support market transformation. Multi-year SEMP's identify deeper savings and may stimulate the adoption of emerging technologies which support market transformation.

ELECTRIC COMMERCIAL & INDUSTRIAL RETROFIT PROGRAM

Delivery Method

Measures Promoted: Prescriptive measures are offered for more common, widely applicable technologies with predictable energy savings, while the custom approach addresses unique opportunities related to a specific process or unique building operations.

Prescriptive incentives are available for measures that provide predictable energy savings in virtually all applications where they replace a similar technology of lesser efficiency. National Grid offers prescriptive incentives for a long list of electric technologies including, but not limited to: lighting equipment and controls, energy management systems, and compressed air. This commodity-based path often serves as the customer’s initial exposure to the Company’s energy efficiency programs and may lead to more complex custom projects.

To identify and quantify custom opportunities, National Grid provides customers with expert technical assistance, using both in-house technical staff and subject matter experts drawn from a pool of prequalified expert private sector engineering consultants. To move customers to action once opportunities have been identified, the Company offers incentives designed to offset the cost of implementing the energy efficiency project. The overarching goal is to instill customer confidence in projections of project savings and the reliability of equipment performance, in order to make the financial investment attractive, and to provide a delivery process that makes the upgrade process as simple and seamless as possible.

Offerings will be continuously reviewed to ensure emerging technologies are incentivized at an appropriate level to encourage market acceptance. Incentives for products that have reached market saturation will be reduced and eliminated over a three-year period.

Implementation Strategy: The National Grid sales team and marketing staff engage C&I customers through one-on-one and group meetings with customers, networks of trade allies and trade associations, direct marketing and other channels, as appropriate.

Engagement efforts will focus on educating customers on their energy load shape and use patterns to identify opportunities to reduce energy waste and energy intensity.

Continuously Improve Delivery - National Grid continually seeks ways to better deliver services and incentives, to improve program reach into under-served markets, and to engage customers served in the past with new offerings to further improve the efficiency and performance of their buildings.

Evaluate Other States’ Programs - In an effort to continually improve the electric energy efficiency program, National Grid Strategy staff routinely reviews programs found in other jurisdictions to identify concepts that may be integrated into the New York offerings.

Research - National Grid reviews industry research, best practices, and conferenced proceedings as a way to bring the best technologies, information and developments to our customers. Organizations such as the American Council for an Energy Efficient Economy (“ACEEE”)

ELECTRIC COMMERCIAL & INDUSTRIAL RETROFIT PROGRAM

produce a wealth of useful studies and industry best practice reviews, and also publish and archive professional papers and presentations from their numerous conferences and study sessions. Similar studies are available from the DOE’s network of national research laboratories such as NREL; regional efficiency organizations, such as the Northwest Energy Efficiency Alliance (“NEEA”), and Northeast Energy Efficiency Partnerships (“NEEP”); and industry collaborations, like the Consortium for Energy Efficiency (“CEE”). Additional sources of thought leadership and information include the Rocky Mountain Institute (“RMI”), the Institute for Market Transformation (“IMT”), the New Buildings Institute (“NBI”) and E Source Companies LLC.

Develop - National Grid Customer Solutions Accelerator is an internal process which guides the development and in-market testing of innovative solutions to meet our customers’ diverse and evolving needs. New technologies and customer facing solutions are vetted by a National Grid committee of technical, strategy and executive staff. National Grid tests new innovative technologies and customer facing solutions by a staged development process from idea, concept, development, and finally in-market testing before introducing the technology to customers.

Delivery Mechanism: National Grid’s Strategic Sales Team is focused on the Company’s largest C&I customers in various sectors including industrial / manufacturing, hospitals and nursing homes, colleges and universities, municipal and state governments, to name a few. The Strategic Sales staff engages thousands of customers, community leaders and channel influencers to demonstrate how energy efficiency makes customer’s operations more competitive and profitable. National Grid’s Strategic Sales Team educates decision-makers on the energy and non-energy benefits (*e.g.*, improved productivity, reduced emissions, etc.) of their energy efficiency investments. Each Sales Team member connects customers with vendors and vendors with customers, thereby animating the market, and building relationships that lead to future energy projects.

In-house technical staff and external technical assistance firms (under contract with National Grid) prepare scoping studies and engineering analyses to identify and quantify energy savings and financial benefits of energy efficiency improvements for customers.

The Channel Sales Team works with small to mid-sized commercial customers and external vendors many of whom participate in National Grid’s Energy Solutions Partner (“ESP”) program. ESP vendors educate customers on energy efficiency savings and install efficiency measures with support from National Grid programs.

Quality Assurance/Quality Control

National Grid’s quality assurance measures include pre-inspections and post-inspections along with a Minimum Requirements Document used to determine whether the equipment and operational assumptions are implemented as designed. National Grid randomly selects up to 10% of the completed prescriptive incentive applications for post-inspection. Such inspections

ELECTRIC COMMERCIAL & INDUSTRIAL RETROFIT PROGRAM
confirm the incented equipment is installed and operational. Custom projects with incentives of \$10,000 or less are randomly selected for post-inspections. All custom projects with incentives greater than \$10,000 require a post-inspection.
Target Market
<p>Eligibility: This program targets non-residential customers with average monthly load greater than 110 kW that pay into the EE Tracker. Non-residential accounts with loads less than or equal to 110 kW will be eligible to participate if their energy efficiency needs are outside the scope of National Grid’s Electric Small Business Services Program.</p> <p>The Company may adjust the targeted threshold based on market conditions.</p> <p>Forecasted Participation: 1,200</p>
Three Year Strategy
<p>2016: Introduction of emerging technologies into National Grid’s offerings to large C&I customer. Seek to collaborate with NYSERDA as their role under the CEF evolves.</p> <p>Increase customer engagement through the introduction of load shape education, SEMP and UESCs.</p> <p>2017: Introduce Self-Direct Program initiative for large C&I customers.</p> <p>2018: Apply the findings from National Grid / NREL collaboration to use data analytics and reverse engineering of existing commercial buildings to understand the energy efficiency potential of individual C&I customers.</p>
Incentives & Services and Implementation Budgets, and Performance Targets
Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

ELECTRIC NON-RESIDENTIAL NEW CONSTRUCTION AND MAJOR RETROFIT PROGRAM

Program Design

National Grid’s Electric Non-Residential New Construction and Major Retrofit Program (this “program”) is designed for C&I and institutional customers who are building high performance new facilities or for major renovation of existing facilities, to promote high performance building design, equipment selection and building operation.

This program will offer technical assistance, design assistance, owner incentives and design team incentives based on project energy savings performance to building beyond the current energy code baselines. There are two core objectives. The first objective is to offer energy efficiency services and incentives to developers of new buildings and owners of existing buildings to influence design and construction of the building to be more energy efficient and exceed standard code. The second objective is to encourage customers purchasing new energy-consuming equipment, or replacing equipment that has reached end of useful life or failed to choose the most efficient equipment within each product category. This program applies to existing buildings and equipment whenever the electric energy efficiency improvement triggers code compliance.

Influencing the design and construction of new buildings to make them more efficient has long term energy impacts at a fraction of the cost and allows for the greatest savings potential and also greatest value to the owner and occupants of these buildings.

New buildings and major renovations offer an opportunity to increase efficiency dramatically for a relatively modest cost and add value to the building for owners and building occupants. Engaging with the design team at the conceptual stage of design, when decisions like orientation of building, day-lighting design, envelope design, and equipment selection are being made can shape the energy cost of a building for its entire life, which can be 50 to a 100 years. The services provided through this program will help lower building operating and maintenance costs throughout its entire life cycle while increasing comfort, health, and productivity for building occupants.

Program Participation: National Grid will offer two approaches for ground-up new construction or major renovation projects. Assistance can range from simple plan review and energy efficiency upgrade recommendations to complete technical assistance studies performed by energy engineering firms.

Whole Building Approach: This approach is designed for ground-up new construction or major renovation projects where all energy saving opportunities including shell, fenestration, equipment and system interactions are taken into consideration. National Grid supports the design team from conceptual design through the completion of the project with technical assistance and support which allows building owners and their design teams to aggressively pursue high-efficiency options that fully integrate building envelope, lighting and mechanical

ELECTRIC NON-RESIDENTIAL NEW CONSTRUCTION AND MAJOR RETROFIT PROGRAM

systems to produce a building that is as efficient as current technology and design techniques allow. Incentives provided by this program cover a significant portion of the additional design, modeling, and equipment costs required to turn an average building into an exemplary one.

The Systems Approach: This approach is designed for individual measures or multiple measures for buildings undergoing a remodel or a change in space use. Customers who choose this approach will receive *prescriptive* incentives for each measure for which one exists, or *custom* incentives for site- or use- specific measures.

Sustainable Office Design: As part of this program National Grid will offer a lighting initiative for office buildings owners, tenants and design professionals, called the Sustainable Office Design (“SOD”). This is an offering under the *Systems Approach*. This initiative will promote high-performance office lighting for quick turnaround office fit-outs.

The objective of SOD is to capture the energy savings potential that becomes available in the period when office space is vacated by one tenant and refitted for occupancy by a new one (i.e., the tenant improvement (“TI”), process or when a new office building is constructed for tenant occupancy and is in the initial leasing phase (tenant fit-out). At least 20% of all energy used in commercial buildings is in office space and estimates show the average commercial office building could reduce its energy use by 20%.

New Enhancements: This program is a new offering for 2017-2018.

Alignment with REV: This program promotes building above code is a progressive path to the eventual goal of Zero Energy Ready (“ZER”) buildings.

The marketing efforts for this program include providing information to architects, engineers, contractors and owners on cutting edge energy efficient design and technology. Education and implementation of design and technology is the first step to creating value and transforming the market place and building environment.

Delivery Method

Measures Promoted: Prescriptive measures, custom measures, and comprehensive design solutions will lead to kWh savings per square foot that are promoted along with encouraging design charrettes, energy modeling, and technical assistance studies.

Implementation Strategy: National Grid will aggressively seek out and recruit owners and designers involved in the construction or major renovation of all non-residential buildings. This process requires multi-faceted strategies to determine new development and construction activities as well as when major renovations take place.

ELECTRIC NON-RESIDENTIAL NEW CONSTRUCTION AND MAJOR RETROFIT PROGRAM
<p>The challenge is to gain market intelligence from a myriad of sources so that program representatives can intersect with customers as early as possible in their process, preferably at the time when the fundamental design decisions that most impact future energy use are being made.</p>
Quality Assurance/Quality Control
<p>Post inspection of all projects prior to final payout of incentives.</p>
Target Market
<p>Eligibility: To be eligible for this program and services, projects:</p> <ul style="list-style-type: none"> • Must be at a point where design changes are feasible, preferably in the conceptual or schematic design phase; • Must be, or will become, a C&I customer of National Grid, and • Must be within defined parameters as any ground-up new construction building (including core and shell), existing building and tenant space going through major renovation, end of useful life equipment, and new equipment that requires compliance with the current code. <p>Target Market: All non-residential new construction, renovation, and addition projects in National Grid’s territory, as well as businesses replacing outmoded or failed equipment outside of a more comprehensive construction or upgrade project.</p> <p>This program has three focus areas markets:</p> <ol style="list-style-type: none"> 1. Ground-up new construction (including core and shell); 2. Major renovations or tenant fit-outs, and 3. End of useful life equipment replacement. <p>Participation: 600</p>
Offering Specific Marketing
<p>National Grid marketing efforts are aimed at generating awareness and driving participation by communicating to our Upstate New York green build environment in a consistent and clear manner which shows understanding of the unique needs of the space. The Company will be reaching new construction customers with advertising in targeted publications as well as through</p>

ELECTRIC NON-RESIDENTIAL NEW CONSTRUCTION AND MAJOR RETROFIT PROGRAM

industry associations and trade shows.

In order to most effectively reach the new construction customer base, National Grid will connect with trade allies such as architects, engineers, electricians and plumbing and heating contractors. The Company will explore opportunities with trainings, webinars, direct mail, email, telemarketing, and in industry publications and e-newsletters. Appropriate strategies to target various trade segments with appropriate value propositions will be used.

There will be a dedicated section to trade allies on the National Grid website which provides easy-to-find links to resources, solutions and incentive forms.

The Company will leverage customer intelligence and profiling information gained through research to deliver targeted, relevant information to each trade segment. National Grid will use internal trade databases and information and any other pertinent external information to segment the trade ally base.

Three Year Strategy

2016: This program will not be offered until 2017.

2017: National Grid will launch this program with a targeted marketing effort to inform and engage the design, construction, and development community of this program’s offerings.

2018: National Grid is developing a long-term strategic plan for how the energy efficiency portfolio can encourage and influence a market for ZER buildings in New York.

This effort will be pursued primarily as a research and development effort for the next three years. As part of this effort National Grid will explore options for select ZER demonstration projects within its service territory. The overall aim of this initiative will be to establish a framework of support within National Grid’s electric energy efficiency portfolio by influencing the implementation of ZER buildings through market accepted strategies.

Energy codes are a key policy strategy to construct new buildings that are energy efficient. This program promotes building above code which is a progressive path to the eventual goal ZER buildings. To further develop this pathway, the Company seeks to achieve higher codes and standards.

Incentives & Services and Implementation Budgets, and Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

ELECTRIC SMALL BUSINESS SERVICES
Program Design
<p>The Electric Small Business Services (“SBS”) Program (“ this program”) strives to improve the energy efficiency of small, non-residential business customers by providing energy audits, savings analysis, incentives, financing, and direct installation.</p> <p>New Enhancements: Enhancements under consideration include targeted market segmentation to reach smaller, non-demand customers, expansion of the Customer Directed Option (“CDO”), expansion of measures offered to potentially include smart thermostats and smart outlets, and the addition of an appliance recycling component.</p> <p>Alignment with REV: Increased incentives for emerging technologies will accelerate customer acceptance of innovative equipment and support market transformation.</p>
Delivery Method
<p>Measures Promoted: Small business owners are encouraged to improve their building’s electric energy efficiency through measures such as state-of-the-art lighting and controls, refrigeration, HVAC, and other unique custom energy savings measures.</p> <p>Implementation Strategy: This program is administered by National Grid and vendors selected through a competitive bidding process. Vendors market the program, perform audits at customers’ facilities, complete audit forms, and provide project proposals to customers including the project costs, estimated annual savings, customer contributions and paybacks.</p> <p>To further animate the market, the CDO provides small business customers the option of working with an independent contractor/vendor of their choosing to install energy-efficient lighting, lighting occupancy sensors, and Vending Miser measures. The CDO also encourages independent contractors to bring electric energy efficiency products to National Grid for consideration. The contractor/vendor must coordinate each project with National Grid’s CDO administrator who manages the project from the audit/ application stage, through incentive offer, to post-retrofit inspection, and payment to the contractor. All CDO project data is input into National Grid’s program tracking system.</p> <p>Eligible customers have the option of on-bill financing for their portion of the project costs placed on their electric utility bills. Approximately half of previous SBS participants have taken advantage of the on-bill financing option.</p>
<p>Delivery Mechanism: This program employs a direct install approach. This allows</p>

ELECTRIC SMALL BUSINESS SERVICES
<p>implementation vendors to work closely with the customer to overcome common barriers to participation in this customer segment: lack of awareness, time and capital, perceived complexity of the technology, and landlord/tenant split incentive.</p>
Quality Assurance/Quality Control
<p>Customers must certify satisfaction with the installed measures prior to program vendors billing National Grid. The Company also uses independent auditors to post-inspect a random sample of up to 10% of completed projects. These auditors are primarily responsible for verifying the counts of installed measures and whether any issues require further attention by the program manager or vendor.</p>
Target Market
<p>Small C&I electric customers with average monthly demand of 110 kW or less. These customers generally comport with National Grid’s SC2D and SC2 rate classes and certain non-residential customers on SC1 rates.</p> <p>Forecasted Participation: 2,500</p>
Three Year Strategy
<p>2016: National Grid will continue to introduce new program measures with a focus on emerging technologies, evaluate the addition of a SBS appliance recycling component, and evaluate the expansion of the CDO.</p> <p>2017: Investigate applicability of an on-line assessment and e-commerce concepts for small businesses. Review preliminary findings of NYSERDA Program Opportunity Notice (“PON”) 2646: Behavioral Demonstration to assess the potential for offering energy reports to small and medium businesses in National Grid’s service territory. The Company is participating in this PON to identify the factors that motivate small and medium businesses to take energy saving actions and/or participate in energy efficiency programs.</p> <p>2018: Plan will be developed based on outcomes from 2016 and 2017.</p>
Incentives & Services and Implementation Budgets, and Performance Targets
<p>Refer to “Budget and Target Summary.” This program may have financial encumbrances and</p>

ELECTRIC SMALL BUSINESS SERVICES

committed savings associated with projects not completed within a given program year.

ELECTRIC SMALL BUSINESS ENGAGEMENT & EFFICIENCY PLATFORM

Program Design

National Grid is proposing an online assessment targeted to small and medium business customers that is intuitive, visual and interactive. First customers complete the online assessment which provides a detailed personalized report that informs customers on their potential to save and to streamline business operations from an energy perspective.

In step two, customers are directed from the online report to take action on these recommendations via an e-commerce website where they can purchase measures such as LED lighting, smart Wi-Fi thermostats, aerators and power strips. They can redeem rebates for these energy efficiency measures instantly. Product offers/promotions are targeted to individual customers based on their energy use and profile and results from the assessment. These above mentioned measures are mailed to the customer, much like any other e-commerce website, such as Amazon.com®.

The online assessment is a cost-effective way to reach small and medium business customers which leads to increased customer satisfaction.

The online assessment will provide leads to this program, which can provide customers with prescriptive measure and custom measures, including direct install for deeper energy savings.

Alignment with REV: The goal of the online assessment for small and medium businesses is to increase customer engagement through education, targeted messaging, and access to an e-commerce website which allows customers to take immediate action by purchasing efficiency measures.

Delivery Method

Measures Promoted: Customers will complete an online assessment and will be directed to an e-commerce website to receive low cost energy efficiency measures or utilize available rebates for measures instantly. The following measures are an example of potential measures to be offered to customers on the website: faucet aerators, LED Lighting, power strips and smart Wi-Fi thermostats.

Implementation Strategy: Customers will be directed to the online assessment via the National Grid website, National Grid marketing messaging, and community events.

Delivery Mechanism: The online assessment software and an e-commerce website will be delivered by vendors selected through a competitive procurement process. The site will be hosted on the National Grid website to create a seamless customer experience. Lead vendors will be responsible for managing the website portal as well as customer eligibility screening,

ELECTRIC SMALL BUSINESS ENGAGEMENT & EFFICIENCY PLATFORM
customer education, and information tracking and analytics. Customer insights will inform future initiatives, strategies and customized messaging, as well as marketing and offerings.
Quality Assurance/Quality Control
<p>National Grid will evaluate the success of the online assessment and the e-commerce tool using key performance metrics. Regular tests of the website will be conducted to ensure a seamless customer experience.</p> <p>As part of the ongoing evaluation of the tool, National Grid will conduct customer surveys at the six month mark as well as the one-year mark of the launch of the tool to determine customer satisfaction and possible areas of improvement.</p>
Target Market
<p>Eligibility: All small and medium business customers.</p> <p>Participation: The Company expects to ramp up to 3,750 customers completing the online assessment by 2017.</p>
Offering Specific Marketing
<p>This program will be marketed to all eligible customers via multiple channels.</p> <p>Marketing efforts will be designed to meet the objectives of driving more customers to the National Grid website to complete the online assessment and promote energy efficiency measures at the e-commerce website to maximize energy savings.</p> <p>This initiative may include outreach via bill inserts and outreach campaign via radio, print advertising, or web-based marketing through social media.</p>
Three Year Strategy
<p>2016: This program will not be offered until 2017.</p> <p>2017: Launch program and investigate new technologies and measures for the on-line e-commerce store. Use the customer insights gained, in the first six months of launch, to determine new offerings and streamline existing offerings.</p>

ELECTRIC SMALL BUSINESS ENGAGEMENT & EFFICIENCY PLATFORM

2018: Conduct a deep review of the customer experience to identify opportunities to streamline and simplify content to drive customers to take action on energy efficiency.

Use the customer insights gained from the online assessments to determine new offerings and streamline existing offerings.

Incentives & Services and Implementation Budgets, and Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

LED STREET LIGHTING
Program Design
<p>Street lighting in the Niagara Mohawk Power Corporation service territory may be Company-owned or customer-owned under PSC Tariff 214 – Street, Highway, Roadway and Other Outdoor Lighting.</p> <p>In response to municipal customer requests for LED street lighting, the Company is evaluating options to offer LED fixtures under the Company-owned Outdoor Lighting tariff.</p> <p>Pending regulatory approval of LED outdoor lighting, the Company will evaluate offering energy efficiency incentives for cost-effective projects starting in 2017.</p> <p>Alignment with REV: The Company will investigate the integration of emerging technologies associated with LED fixtures including controls and applications to support remote operation.</p>
Delivery Method
<p>Measures Promoted: LED outdoor lighting for Company-owned and customer-owned fixtures.</p> <p>Implementation Strategy: In response to growing interest in efficient outdoor lighting, the Company’s Community & Customer Account Managers and energy efficiency sales staff will introduce this technology to municipal customers across the National Grid service territory.</p>
Quality Assurance/Quality Control
<p>Pre and post-installation inspections of lighting applications.</p>
Target Market
<p>Eligibility: Lighting customers under PSC Tariff 214 qualify to participate.</p> <p>Forecasted Participation: 1-20 municipal participants annually.</p>
Offering Specific Marketing
<p>Program information will be disseminated through direct mail and one-on-one meetings with municipal customers.</p>

Three Year Strategy

2016: Pending regulatory approval of LED outdoor lighting, the Company will evaluate energy efficiency offerings for LED fixtures.

2017: Proposed start of LED energy efficiency offering for Company-owned and customer-owned outdoor lighting.

2018: Evaluate and adjust program based on learnings from 2017.

Incentives & Services and Implementation Budgets, and Performance Targets

Refers to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

ELECTRIC RESIDENTIAL PROGRAMS

ELECTRIC RESIDENTIAL ENGAGEMENT PROGRAM

Program Design

The Electric Residential Engagement Program (“this program”) is a behavioral initiative to encourage residential customers to change their energy use behavior to conserve energy. Behavioral initiatives seek to identify the motivational factors which cause residential customers to actively employ personal energy saving actions and/or participate in energy efficiency programs. One of the behavioral mechanisms National Grid plans to implement is to provide customers with personalized energy information via an energy information platform.

An energy information platform uses multiple channels (*e.g.*, web, mail, email) to deliver personalized energy information to residential customers. The information motivates customers to take action to conserve energy use and expense.

One of the ways customers can receive information is via home energy reports. These reports provide a snapshot of the customer’s current energy use, while also comparing to previous year’s use to similar sized homes heating with the same fuel and located within a fixed radius of the customer’s home. Customers also receive personalized information about how to save energy and avoid high bills.

The energy information platform has proven to deliver reliable, cost-effective energy savings. It has also increased participation in other energy efficiency programs when comparing platform recipients to non-recipients.

New Enhancements: The learnings from the Company’s current EEPS Residential Building Practices and Demonstration Program will be used to introduce the Energy Engagement Platform (the “Platform”) in 2016 to a larger participant group.

The Platform will offer a points and rewards program which provides National Grid customers the opportunity to earn points in exchange for taking energy actions (such as participating in an online home assessment or joining a paperless billing program). These rewards can be redeemed for energy efficient products, gift cards or charitable donations.

National Grid also plans to introduce informational campaigns promoting energy use best practices, such as optimal thermostat set points and seasonal energy tips.

Alignment with REV: Customized energy reports and messaging increase customer awareness, customer engagement and empowers customers to make informed choices about their energy use.

ELECTRIC RESIDENTIAL ENGAGEMENT PROGRAM

Delivery Method

Measures Promoted:

The Platform’s behavioral initiatives will focus on motivating energy-conserving actions that residents can control, such as programming thermostats, monitoring and adjusting home temperatures via wireless-enabled thermostats, and powering down or turning off equipment and electronics. The Platform also cross-promotes participation in other initiatives with specific measures including online assessments, National Grid e-commerce website, and the Electric Residential Consumer Products & Recycling Program.

Implementation Strategy:

Home energy reports - A cornerstone of the behavioral initiative through the Platform is to deliver a home energy report (“HER”) to residential households on an opt-out basis.

By providing customers with better information on their energy use and personalized energy saving advice, this program motivates customers to measurably and verifiably use less energy. This program will serve to increase participation in other National Grid energy efficiency initiatives.

The HER initiative assigns customers to treatment and control groups. The treatment groups receive mailer-based reports on an ongoing basis and have access to an online portal. Control groups are retained for the purposes of evaluation. Customers are treated as a group indefinitely, or until National Grid decides to stop treating customers.

Customer Insights On the Web - Participants will have access to personalized insights and energy usage information through the Company’s website. This will enable participants to create a profile, access energy savings tips, monitor usage over time, and compare usage to neighbors for benchmarking purposes. This web interface will allow customers to update profile information (*e.g.*, correcting square footage or fuel type if changed) in order to ensure their HER and other program components are current and accurate.

The HER details and benchmarks a customer’s energy usage against their past usage and against similar residences in the area. Customers also have the option of an online platform to gain greater feedback on their energy usage.

Delivery Mechanism:

National Grid will contract with a vendor to deliver the Platform. National Grid will work with the vendor to define the participant group, the treatment period, engagement mechanisms, and content of messaging and how these messages tie in with other National Grid offerings.

ELECTRIC RESIDENTIAL ENGAGEMENT PROGRAM
Quality Assurance/Quality Control
The behavioral initiative assigns customers to treatment and control groups. The treatment groups receive mailer-based reports on an ongoing basis and have access to an online portal. Control groups are retained for the purposes of evaluation.
Target Market
Eligibility: Residential customers. Participation: Up to 600,000
Offering Specific Marketing
The current EEPS “Residential Building Practices and Demonstration Program” initiative uses an opt-out model and requires minimal marketing beyond direct offerings to selected customers. This same approach will be utilized for the expanded target market.
Three Year Strategy
2016: Introduction of this behavioral program to larger participant group with new points and rewards offering. 2017 and 2018: Monitor and adjust this program.
Incentives and Services and Program Implementation Budgets
Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

ELECTRIC RESIDENTIAL EFFICIENCY PLATFORM

Program Design

The Electric Residential Efficiency Platform initiative (this “initiative”) includes individualized customer education on specific energy efficiency opportunities for customers’ homes. It allows customers to take immediate action and provides instant financial incentives and rebates. This initiative drives action, educates and also provides customer intelligence for a more targeted customized online experience.

Step one of this initiative offers single family residential customers (1-4 units) an online energy assessment including energy efficiency recommendations. The assessment also includes an online solar photovoltaic (“PV”) assessment component. The online assessment engages the customers and educates them on the savings potential within their home and helps them determine their solar PV potential as well.

Upon completion of the online assessment, customers receive a report that provides recommended electric energy saving activities, an assessment of potential saving, a clear call to action, and a breakdown of savings by energy-use category. These reports are customized to the customer’s unique home and energy-use characteristics and identify available energy efficiency incentives for each energy-use savings recommendation. The report will also determine if the home has potential for solar PV.

In step two, customers are directed from the online report to take action on these recommendations via an e-commerce website where they can purchase measures such as efficient lighting, smart Wi-Fi thermostats, power strips, aerators and appliances, and redeem rebates for these energy efficiency measures instantly. Product offers/promotions are targeted to individual customers based on their electric energy use profile and results from the assessment. The above mentioned measures are mailed to the customer, much like any other e-commerce website such as Amazon.com®.

This initiative will explore the opportunity for a Referral Model whereby customers will be referred to other online retailers for other energy efficient products and services like domestic water heaters, washers, dryers and HVAC systems.

The online assessment report will recommend a combination of the following:

- Behavioral changes to reduce energy use;
- Energy saving appliances and measures along with associated incentives;
- Weatherization suggestions including air sealing and insulation and associated incentives.
- Heating, cooling, water heating equipment, and other qualified efficient product rebates available through the e-commerce website or a larger box store. Customers will be able to

ELECTRIC RESIDENTIAL EFFICIENCY PLATFORM

compare prices, efficiency levels and savings for appliances and equipment on the e-commerce website, and

- Solar PV potential for the home: If solar PV potential exists for the home, the online assessment report would recommend implementing the electric energy efficiency measures first, as this would help reduce the amount of solar PV needed and “right size” the solar PV application for the home.

Alignment with REV: The online assessment increases customer engagement through education and the e-commerce website allows customers to take immediate action by purchasing and installing energy efficiency measures. Higher incentives for cutting edge technologies will accelerate customer acceptance of innovative equipment, and support market transformation.

Delivery Method

Measures Promoted: Customers will complete an online assessment and will be directed to an e-commerce website to receive low cost measures or avail rebates for instant measures. The following measures are examples of what may be offered to customers on the website: LED technology bulbs, faucet aerators, showerheads, and smart Wi-Fi thermostats.

Implementation Strategy: Customers will be directed to the online assessment via the National Grid website, HERs, National Grid marketing messaging, and through presentations at community events.

Customers who do not have internet access will be mailed a paper version of the assessment, and subsequently will be mailed an energy assessment report with the opportunities and actions they can take to improve energy efficiency within their home.

Delivery Mechanism: The online assessment software as well as the e-commerce website will be delivered by vendors selected through a competitive procurement process. The site will be hosted on the National Grid website to create a seamless customer experience. Lead vendors will be responsible for managing the website portal as well as customer eligibility screening, customer education, and information tracking and analytics. Customer insights will inform future initiatives, strategies and customized messaging, as well as marketing and offerings.

Quality Assurance/Quality Control

National Grid will evaluate the success of the online assessment and the e-commerce tools using key performance metrics that may include visits to the website, completion of online assessments, email information received, number of visits to the e-commerce website, and subsequent energy efficiency measures purchased, and non-instant measures researched.

ELECTRIC RESIDENTIAL EFFICIENCY PLATFORM
<p>National Grid will perform regular tests of the website to insure a seamless customer experience, and modify and fine tune the online process as needed to maximize the success of the online experience.</p> <p>As part of the ongoing evaluation of the tool, National Grid will conduct customer surveys at the six- month mark as well as the one-year mark of the launch of the tool to determine customer satisfaction and possible areas of improvement.</p>
Target Market
<p>Eligibility: All residential customers including single family and multifamily customers who own or rent (1-4 units).</p> <p>Forecasted Participation: Expect to ramp up to 40,000 customers by end of 2017.</p>
Offering Specific Marketing
<p>The online assessment e-commerce initiative will be marketed to all residential customers living in single family houses or one to four unit buildings, as well as multifamily homes and eligible residential customers.</p> <p>Marketing efforts will be designed to meet the objectives of driving more customers to the National Grid website to complete the online assessment and provide incentive information on energy efficiency measures at the e-commerce website to maximize energy savings. National Grid will conduct market segmentation to target homes and communities with the most opportunity to save energy.</p> <p>National Grid will explore opportunities for collaboration with NYSERDA to promote the online assessment on their website.</p> <p>This initiative may include outreach via bill inserts and outreach campaign via radio, print advertising, or web-based marketing through social media.</p>
Three Year Strategy
<p>2016: Program year start-up.</p> <p>2017: Investigate new technologies and measures for the on-line e-commerce store. Use the customer insights gained from the online assessments to determine new offerings and streamline existing offerings.</p>

ELECTRIC RESIDENTIAL EFFICIENCY PLATFORM

2018: Conduct a deep review of the customer experience to identify opportunities to streamline and simplify content to drive customers to take action on energy efficiency.

Use the customer insights gained from the online assessments to determine new offerings and streamline existing offerings.

Explore inclusion of additional questions on the online assessment regarding: 1) solar PV potential of customer homes, and 2) clean transportation options. Customers will be directed to solar PV and clean transportation offerings.

Explore collaboration with the NYSERDA NY-Sun initiative to share solar PV leads generated from the National Grid on-line assessment. This may help NY-Sun “right size” solar PV.

Incentives & Services and Implementation Budgets, and Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

RESIDENTIAL ELECTRIC CONSUMER PRODUCTS AND RECYCLING

Program Design

The Residential Electric Consumer Products and Recycling initiative (this “initiative”) is designed to increase customer awareness of the importance and benefits of purchasing high-efficiency appliances and products. This initiative seeks to expand the availability, customer acceptance, and use of high-quality energy-efficient technologies. This initiative also promotes the recycling of certain older, less efficient appliances.

National Grid routinely works with our rebate processing company to improve the customer experience. An online rebate application option was introduced under EEPS in 2014 to improve the customer experience by shortening rebate processing cycles. This enhancement has been well received as it allows customers to complete their rebate application online and to monitor the application as it progresses through the submission, review and payment cycle. Paper application forms are also offered for customers who do not have computer access.

New Enhancements:

New technologies under review for this initiative include measures such as: smart outlets for window air conditioning, smart Wi-Fi smart thermostats, electronically commutated motor (“ECM”) circulator pumps for boilers, LED lighting, ductless mini-split heat pumps, and heat pump clothes dryers.

Consideration will also be given to adding appliances such as: refrigerators, freezers, air cleaners, electric clothes dryers, televisions, desktop computers, pool pumps, dehumidifiers, water saving products, specialty LED lighting, etc.

Alignment with REV: Higher incentives for cutting-edge technologies will potentially accelerate customer acceptance of innovative equipment and support market transformation.

Delivery Method

Measures Promoted: Incentives are provided for qualifying consumer products. The list is continuously updated, adding new technologies and retiring those that have gained market acceptance. Current EEPS offerings include heat pump water heaters, stand-alone / storage water heaters, water heater tank wraps, hot water pipe insulation, compact fluorescent lighting (“CFL”), advanced power strips, and refrigerator/freezer recycling. These may be expanded based on emerging technologies as the market transforms.

Implementation Strategy: This initiative educates customers and vendors regarding the benefits of high- efficiency equipment to increase customer acceptance of these products and to encourage customers to purchase ENERGY STAR® certified models when they shop.

RESIDENTIAL ELECTRIC CONSUMER PRODUCTS AND RECYCLING

Customers may apply for equipment rebates online or by mail.

National Grid has partnered with a major appliance retailer to place point of purchase displays in retail outlets to promote high-efficiency appliances and recycling. Training is provided to employees in each store so they can be one-on-one consumer educators and effective champions for energy-efficient appliances and associated environmental benefits.

This retail partnership has also enhanced the National Grid appliance recycling program. The appliance retailer offers National Grid’s recycling incentive when the customer purchases a new refrigerator or freezer. The retailer then collects old, inefficient appliances from customers’ homes, and stores them at central warehousing facilities where the National Grid recycling vendor collects the old appliances on a monthly basis. This has improved customer satisfaction as the new product delivery and recycling pick-ups are completed together at one time by the retail partner.

An educational “*thank you*” kit is sent to all recycling participants. Designed to keep energy efficiency at the top of customers’ minds, this kit provides CFLs along with an educational message describing the associated energy savings. The kits also include information on how customers can take additional steps to improve their home with other electric energy efficiency offerings and a call to action directs customers to National Grid’s website.

Methods to cross promote this initiative through home energy reports, online assessments, and an e-commerce website will be explored to better inform customers regarding the full suite of residential offerings.

Delivery Mechanism: National Grid employs outreach contractors who recruit manufacturers, wholesale distributors and retailers (including discount retail outlets) to participate in the incentive program. The outreach contractors train wholesale / retail employees, place point of purchase materials in participating wholesale and retail stores, and act as a liaison between the utility, manufacturers, wholesale distributors and retailers.

This initiative will employ a competitively bid rebate processing contractor, to also be used in the companion residential natural gas initiative, to process both mail-in and online rebates. This contractor provides documentation for program tracking and evaluation purposes.

Quality Assurance/Quality Control

National Grid will conduct a random post-inspection of up to 10% of approved rebates to verify the incentivized equipment is installed.

Target Market

RESIDENTIAL ELECTRIC CONSUMER PRODUCTS AND RECYCLING
<p>Eligibility: All eligible residential electric customers.</p> <p>Participation: 9,000</p>
Offering Specific Marketing
<p>There are a number of different energy-saving measures residential customers can take to make things that matter to them in their homes better. National Grid’s marketing and outreach will be aimed at reaching customers in the communities where they work and live and connecting to what matters to them most. The Company will begin with building awareness and interest through mass media advertising such as radio, print and outdoor advertising. This will be supported by digital, direct mail, bill inserts, email, website, social media and other grassroots tactics such as local events and sponsorships in order to drive participation.</p>
Three Year Strategy
<p>2016: To increase customer participation, this initiative the will explore ways to shorten rebate cycle times, automate processes, increase consumer awareness and adoption of the highest efficiency appliances, and identify tactics to support deeper savings through education, promotion, and higher incentives for cutting edge measures, if appropriate.</p> <p>This initiative will monitor more efficient products for consumers, such as those with higher tier ratings by ENERGY STAR[®] and the CEE.</p> <p>2017: To further enhance the customer experience, the Company and its rebate implementation contractor will explore opportunities to offer instant rebates using mobile technology.</p> <p>2018: Refinement of strategies introduced in years 1 and 2.</p>
Incentives & Services and Implementation Budgets, and Performance Targets
<p>Refer to “Budget and Target Summary.” This initiative may have financial encumbrances and committed savings associated with projects not completed within a given program year.</p>

MULTIFAMILY SECTOR

ELECTRIC MULTIFAMILY PROGRAM

Program Design

The Electric Multifamily Program (“this program”) is designed to increase the installation of energy efficiency measures in existing, multifamily buildings within National Grid’s electric service areas by working with property owners, managers, trade allies and tenants. The initiative includes free energy audits which identify energy saving opportunities for electric measures. Multifamily buildings provide opportunity for upgrades in common areas and in units.

The program currently includes a free energy audit, incentives for attic ventilation, ductwork wrapping, air infiltration testing, lighting replacements (“CFL”), programmable thermostats, refrigerator replacement, low-flow shower heads, faucet aerators, hot water pipe wrap and tank wrap.

National Grid is seeking to thoroughly evaluate, refine, enhance and explore new ways to animate this market and deliver comprehensive energy efficiency measures and solutions to this highly segmented and complex market.

New Enhancements: The program will be available to all eligible multifamily buildings with five or more units on a contiguous property.

The Existing Market: The multifamily housing industry is highly segmented and complex. Within this market segment there exist multiple decision makers including property managers, building operators, on-site managers and owners. The degree of motivation to invest in energy efficiency measures varies, with the type of property owners (*e.g.*, larger and small scale).

As tenants are becoming increasingly interested in energy and the environment, this has become a selling point for property owners. Larger property owners are motivated by the impact on property values and the ability to attract and retain tenants when considering capital improvements. Their decisions are based on return on investment (“ROI”) and payback and typically larger property owners will review the need for capital improvements annually.

Smaller property owners may also be motivated to undertake capital improvements to increase property value, but unlike larger property owners, upfront costs and cash flows are more important than ROI and payback. They also tend to be less aware of energy saving opportunities.

Split Incentives: Multiple research studies over the past few years have indicated that streamlining rebates and incentives, and educating building owners of the indirect benefits of investing in efficient appliances and equipment, such as reduced common area energy costs and reduced tenant turnover costs, can alleviate the barrier of split incentives that exists in this market segment and encourage owners to invest in tenant spaces, even if owners do not benefit from energy savings.

ELECTRIC MULTIFAMILY PROGRAM

National Grid will look to engage building owners with outreach and education on our multifamily program and potential benefits of energy efficiency to encourage participation in the multifamily program.

In communities where National Grid does not provide electric service, the Company will explore opportunities to collaborate with other utilities to engage a single implementation vendor who will coordinate leads, audits and savings between the gas and electric utilities. This program will offer energy education and outreach campaigns to increase energy efficiency awareness of multifamily customers and offer incentives to both residential and commercial meters serving in-unit as well as common areas to continue the practice employed in the current EEPS electric multifamily program.

This program will offer direct install measures like efficient lighting, faucet aerators, low-flow showerheads, water heater pipe wrap, advanced power strips, pipe wraps and tank wraps. National Grid will look to expand the direct install offerings with new technologies like smart Wi-Fi thermostats, LED lighting, and smart plugs.

This program will explore opportunities to offer incentives for non-direct install measures like building shell improvements, appliances, and electric heating and cooling equipment, to achieve deeper more comprehensive energy savings.

Alignment with REV: Outreach and education will increase customer engagement. Higher incentives for emerging technologies will accelerate customer acceptance of innovative equipment, and support market transformation.

Delivery Method

Measures Promoted: The measures available to buildings will vary depending on the building characteristics (*e.g.*, age, construction, locational constraints) but may include in-unit direct savings measures, common area direct savings measures, and contractor-installed capital intensive measures.

Implementation Strategy: National Grid will implement a comprehensive approach to the multifamily segment. An integral part of this program design involves the service of an implementation vendor who will provide a single point of contact throughout program participation. The single point of contact will help the customer through the process of audit, application, direct install, retrofit and payment.

National Grid will leverage customer data and building data within our territory to determine the characteristics of the building stock and the potential for energy efficiency to determine appropriate strategies and approach. There are multiple channels through which building owners may enroll including website and telephone registration.

Audit: The National Grid implementation vendor will engage property owners and managers

ELECTRIC MULTIFAMILY PROGRAM

directly, and perform a detailed audit and prepare a customized audit report that recommends a list of energy conservation measures (“ECM”) upgrade options. This report and the potential ECM upgrades are then discussed with the property owner/manager.

Analysis and Proposal: Based on the audit results, a project proposal is drafted that includes eligible measures, incentives and other available services. A set of approved ECMs are selected for the project by property owner/manager with the help of the National Grid implementation vendor. A comprehensive action plan is also provided to the property owner/manager that outlines a road map to implement all ECMs within their property.

Installation and Inspection: The implementation vendor(s) will coordinate the delivery of the measures and services requested and agreed to by the property owner/manager. To the extent possible, all dwelling unit measures will be installed in a single visit to minimize disruption for the tenants, however, multiple visits may be required for the installation.

Additional Core Initiative Design Elements: Audit reports will be streamlined and abbreviated so as to not overwhelm building owners with information. National Grid will develop leave behind operations and maintenance materials for building owners as well as tenants.

Delivery Mechanism: National Grid will look to administer this program collaboratively with other electric utilities so that the customer experience and engagement is seamless. National Grid will explore opportunities to engage a single implementation vendor jointly to deliver a fully integrated multifamily initiative. The implementation vendor will be responsible for facilitating and coordinating the delivery of the program’s services with the various vendors engaged to deliver the program. National Grid will explore opportunities to create a Contractor Alliance Network to support delivery of the Multifamily Program.

Quality Assurance/Quality Control

Random post-inspections are performed at up to 10% of installed projects.

Target Market

Eligibility: This program targets all eligible multifamily buildings with five or more units on a single property owned by a single firm or person, including low-income multifamily residential units. The Company will collaborate with NYSERDA to avoid customer confusion and overlap of services.

Participation: 14,000

ELECTRIC MULTIFAMILY PROGRAM
Offering Specific Marketing
<p>National Grid will use its customer data and information and any other additional information from partnerships with other state agencies to segment the customer and multifamily building type.</p> <p>National Grid will then use appropriate strategies to target and market the various segments with appropriate value propositions, be it increases in property value, ROI, tenant retention, lower maintenance and energy costs and environmental benefits.</p> <p>The Company will promote success stories and case studies to help educate property owners and manager.</p> <p>National Grid will explore opportunities in industry newsletters to educate market actors such as engineers, realtors, landlord associations, architects, and/or property managers. The Company will participate, as appropriate, in trade ally shows, such as realtor and multifamily property manager conferences</p>
Three Year Strategy
<p>2016: National Grid will market and target multifamily properties with 5 or more units.</p> <p>2017: Explore opportunities to introduce new technologies and measures to the program and develop leads for in-home audits through an online assessment that will be made available to multifamily residential customers for non-direct install measures to deliver more comprehensive, deeper electric energy savings.</p> <p>2018: The Company will explore opportunities to provide on-bill financing to offset upfront costs for property owners to help finance electric energy efficiency projects.</p>
Incentives & Services and Implementation Budgets, and Performance Targets
<p>Refer to “Budget and Target Summary.”. This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.</p>

H. PROPOSED ELECTRIC 2016 UTILITY INCENTIVE MECHANISM

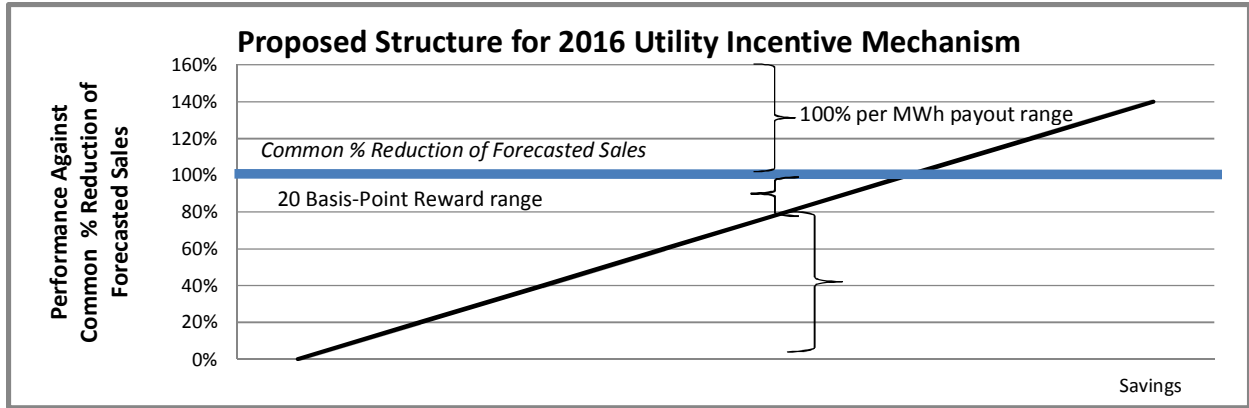
National Grid proposes a utility incentive mechanism for its 2016 utility electric energy efficiency program portfolios similar to that of EEPS 2 program portfolios, but with certain modifications.

The EEPS 2 electric utility incentive is based on performance during the four years, 2012-2015. The statewide pool for potential payout for the electric EEPS 2 utility incentive mechanism is \$36 million. The performance reward is in two tiers: one for individual utility performance, and another for statewide performance toward the jurisdictional gap. Individual utility performance rewards are calculated using a twenty basis point scale for savings achievements that exceed 80% of targets up to 100% of targets. There are no penalties for under-performance and no reward for performance that exceeds 100% of the approved targets.

National Grid proposes a single-tiered 2016 utility incentive mechanism of \$9 million statewide (one-fourth of the previous four-year performance period). Payout of this potential pool to the electric utilities would be based on performance against the cumulative utility targets of 548,697 MWh as set forth in the REV Track One Order. Each megawatt-hour savings achieved would have the potential to pay out at a rate of approximately \$16.40 per MWh (*i.e.*, \$9 million divided by 548,697 MWh). Actual payout would be determined based on performance.

National Grid proposes that for 2016 the twenty basis point scale be applied to a common baseline across all utilities with performance above that baseline rewarded at 100% of earnings per MWh rate. For example, if the common baseline were defined as a 1% reduction of forecasted sales at a fixed point in time for each utility, the twenty basis point scale would apply to energy savings equivalent to 0.81% to 1% of forecasted sales. Within that range there are twenty basis points. Each basis point is equal to 5% of the approximate \$16.40 per MWh. Performance within the twenty basis point range would be rewarded at a pro-rated per MWh rate. For example, if a utility's savings performance is at .85% of forecasted sales, the reward would be calculated at five basis points or \$4.10 per MWh ($\$4.10 = 5 \text{ basis points} \times 5\% \times \16.40). If a utility's performance is at .95% of forecasted sales, the reward would be calculated at fifteen basis points or \$12.30 per MWh ($\$12.30 = 15 \text{ basis points} \times 5\% \times \16.40). Utilities with approved targets and performance at or above the 1% percent reduction of forecasted sales would be rewarded at \$16.40 per MWh. There would be no reward for performance at or below 80% of the common baseline. This model establishes a level of parity across the electric utilities for potential utility performance rewards while encouraging, recognizing and rewarding the achievement of savings targets and performance beyond a defined common threshold.

National Grid seeks to propose future utility incentive mechanism structures for future years as REV develops.



III. GAS PORTFOLIO

A. GAS PORTFOLIO DESCRIPTION

National Grid’s gas energy efficiency portfolio is designed to support the progression of market-based solutions and the penetration of market transformative technologies. National Grid has redesigned its existing gas energy efficiency portfolio to allow for increased customer awareness and education of energy efficiency resources and to allow for the reduction of barriers to the adoption of early market technologies.

The Company has positioned its portfolio to grow. The June 2015 Gas ETIP Order authorizes National Grid’s 2016 gas energy efficiency savings targets at 450,402 dekatherms with a corresponding budget of \$10,549,262. These authorizations represent 26% of the total authorized gas utility targets and 17% of the authorized gas budgets. The authorized funding rate for National Grid’s gas portfolio is \$23.42 per dekatherm.

National Grid’s gas energy efficiency portfolio redesign under ETIP forecasts 2016 acquired savings to exceed the Commission’s authorized savings target. In addition, the Company’s 2017 and 2018 proposed gas energy efficiency portfolio reflects an increase of 36% and 43%, respectively, in savings targets over the 2016 authorized level. With these projected savings increases in 2017 and 2018, National Grid’s performance budgets for 2017 and 2018 are increased by 40% and 46%, respectively, over the 2016 authorized amount.

Achieving REV Core Policy Objectives through Energy Efficiency

National Grid’s gas energy efficiency portfolio is designed to support the progression of market-based solutions and the penetration of market transformative technologies. The Company has redesigned its existing EEPS gas portfolio to allow for increased customer awareness and education of gas energy efficiency resources and to allow for the reduction of barriers to the adoption of early market technologies.

Customer Engagement

Education is a key component to developing informed energy market participants in New York. Providing customers with information and opportunities to take action are the tenets of the Company’s gas energy efficiency offerings. For mass market customers, awareness and understanding are the first steps to managing energy consumption. Mass market programs, whether for residential or small business, inform and direct customers to solutions. For larger C&I customers, combining a knowledge and understanding of market pricing with site-specific energy use is vital. Through its gas energy efficiency offerings, National Grid will strive to provide energy saving information and opportunities to all customer classes.

Reduction of Greenhouse Gas Emissions

National Grid has adopted greenhouse gas (“GHG”) emission reductions as an additional portfolio performance metric to be monitored in association with its energy efficiency activities. The reduction of GHG emissions is a key element of the vision of the “2015 New York State Energy Plan” issued June 25, 2015. National Grid will use nationally recognized standards to convert savings achieved through its gas energy efficiency programs into GHG emission reductions.

ANIMATION OF MARKETS THROUGH PARTNERSHIPS WITH THIRD PARTIES

National Grid will enhance its relationships with existing partners and develop new relationships to support the growth of market-based gas energy efficiency opportunities for its customers. National Grid is poised to work collaboratively with NYSERDA, new market players, and peer New York utilities in areas where electric and natural gas service territories overlap. A cooperative approach will include:

- Accelerate market animation;
- Provide comprehensive energy solutions for electric and gas customers;
- Reduce program costs thus benefitting our customer base;
- Increase customer participation and satisfaction; and
- Eliminate customer confusion as to who is serving the market.

Preliminary strategies are under development among and between National Grid, NYSERDA and peer utilities to identify the best market segments and offerings for these joint initiatives. These combined efforts will allow for streamlined implementation of energy efficiency programs and reduce market confusion.

NEW YORK’S ENERGY INDUSTRY IN TRANSITION

National Grid recognizes that New York is in the foundational stages of enabling the REV transformation. The role of new and diverse market players and the regulatory structures to support those roles are still under development. Flexibility to keep pace with the evolution of the regulatory process and the development of new customer offerings is imperative for success. National Grid continues to support these efforts and will continue to be an active leader in enabling the advancement of the REV transition.

THE CLEAN ENERGY FUND

In May 2014, the Commission initiated the Clean Energy Fund (“CEF”) proceeding which combines the energy efficiency, renewable energy and technology and market development roles of NYSERDA under a single funding source, and addresses funding for the NY-Sun initiative and New York Green Bank (“NYGB”). National Grid recognizes the shift of NYSERDA’s role in the changing New York energy market which will continue to evolve with further development of REV and the role of utilities in REV. Flexibility to adjust to market developments will enable the REV transition..

MARKET TRANSFORMATION

The animation of markets will result in bringing new, market transformative products to market faster and more often. National Grid will work with market participants and NYSERDA to introduce emerging technologies to customers through the engagement channels of its gas energy efficiency portfolio is proposed in this ETIP.

AVAILABILITY OF FINANCING OPTIONS FOR CUSTOMERS

Whenever possible, National Grid will encourage customers to leverage resources to access alternative funding streams such as the NYGB, grants and awards through the United States Department Of Energy (“DOE”), United States Environmental Protection Agency, United States

Housing and Urban Development, United States Department of Transportation, United States Department Of Justice, United States Department of Veterans Affairs and financing through institutions in order to advance energy efficiency investments and/or behind-the-meter distributed energy resources (“DERs”).

NATIONAL GRID CUSTOMER RELATIONSHIPS

National Grid has a solid history of interacting with customers each day and month through multiple channels and touch points. Through this constant interaction and by conducting marketing research and leveraging market intelligence, the Company has developed a solid understanding of the diverse needs of its gas customers. Through primary research and syndicated studies, National Grid maintains a pulse on both the motivations and expectations of each of its customer segments.

The Company’s gas energy efficiency offerings are designed to serve the diverse needs of three broad market sectors: non-residential, multifamily, and residential. Within each of these sectors are sub-populations with unique needs which are addressed within National Grid’s gas energy efficiency portfolio.

NON-RESIDENTIAL

Large C&I customers are energy intense and often have customized, specific energy needs. Large business research shows that key priorities for C&I customers are ease of implementation, increased productivity and financial savings. National Grid’s gas ETIP incorporates enhanced program designs reflecting site-specific needs for these customers.

Small and medium businesses have more turnkey needs with ease of process and cost reassurance being key concerns when implementing energy efficiency measures. The gas energy efficiency portfolio provides a variety of delivery mechanisms and offerings combined with thoughtful research to support increased engagement and awareness opportunities for small and medium businesses.

RESIDENTIAL

Residential customers want to be informed energy consumers with pricing and solution options to help them better manage their energy use to achieve cost savings. National Grid has grown its residential gas energy efficiency offerings to enhance customer engagement, increase energy efficiency education, and provide customers more information on savings opportunities. While the Company’s residential offerings are designed to serve the mass market, they also address the landlord/tenant “split incentives” barrier and reach low and moderate income customers. National Grid will seek to collaborate with NYSERDA to avoid customer confusion and potential overlap of services for low income customers.

MULTIFAMILY

Multifamily customers are served by sector specific gas offerings as well as qualifying non-residential and residential offerings. Along with multifamily direct-install opportunities, National Grid’s residential engagement tools will help breach the “split-incentive” barrier for tenants by providing energy saving tips that are within their control. Additional savings opportunities can be achieved through qualifying non-residential and residential offerings.

National Grid believes in the importance of building customer engagement and participation through awareness. The Company has developed a balanced, forward-thinking portfolio of energy efficiency offerings for all customers to support the Commission’s vision under REV. National Grid will provide customers with positive, cohesive experiences in order to drive market-based solutions and help support customer awareness pursuit of energy efficiency opportunities.

MARKETING OVERVIEW

There is a number of different energy-saving measures customers can take to make things that matter to them in their homes, buildings and businesses better. National Grid’s marketing and outreach will be aimed at reaching customers in the communities where they work and live and connecting to what matters to them most. The Company will begin with building awareness and interest through mass media advertising such as radio, print and outdoor advertising. This will be supported by digital, direct mail, bill inserts, email, website, social media and other grassroots tactics such as local events and sponsorships in order to drive participation.

According to “*Customer Impact Report: Energy Efficiency Programs and Awareness*” by JD Power¹¹, the higher level of awareness customers have the more likely they are to participate in EE programs. Additionally, the more customers participate with their utility company the higher their satisfaction ratings.

National Grid’s marketing theme is aimed at generating awareness and driving participation by communicating to our gas customers in a consistent and clear manner which shows understanding of their unique needs. The Company will leverage customer intelligence as well as usage profiling information gained through research to deliver targeted, relevant information to each customer segment.

¹¹ JD Power, “Customer Impact Report: Energy Efficiency Programs and Awareness,” 2014, pg. 4.

B. GAS BUDGET AND TARGET SUMMARY:

The following tables provide the budgets and targets of the offerings with National Grid’s gas ETIP.

TABLE: THREE-YEAR GAS BUDGETS

GAS PORTFOLIO	2016	2017	2018
<i>Non-Residential Sector</i>			
Gas C&I Program			
Incentives & Services	\$2,284,489	\$3,075,299	\$3,075,299
Program Implementation*	\$574,975	\$1,114,269	\$1,114,958
Total Budget	\$2,859,465	\$4,189,568	\$4,190,257
Gas C&I New Construction & Major Retrofit Program			
Incentives & Services	\$0	\$1,600,000	\$1,849,200
Program Implementation*	\$0	\$72,048	\$83,032
Total Budget	\$0	\$1,672,048	\$1,932,232
Gas Non-Residential Engagement & Efficiency Platform			
Incentives & Services	\$0	\$100,000	\$350,000
Program Implementation*	\$0	\$200,573	\$124,895
Total Budget	\$0	\$300,573	\$474,895
<i>Residential Sector</i>			
Gas Residential Engagement Program			

GAS PORTFOLIO	2016	2017	2018
Incentives & Services	\$662,000	\$646,000	\$640,000
Program Implementation*	\$31,000	\$41,205	\$41,411
Total Budget	\$693,000	\$687,205	\$681,411
Gas Residential Efficiency Platform			
Incentives & Services	\$300,000	\$301,500	\$303,008
Program Implementation*	\$340,000	\$344,220	\$345,929
Total Budget	\$640,000	\$645,720	\$648,936
Gas Residential Program			
Incentives & Services	\$3,034,358	\$3,013,355	\$3,013,355
Program Implementation*	\$383,926	\$414,346	\$414,346
Total Budget	\$3,418,284	\$3,427,700	\$3,427,700
<i>Multifamily Sector</i>			
Gas Multifamily Program			
Incentives & Services	\$320,410	\$370,314	\$427,990
Program Implementation*	\$122,645	\$146,367	\$169,074
Total Budget	\$443,055	\$516,681	\$597,064
Total Portfolio			
Total C&I Programs	\$2,859,465	\$6,162,189	\$6,597,383
Total Residential Programs	\$4,751,284	\$4,760,625	\$4,758,047

GAS PORTFOLIO	2016	2017	2018
Total Multifamily Programs	\$443,055	\$516,681	\$597,064
Portfolio Administration	\$1,968,646	\$2,553,109	\$2,673,541
Portfolio EM&V	\$526,814	\$736,668	\$769,929
<i>Total Gas Portfolio Budget</i>	<i>\$10,549,263</i>	<i>\$14,729,271</i>	<i>\$15,395,966</i>

* Internal sales labor included

The Program Administration budget category is defined to include all portfolio-level (non-program specific) costs other than portfolio EM&V costs or labor costs of utility employees that are recovered through the Company’s base rates.¹² Costs included in Portfolio Administration include, but are not limited to, staff salaries, employee benefit costs, exclusive of pension and other post-employment benefits (“OPEB”), company overhead (*e.g.*, supplies, computer and communication equipment, staff training and industry related sponsorships and memberships), program literature, advertising, promotion, internal and external communication and all forms of media such as direct mail, print, radio, television, and internet. However, as employee pension and OPEB, are currently recovered through the Company’s base rates, such costs are not reflected in the Program Administration budget category or the energy efficiency portfolio budgets. The program administration does not reflect expected changes beginning in 2017 when upon rate case approval, labor and benefits will be captured in base rates.

¹² See CE-02: ETIP Guidance, New York State Department of Public Service - Office of Clean Energy, May 1, 2015.

TABLE: THREE-YEAR PRIMARY GAS TARGETS

GAS PORTFOLIO - Dth	2016	2017	2018
<i>Non-Residential Sector</i>			
Gas C&I Program	93,063	134,011	134,011
Gas C&I New Construction & Major Retrofit Program	0	71,111	81,778
Gas Non-Residential Engagement & Efficiency Platform	0	8,000	28,000
<i>Residential Sector</i>			
Gas Residential Engagement Program	101,214	108,922	106,951
Gas Residential Efficiency Platform	36,000	36,000	36,000
Gas Residential Program	233,445	233,445	233,445
<i>Multifamily Sector</i>			
Gas Multifamily Program	18,232	20,967	24,112
<i>Total Gas Portfolio</i>			
<i>Dth (Primary)</i>	481,954	612,456	644,297

ADDITIONAL METRICS

In the February 2015 REV Order 2016 budgets and targets are authorized at 2015 levels. Utilities are to propose budgets and metrics for the remaining years of the 2016 - 2018 cycles. National Grid proposes that additional metrics the Company will begin tracking include: reduction of greenhouse gas emissions, lifetime energy savings, and engagement metrics. GHG emission reductions should be calculated based on an industry standard.

The Company also recognizes that increased engagement activities may erode life-time energy savings achieved under traditional resource acquisition energy efficiency programs, and that metrics valuing engagement will help measure the importance of such activities. Engagement metrics may be related to web activity, content of messaging, or uplift to traditional programs attributable to engagement tools.

C. GAS FORECASTED PORTFOLIO-LEVEL ACTIVITY

Table: Gas Forecasted Portfolio Expenditures

Budgets (Gas)	Forecasted Expenditures			
	2016	2017	2018	2019
Proposed 2016	\$9,849,427	\$408,574	\$291,262	\$0
Proposed 2017		\$12,785,882	\$830,037	\$754,311
Proposed 2018			\$13,261,495	\$894,292
Total Gas Portfolio	\$9,849,427	\$13,194,457	\$14,382,795	\$1,648,603

TABLE: FORECASTED GAS PORTFOLIO ACHIEVEMENTS (PER METRIC)

Targets (Dth)	Forecasted Achievements			
	2016	2017	2018	2019
Proposed 2016	446,344	34,971	640	0
Proposed 2017		529,429	50,661	16,409
Proposed 2018			554,230	52,984
Total Gas Portfolio	446,344	564,400	605,531	69,393

Tables represent forecasted expenditures and achievements expected to be encumbered and energy savings expected to be committed at the end of the program year. Such expenditures and savings are reflected in the future year in which funds are anticipated to be expended and energy savings are anticipated to be acquired.

D. GAS FUNDING

The proposed annual distribution of unspent EEPS 1 and EEPS 2 funds, to reduce future collections necessary to fund proposed 2016-2018 energy efficiency portfolio budgets, is shown in the table below. Unspent EEPS 1 funds are calculated using Commission-authorized budgets and include recovery from the Commission's March 4, 2015 Order Resolving Gas and Electric Energy Efficiency Matters¹³ and are net of utility EEPS funds transferred to the New York Green Bank.¹⁴ EM&V funds are forecasted amounts and will also reduce future collections to fund proposed 2016-2018 energy efficiency portfolio budgets. An EE Tracker will be established as the volumetric surcharge mechanism similar to the current SBC surcharge.

Table: Expected sources of funds for future programs

Source	2016	2017	2018
Unspent EEPS 1	\$220,115	\$220,115	\$220,115
Unspent EEPS 2	\$605,939	\$605,939	\$605,939
Unspent EEPS EM&V	\$397,143	\$397,143	\$397,143
EE Tracker Collections*	\$9,326,067	\$13,506,074	\$14,172,769
Total Gas Funding	\$10,549,263	\$14,729,271	\$15,395,966

*The Company tariff will refer to the EE Tracker as the Energy Efficiency Surcharge ("EES")."

¹³ Case 07-M-0548, *et al.*, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio, et al.*, Order Resolving Gas and Electric Energy Efficiency Matters (issued March 4, 2015).

¹⁴ Case 13-M-0412 – Petition of New York State Energy Research and Development Authority, Order Establishing New York Green Bank and Providing Initial Capitalization (issued December 13, 2013).

E. GAS EVALUATION MONITORING AND VERIFICATION (EM&V)

The tables below outline the Company’s plan and schedule for all EM&V activities for 2016-2018. It identifies the information being sought, budget amounts, and the estimated timeframe by which EM&V will be obtained to support the overall program cycle. Rather than limiting evaluations to traditional studies such as process and impact evaluations, the plan also looks at the market as a whole, in order to maximize feedback to energy efficiency programs. The plan recognizes the potential opportunity to perform some of the work collaboratively across the state of New York, and will use local consulting firms and contractors wherever possible. The plan incorporates work needed to assist in maintaining the New York State Technical Reference Manual (“TRM”).

TABLE: GAS THREE-YEAR EM&V ACTIVITY SCHEDULE

EM&V Activity		Expected Start Date	Expected Completion Date	Cycle Year Informed
Gas Non-Residential				
1	Market Assessment, Market Effects, and Market Potential Study	2016	2018	2016 to 2018
2	Process & Impact Evaluation	2017	2018	2017 to 2018
3	Heating Equipment Full Load Hours Study	2016	2016	2016 to 2018
4	NYS Tech Manual, Benefit/Cost, Measure Costs, & Savings Impact Activities	2016	2018	2016 to 2018
5	M&V Activities	2016	2018	2016 to 2018
Gas Residential (*Gas and Electric)				
6	Behavioral Program Process & Impact Evaluation*	2016	2017	2016 to 2018
7	Customer Profile Study*	2017	2018	2017 to 2018
8	NYS Tech Manual, Benefit/Cost, Measure Costs, & Savings Impact Activities*	2017	2018	2017 to 2018
9	Supply Side Population Assessment*	2016	2018	2016 to 2018
10	M&V Activities*	2017	2018	2017 to 2018

EM&V Activity		Expected Start Date	Expected Completion Date	Cycle Year Informed
11	High Efficiency Heating Equipment (HEHE) Process & Impact Evaluation	2016	2018	2016 to 2018
Gas Multifamily				
12	Multifamily Process & Impact Evaluation*	2016	2017	2016 to 2018

TABLE: GAS THREE-YEAR EM&V ACTIVITY EXPENDITURES

EM&V Activity		2016	2017	2018
Gas Non Residential				
1	Market Assessment, Market Effects, and Market Potential Study	\$24,637	\$111,918	\$132,741
2	Process & Impact Evaluation	\$0	\$69,638	\$100,182
3	Heating Equipment Full Load Hours Study	\$27,922	\$0	\$0
4	TRM, Benefit/Cost, Measure Costs, & Savings Impact Activities	\$32,849	\$104,456	\$97,677
5	M&V Activities	\$27,922	\$62,176	\$75,136
Gas Residential (*Gas and Electric)				
6	Behavioral Program Process & Impact Evaluation*	\$12,790	\$10,423	\$0
7	Customer Profile Study*	\$0	\$20,846	\$19,622
8	TRM, Benefit/Cost, Measure Costs, & Savings Impact Activities*	\$81,859	\$106,314	\$111,843
9	Supply Side Population Assessment*	\$0	\$15,634	\$14,716
10	M&V Activities*	\$25,581	\$20,846	\$39,243
11	High Efficiency Heating Equipment (HEHE) Process & Impact Evaluation	\$106,939	\$60,752	\$88,135
Gas Multifamily (*Gas and Electric)				

12	Multifamily Process & Impact Evaluation*	\$62,465	\$30,047	\$0
Total Gas EM&V Budget		\$402,964	\$613,050	\$679,295

1. Market Assessment, Market Effects, and Market Potential Study: The objective of this study is to capture a snapshot of the C&I Gas market in National Grid’s service territory, examining current and evolving conditions. The net effects over time of National Grid’s C&I program offerings will be explored, as well as the market potential of new or emerging gas technologies aimed at the C&I sector. The potential to conduct this study jointly with other program administrators will be explored.
2. Process & Impact Evaluation: Assess National Grid’s program offerings to C&I gas customers through an ongoing examination of barriers, prior recommendations, program operations, and customer experience. Also, conduct surveys and in-depth interviews to determine if customers are interested in additional program offerings or program improvements.
3. Heating Equipment Full Load Hours Study: Monitor C&I gas heating equipment to determine annual full load operating hours in National Grid’s service territory. The potential to conduct this study jointly with other program administrators will be explored.
4. TRM, Benefit/Cost, Measure Costs, & Savings Impact Activities: Many activities will be conducted to inform the TRM and Benefit Cost Analysis. Another component of the study will seek to understand the cost value, both full and incremental, of the efficient measure versus the baseline measure, existing or new. Another objective is to quantify NEIs that are associated with current or future program measures. This study will provide an update to the avoided energy supply costs (“AESC”) used by National Grid when conducting the benefit cost analysis of its program portfolio. The NY AESC values have not been updated since 2008. The effects of residential energy efficiency code changes will also be estimated.
5. C&I Measurement & Verification Activities.
6. Behavioral Program Process & Impact Evaluation: Surveys and in-depth interviews will be used to measure actions customers are taking that are driving on-going savings, assess the value of the reports in generating persistent savings, and determine if customers are interested in additional program offerings or improvements.
7. Residential Customer Profile Study: The objective of this study is to compile customer and participation data on residential customers to provide insights into levels of participation, energy consumption, and energy.
8. TRM, Benefit/Cost, Measure Costs, & Savings Impact Activities: Many activities will be conducted to inform the TRM and Benefit Cost Analysis. One aspect of these activities will seek to capture the net effects over time of programs to promote high efficiency heating, ventilation and air conditioning equipment. Another component of the study will seek to understand the cost value, both full and incremental, of the efficient measure

versus the baseline measure, existing or new. Another objective is to quantify non-energy impacts that are associated with current or future program measures. In addition, a standard battery of questions to consistently and accurately assess participant free ridership and non-participant spillover. This study will provide an update to the avoided energy costs used by National Grid when conducting the benefit cost analysis of its program portfolio. The NY AESC values have not been updated since 2008. The effects of residential energy efficiency code changes will also be explored.

9. Supply Side Population Assessment: The intent of this study would be to characterize the population of market actors that serve residential customers, and recruit market actors for possible participation in future EM&V efforts.
10. Residential Measurement & Verification Activities.
11. HEHE Process & Impact Evaluation: The objective of this study is to determine gross savings for the HEHE programs, provide cleaner/refined estimates of hours of use, and attempt to measure the impact of federal tax incentives on prior results. Metering equipment should be utilized if possible, with the meters remaining in place throughout the heating season. Also, surveys and in-depth interviews will be conducted to determine if customers are interested in additional program offerings or program improvements.
12. Multifamily Process & Impact Evaluation: The objective of this study is to assess and monitor the current state of the Multifamily Program as a stand-alone offering, and to explore its evolution into an integrated residential and commercial offering through an ongoing examination of barriers, prior recommendations, program operations, and customer experience. Also, conduct surveys and in-depth interviews to determine if customers are interested in additional program offerings or program improvements.

National Grid will consider the potential to conduct studies jointly with other program administrators in New York where applicable.

F. GAS BENEFITS COST ANALYSIS (BCA)

A benefit cost ratio at the portfolio level and for each program.

TABLE: THREE-YEAR GAS BENEFIT COST RATIOS

GAS PORTFOLIO	2016	2017	2018
<i>Non-Residential Sector</i>			
Gas Commercial & Industrial Program			
Benefits	\$6,749,645	\$10,031,433	\$10,342,970
Costs	\$7,016,314	\$9,723,832	\$9,732,628
<i>Benefit Cost Ratio</i>	0.96	1.03	1.06
Gas Commercial & Industrial New Construction & Major Retrofit Program			
Benefits	\$0	\$7,062,342	\$8,371,409
Costs	\$0	\$3,842,931	\$4,437,371
<i>Benefit Cost Ratio</i>	N/A	1.84	1.89
Gas Non-Residential Engagement & Efficiency Platform			
Benefits	\$0	\$150,938	\$546,073
Costs	\$0	\$552,701	\$803,259
<i>Benefit Cost Ratio</i>	N/A	0.27	0.68
<i>Residential Sector</i>			
Gas Residential Engagement Program			

GAS PORTFOLIO	2016	2017	2018
Benefits	\$1,211,778	\$1,351,621	\$1,376,775
Costs	\$964,158	\$947,792	\$942,733
<i>Benefit Cost Ratio</i>	1.26	1.43	1.46
Gas Residential Efficiency Platform			
Benefits	\$1,784,271	\$1,842,103	\$1,899,630
Costs	\$1,137,643	\$1,147,663	\$1,154,925
<i>Benefit Cost Ratio</i>	1.57	1.61	1.64
Gas Residential Program			
Benefits	\$11,570,255	\$11,945,268	\$12,318,308
Costs	\$7,781,494	\$7,765,162	\$7,766,077
<i>Benefit Cost Ratio</i>	1.49	1.54	1.59
<i>Multifamily Sector</i>			
Gas Multifamily Program			
Benefits	\$1,474,483	\$1,749,675	\$2,074,355
Costs	\$1,305,675	\$1,472,184	\$1,691,728
<i>Benefit Cost Ratio</i>	1.13	1.19	1.23
<i>Total Portfolio</i>			
Total Benefits	\$22,790,432	\$34,133,380	\$36,929,521
Total Costs	\$18,205,284	\$25,452,266	\$26,528,721

GAS PORTFOLIO	2016	2017	2018
<i>Portfolio Benefit Cost Ratio</i>	1.25	1.34	1.39

G. DESCRIPTION OF OFFERINGS IN THE GAS PROGRAM S

This section provides description of each of National Grid’s gas energy efficiency offerings for 2016-2018. The program descriptions include the elements prescribed in the ETIP Guidance document. The Company’s gas energy efficiency offerings include:

- Gas Commercial & Industrial Program;
- Gas Commercial & Industrial New Construction & Major Retrofit Program;
- Gas Non-Residential Engagement & Efficiency Platform (online assessment and e-commerce);
- Gas Residential Engagement Program (behavioral initiative);
- Gas Residential Efficiency Platform (online assessment and e-commerce);
- Gas Residential Program (HVAC); and
- Gas Multifamily Program.

ENERGY EFFICIENCY MARKETING APPROACH

National Grid will promote its energy efficiency opportunities to all customers through a single cohesive energy efficiency campaign incorporating the message: “*Energy efficiency makes the things that matter better.*” While designed to have a common look and feel, this message will be tailored to each customer segment, incorporating insights and learnings specific to each market. National Grid’s marketing and outreach will reach customers in the communities where they work and live and connect them to the value of energy efficiency

Marketing and customer outreach will embody a simple, understandable and streamlined messaging. The Company will continue to build awareness and interest in gas energy efficiency through mass media advertising such as radio, print and outdoor advertising. This will be supported by digital, direct mail, bill inserts, email, website, social media and other grassroots tactics such as local events and sponsorships in order to drive participation. Through targeted messages and a multi-tiered media strategy, National Grid will engage customers with tailored, targeted and actionable information. The Company will leverage customer intelligence as well as usage information obtained through research to deliver targeted, relevant information to each customer segment.

The National Grid marketing and outreach strategy will:

- Provide a clear and easy path for contacting National Grid;
- Communicate compelling and relevant messages, clearly describing the benefits of gas energy efficiency with customer-focused language explaining how energy efficiency can make what matters most to our customers better;
- Deploy targeted marketing, demonstrating the understanding of unique motivational differences of customer markets;
- Use diverse channels with consistent messages to reach customers and generate awareness, trust and interest;
- Ensure coordinated strategies that work together to achieve a consistent customer experience and increase knowledge and awareness of gas energy efficiency programs, ultimately leading to higher participation rates; and
- Reach out to our customers directly through our sales and account development groups, and through our implementation vendors to help our customers with their gas energy efficiency decisions.

PROPENSITY MODELING

National Grid has developed highly sophisticated propensity modeling tools that predict the likelihood of customers to participate in energy efficiency programs. These tools have been successfully deployed in New York to identify and specifically target customers that are most likely to participate in energy efficiency programs. The models also identify customers who have not participated previously and are less likely to adopt energy efficiency measures. Through the use of these tools, the Company is able to develop strategies to engage hard-to-reach markets and enable participation by addressing barriers.

During the next three years, the Company will continue to use these tools to identify underserved customers, and target customers with a higher propensity to adopt measures. These tools, along with Company research addressing customer motivation, priorities and expectations, enable National Grid to be strategic and cost efficient in its outreach and education efforts.

COORDINATED PROGRAM DELIVERY

National Grid currently delivers electric and gas energy efficiency programs in a coordinated manner within the Company's dual fuel service territory. This approach will continue, and will be expanded to proactively coordinate with the other utilities where service territories overlap in efforts to best serve our customers. The Company will also be working with NYSERDA to deliver robust offerings that leverage the knowledge gained in their upstream activities and research of emerging technologies. National Grid views its relationships with peer utility program administrators and NYSERDA as partnerships in delivering valued market based solutions to customers.

PROGRAM ELIGIBILITY

National Grid’s energy efficiency programs will be funded via an EE Tracker and base rate as described in the June 2015 Gas ETIP Order. Per the ETIP Guidance “current SBC/EEPS/RPS exemptions will be continued with respect to the new utility Energy Efficiency Tracker.” As a result, customers eligible to participate in the gas energy efficiency programs are those that contribute to the EE Tracker.

Descriptions of gas energy efficiency program offerings follow.

GAS NON-RESIDENTIAL SECTOR

GAS COMMERCIAL AND INDUSTRIAL PROGRAM

Program Design

The Gas Commercial and Industrial Program (the “Gas C&I Program”) is focused on the retrofit market providing technical services along with prescriptive and custom incentives to encourage the installation of a wide variety of gas energy-efficient measures to upgrade everything from building systems to manufacturing processes. Program performance is continually monitored, and offerings and incentive levels will be adjusted to reflect technological advancements and changes in the market place.

In addition to financial incentives, the program offers technical assistance services. Scoping studies and engineering analyses assist customers in identifying a variety of efficiency measures. Often these studies encourage and support customers in developing multi-year plans to improve their buildings and processes by incorporating energy projects into their annual budget planning process. Customers who undertake these multi-year plans have moved beyond the easy, less expensive prescriptive measures to deeper savings through implementing custom projects.

National Grid is looking to enhance the gas C&I program with new measures, technologies, and offerings to help increase energy efficiency of equipment via regular maintenance and tune-ups. The Company is also looking for new and innovative ways to engage federal agencies and large C&I customers through strategic partnerships that foster long term energy planning to achieve comprehensive benefits. National Grid is committed to creating innovative ways to provide customers access to data and information. Using big data and analytics to understand customers’ needs and their buildings, the Company will be able to more effectively target gas energy efficiency offerings to the customer.

New Enhancements:

The Company seeks to more readily integrate emerging technologies into its program offerings to stimulate market transformation. Where possible, new technologies will be made available prescriptively, while custom opportunities will allow for more tailored customer needs.

Engagement, and Efficiency Platforms - National Grid affiliates are participating in a Small and Medium Business (“SMB”) Behavioral Demonstration pilot to encourage customer level behavioral change to conserve energy through NYSERDA’s PON 2646. This pilot will identify

GAS COMMERCIAL AND INDUSTRIAL PROGRAM

the motivational factors that cause SMB customers to actively employ energy saving actions and/or participate in energy efficiency programs. National Grid will use lessons learned from this demonstration project and knowledge gained in its other jurisdictions to inform the development of engagement and efficiency platforms that leverage energy information, online energy assessments, and e-commerce opportunities for customers.

Utility Energy Service Contract (“UESC”) - The DOE established Utility Energy Service Contracts with approximately 150 electric, gas and water utilities across the county to help federal agencies implement energy efficiency, renewable-energy and water-efficiency projects. National Grid is an active partner in this program providing project management services to implement energy-efficiency measures at federal, state and local government facilities. The UESC program allows governments to expedite the identification and installation of energy saving measures in their facilities.

Strategic Energy Management Plans (“SEMP”) - This initiative provides customers with an opportunity to conduct a multi-year approach to planning energy efficiency opportunities that map more closely to their budgeting process. SEMP creates an opportunity to go deeper into a customer’s operations and reach the technical and achievable savings potential that comes from master planning and execution over a multi-year design and construction process. This strategy will make it possible to give customers the tools to address the technical, financial, and operational barriers to achieving deeper and broader savings, helping them significantly reduce costs and remain competitive in their business environments.

Green Button - In 2014, National Grid introduced the “Green Button” initiative, a national platform allowing customers to securely receive their energy use information electronically. To create greater awareness of energy load shape and consumption, National Grid will explore ways to provide automated usage data to educate and engage C&I customers in the identification of energy efficiency opportunities.

National Renewable Energy Laboratory (“NREL”) Market Potential - National Grid proposes to leverage big data coupled with advanced analytics to gain the market insights necessary to enable targeting of commercial customers with optimal energy efficiency program offerings. National Grid is partnering with NREL to build a four-stage process (Figure 1) to understand the energy efficiency potential of its customers’, enable its Sales and Marketing Team to best serve its customers’ needs, set energy efficiency program goals from a more informed standpoint, and aid in new program development.

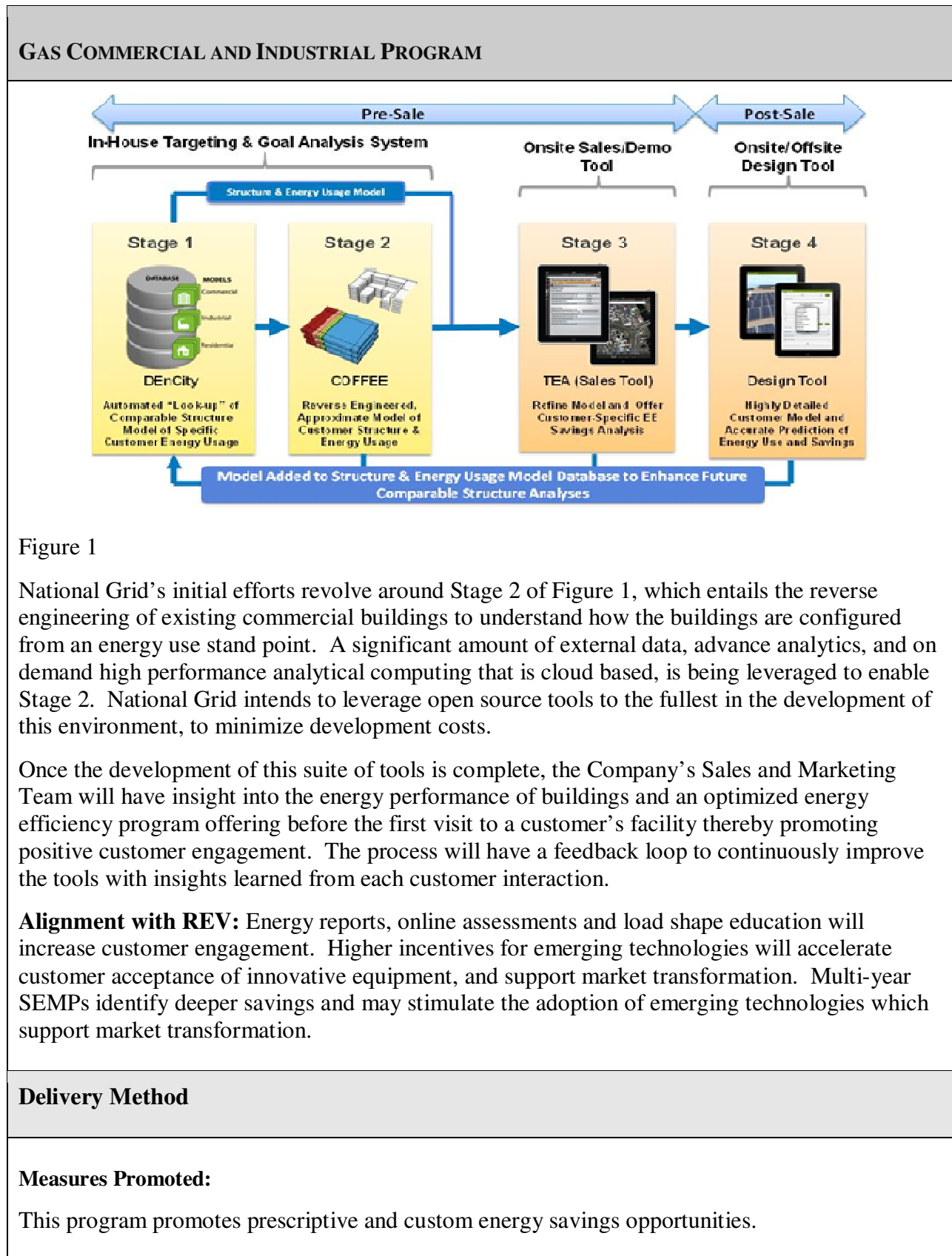


Figure 1

National Grid’s initial efforts revolve around Stage 2 of Figure 1, which entails the reverse engineering of existing commercial buildings to understand how the buildings are configured from an energy use stand point. A significant amount of external data, advance analytics, and on demand high performance analytical computing that is cloud based, is being leveraged to enable Stage 2. National Grid intends to leverage open source tools to the fullest in the development of this environment, to minimize development costs.

Once the development of this suite of tools is complete, the Company’s Sales and Marketing Team will have insight into the energy performance of buildings and an optimized energy efficiency program offering before the first visit to a customer’s facility thereby promoting positive customer engagement. The process will have a feedback loop to continuously improve the tools with insights learned from each customer interaction.

Alignment with REV: Energy reports, online assessments and load shape education will increase customer engagement. Higher incentives for emerging technologies will accelerate customer acceptance of innovative equipment, and support market transformation. Multi-year SEMP’s identify deeper savings and may stimulate the adoption of emerging technologies which support market transformation.

Delivery Method

Measures Promoted:

This program promotes prescriptive and custom energy savings opportunities.

GAS COMMERCIAL AND INDUSTRIAL PROGRAM

Prescriptive incentives are available for measures that provide predictable energy savings in virtually all applications where they replace a similar technology of lesser efficiency. National Grid offers prescriptive incentives for a variety of natural gas technologies including, but not limited to: space and water heating systems along with associated controls, steam traps, insulation, and commercial kitchen equipment. The prescriptive path often serves as the customer's initial exposure to energy efficiency and may lead to more complex custom projects.

To identify and quantify custom opportunities, National Grid provides customers with expert technical assistance, using both in-house technical staff and subject matter experts drawn from a pool of prequalified private sector engineering consultants. To move customers to action once opportunities have been identified, the Company offers incentives designed to offset the cost of implementing the efficiency project. The overarching goal is to solidify customer confidence in the project savings projections and the performance reliability of the proposed equipment performance, in order to make the financial investment attractive, and to provide a delivery process that makes the upgrade installation as simple and seamless as possible.

Offerings will be reviewed to ensure emerging technologies are incentivized at higher levels to encourage market acceptance. Incentives for products that have reached market saturation will be retired.

Implementation Strategy:

Engage: The National Grid Sales and Marketing Team engage C&I customers through one-on-one and group meetings with customers, networks of trade allies and trade associations, direct marketing and other channels, as appropriate.

Educate: Engagement efforts will focus on educating customers on their energy load shape and use patterns to identify opportunities to reduce energy waste and energy intensity.

Continuously Improve Delivery: National Grid continually seeks ways to better deliver services and incentives, to improve program reach into under-served markets, and to engage customers served in the past with new offerings to further improve the efficiency and performance of their buildings.

Evaluate Other States' Programs: In an effort to continually improve the programs, National Grid Strategy staff continuously review programs found in other jurisdictions to identify concepts that may be integrated into the New York offerings.

Research: National Grid staff reviews industry research, best practices, and conferenced proceedings as a way to bring the best technologies, information and developments to our customers. Organizations such as the American Council for an Energy Efficient Economy ("ACEEE") produce a wealth of useful studies and industry best practice reviews, and also publish and archive professional papers and presentations from their numerous conferences and study sessions. Similar studies are available from the DOE's network of national research laboratories such as NREL; regional efficiency organizations, such as the Northwest Energy Efficiency "NEEA"), and Northeast Energy Efficiency Partnerships ("NEEP"); and industry

GAS COMMERCIAL AND INDUSTRIAL PROGRAM

collaborations, like the Consortium for Energy Efficiency (“CEE”). Additional sources of thoughtful leadership and information include the Rocky Mountain Institute (“RMI”), the Institute for Market Transformation (“IMT”), the New Buildings Institute (“NBI”) and E Source Companies LLC.

Develop: National Grid Customer Solutions Accelerator is an internal process which guides the development and in-market testing of innovative solutions to meet our customers’ diverse and evolving needs. New technologies and customer facing solutions are vetted by a National Grid committee of technical, strategy and executive staff. National Grid tests new innovative technologies and customer facing solutions by a staged development process from idea, concept, development, and finally in-market testing before introducing the technology to customers.

Delivery Mechanism:

National Grid’s Strategic Sales Team is focused on the Company’s largest C&I customers in various sectors including industrial / manufacturing, hospitals and nursing homes, colleges and universities, municipal and state governments, to name a few. The Strategic Sales staff engages thousands of customers, community leaders and channel influencers to demonstrate how energy efficiency makes customer’s operations more competitive and profitable. National Grid’s Strategic Sales Team educates decision-makers on the energy and non-energy benefits (*e.g.*, improved productivity, reduced emissions, etc.) of their energy efficiency investments. Each Sales Team member connects customers with vendors and vendors with customers, thereby animating the market, and building relationships that lead to future energy projects.

In-house technical staff and external technical assistance firms (under contract with National Grid) prepare scoping studies and engineering analyses to identify and quantify energy savings and financial benefits of energy efficiency improvements for customers.

The Channel Sales Team works with small to mid-sized commercial customers and external vendors many of whom participate in National Grid’s Energy Solutions Partner (“ESP”) program. ESP vendors educate customers on energy efficiency savings and install efficiency measures with support from National Grid programs.

Quality Assurance/Quality Control

National Grid quality assurance measures include pre-inspections and post-inspections along with a Minimum Requirements Document used to determine whether the equipment and operational assumptions are implemented as designed. National Grid randomly selects up to 10% of the completed prescriptive incentive applications for post-inspection. Such inspections confirm the incented equipment is installed and operational. Custom projects with incentives of \$ 10,000 or less are randomly selected for post-inspections. All custom projects with incentives greater than \$ 10,000 require a post-inspection.

GAS COMMERCIAL AND INDUSTRIAL PROGRAM
Target Market
<p>Eligibility: All eligible non-residential natural gas customers.</p> <p>Participation: 400</p>
Three Year Strategy
<p>2016: Expand the Boiler Tune-Up pilot to a permanent, custom offer. Evaluate additional measures for the Small and Medium Business Direct Install offering. Increase customer engagement by using such tools as Strategic Energy Management Plans and Utility Energy Services Contracts. Collaborate with NYSERDA as their role under CEF evolves.</p> <p>2017: Review the findings from the Small and Medium Business (“SMB”) Behavioral pilots in Upstate NY and National Grid’s affiliates in New England to determine if the behavioral energy report, online assessment and e-commerce model should be introduced to gas customers.</p> <p>2018: Apply the findings from National Grid / NREL collaboration to use data analytics and reverse engineering of existing commercial buildings to understand the energy efficiency potential of individual C&I customers.</p>
Incentives & Services and Implementation Budgets, and Performance Targets
<p>Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.</p>

GAS COMMERCIAL & INDUSTRIAL NEW CONSTRUCTION & MAJOR RETROFIT PROGRAM

Program Design

National Grid’s New Construction Commercial, Industrial and Institutional (non-residential) Program is designed for C&I and Institutional customers who are building high performance new facilities or for major renovation of existing facilities that promote high performance building design, equipment selection and building operation.

This program will offer technical assistance, design assistance, owner incentives and design team incentives based on project energy savings performance, to building beyond the current energy code baselines. There are two core objectives. The first objective is to offer energy efficiency services and incentives to developers of new buildings and owners of existing buildings to influence design and construction of the building to be more energy efficient and exceed standard code. The second objective is to encourage customers purchasing new energy-consuming equipment, or replacing equipment that has reached end of useful life or failed, to choose the most efficient equipment within each product category. This program applies to existing buildings and equipment whenever the gas energy efficiency improvement triggers code compliance.

Influencing the design and construction of new buildings to make them more efficient has long term energy impacts at a fraction of the cost, and provides for the greatest savings potential and also greatest value to the owner and users of these buildings.

New buildings and major renovations offer an opportunity to increase efficiency dramatically for a relatively modest cost and add value to the building for owners and building occupants. Engaging with the design team at the conceptual stage of design, when decisions such as orientation of building, day-lighting design, envelope design, and equipment selection are being made can shape the energy cost of a building for its entire life, which can be 50 to 100 years. The services provided through this program will help lower building operating and maintenance costs throughout its entire life cycle while increasing comfort, health, and productivity for building occupants.

Program Participation: National Grid will offer two approaches for ground-up new construction or major renovation projects. Assistance can range from simple plan review and efficiency upgrade recommendations to complete technical assistance studies performed by energy engineering firms.

Whole Building Approach: This approach is designed for ground-up new construction or major renovation projects where all energy saving opportunities including shell, fenestration, equipment and system interactions are taken into consideration. The National Grid team supports the design team from conceptual design through the completion of the project with technical assistance and support which allows building owners and their design teams to aggressively pursue high efficiency options that fully integrate building envelope, lighting and

GAS COMMERCIAL & INDUSTRIAL NEW CONSTRUCTION & MAJOR RETROFIT PROGRAM

mechanical systems to produce a building that is as efficient as current technology and design techniques allow. Incentives provided by this program cover a significant portion of the additional design, modeling, and equipment costs required to turn an average building into an exemplary one.

The Systems Approach: This approach is designed for individual measures or multiple measures for buildings undergoing a remodel or a change in space use. Customers who choose this approach will receive *prescriptive* incentives for each measure for which one exists, or *custom* incentives for site or use specific measures.

Sustainable Office Design: As part of this program National Grid will offer a lighting initiative for office buildings owners, tenants and design professionals, called the Sustainable Office Design (“SOD”). This is an offering under the *Systems Approach*. This initiative will promote high-performance office lighting for quick turnaround office fit-outs.

The objective of SOD is to capture the energy savings potential that becomes available in the period when office space is vacated by one tenant and refitted for occupancy by a new one (i.e., the tenant improvement (“TI”) process. When a new office building is constructed for tenant occupancy and is in the initial leasing phase (tenant fit-out). At least 20% of all energy used in commercial buildings is in office space and estimates show the average commercial office building could reduce its energy use by 20%.

New Enhancements: New offering in 2017-2018

Alignment with REV: This program which promotes building above code is a progressive path to the eventual goal of ZER buildings.

The marketing efforts for this program include providing information to architects, engineers, contractors and owners on cutting edge energy efficient design and technology. Education and implementation of design and technology is the first step to creating value and transforming the market place and building environment.

Delivery Method

Measures Promoted: Prescriptive measures, custom measures and comprehensive design solutions that lead to therm savings per square foot are promoted along with encouraging design charettes energy modeling and technical assistance studies.

Implementation Strategy: National Grid sales staff will aggressively seek out and recruit owners and designers involved in the construction or major renovation of all non-residential buildings. This process requires multi-faceted strategies to determine new development and construction activities as well as when major renovations take place. The challenge is to gain market intelligence from a myriad of sources so that program representatives can intersect with customers as early as possible in their process, preferably at the time when the fundamental

GAS COMMERCIAL & INDUSTRIAL NEW CONSTRUCTION & MAJOR RETROFIT PROGRAM
design decisions that most impact future energy use are being made.
Quality Assurance/Quality Control
Post inspection of all projects prior to final payout of incentives.
Target Market
<p>Eligibility: To be eligible for this program and services, projects:</p> <ul style="list-style-type: none"> • Must be at a point where design changes are feasible, preferably in the conceptual or schematic design phase; • Must be, or will become, a C&I customer of National Grid; and • Must be within defined parameters as any ground up new construction building (including core and shell), existing building and tenant space going through major renovation, end of useful life equipment and new equipment that requires compliance with the current code. <p>Target Market: All non-residential new construction, renovation, and addition projects in National Grid’s service territory, as well as businesses replacing outmoded or failed equipment outside of a more comprehensive construction or upgrade project.</p> <p>This program has three focus areas markets:</p> <ol style="list-style-type: none"> 1. Ground-up new construction (including core and shell); 2. Major renovations or tenant fit-outs; and 3. End of useful life equipment replacement. <p>Participation: 43</p>
Offering Specific Marketing
National Grid marketing is aimed at generating awareness and driving participation by communicating to our Upstate New York green build environment in a consistent and clear manner which shows understanding of the unique needs of the space. The Company will be reaching new construction customers with advertising in targeted publications as well as through industry associations and trade shows.

GAS COMMERCIAL & INDUSTRIAL NEW CONSTRUCTION & MAJOR RETROFIT PROGRAM

In order to most effectively reach the new construction customer base, National Grid will connect with trade allies such as architects, engineers, electricians and plumbing and heating contractors. The Company will explore opportunities with trainings, webinars, direct mail, email, telemarketing, and in industry publications and e-newsletters. Appropriate strategies to target various trade segments with appropriate value propositions will be used.

There will be a dedicated section to trade allies on the National Grid website which provides easy-to-find links to resources, solutions and incentive forms.

We will leverage customer intelligence and profiling information gained through research to deliver targeted, relevant information to each trade segment. National Grid will use internal trade databases and information and any other pertinent external information to segment the trade ally base.

Three Year Strategy

2016: Program will not be offered until 2017.

2017: We will launch this program with a targeted marketing effort to inform and engage the design, construction, and development community of this program.

2018: National Grid is developing a long-term strategic plan for how the gas energy efficiency portfolio can encourage and influence a market for ZER buildings in New York.

This effort will be pursued primarily as a research and development effort for the next three-years. As part of this effort National Grid will explore options to select ZER demonstration projects within its service territory. The overall aim of this initiative will be to establish a framework of support within the Company’s energy efficiency portfolio by influencing the implementation of ZER buildings through market accepted strategies.

Energy Codes are a key policy strategy to build new buildings that are energy efficient. This program promotes building above code as a progressive path to the eventual goal of ZER buildings.

Incentives & Services and Implementation Budgets, and Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

GAS NON-RESIDENTIAL ENGAGEMENT & EFFICIENCY PLATFORM

Program Design

Many small business customers have low energy usage and are tenant occupied. Landlords have little motivation to invest in energy efficiency to save energy as the utility bills are paid by the tenants. In the case of owner occupied spaces, energy service providers and vendors have little incentive to target these customers as energy savings potential is low and the transaction costs can be high. Also, small business owners typically have little discretionary capital to invest in energy efficiency.

These challenges require a different strategy to engage, educate and then make energy saving decisions easy and actionable. National Grid is proposing a Non-Residential Engagement & Efficiency Platform (the “Platform”) targeted to small and medium business customers that is intuitive, visual and interactive. First customers complete the online assessment which provides a detailed personalized report that informs customers on their potential to save and to streamline business operations from an energy perspective.

In step two, customers are directed from the online report to take action on these recommendations via an e-commerce website where they can purchase measures such as, spray valves, thermostatic radiator valves, smart Wi-Fi thermostats and aerators. They can redeem rebates for these energy efficiency measures instantly. Product offers/promotions are targeted to individual customers based on their energy use and profile and results from the assessment. The above mentioned measures are mailed to the customer, much like any other e-commerce website such as Amazon.com®.

Alignment with REV: The Platform increases customer engagement through education and targeted messaging to reach customers and provides access to an e-commerce website which allows customers to take immediate action by purchasing gas energy efficiency measures.

Delivery Method

Measures Promoted: Customers will complete an online assessment and will be directed to an e-commerce website to receive low cost measures or take advantage of rebates for instant energy efficiency measures. The following measures can be offered to customers on the e-commerce website: faucet aerators spray valves, thermostatic radiator valves and smart Wi-Fi thermostats.

Implementation Strategy: Customers will be directed to the online assessment via the National Grid website, National Grid marketing messaging, and community events.

Customers who do not have internet access will be mailed a paper version of the assessment, and subsequently will be mailed an energy assessment report with the opportunities and actions they can take to improve energy efficiency within their business.

GAS NON-RESIDENTIAL ENGAGEMENT & EFFICIENCY PLATFORM

Delivery Mechanism: The online assessment software as well as the e-commerce website will be delivered by vendors selected through a competitive procurement process. Vendors will be required by contract to provide services to any eligible customer. This ensures all eligible New York small and medium business customers will have access to the online assessment tool and e-commerce website. The site will be hosted on the National Grid website to create a seamless customer experience. Lead vendors will be responsible for managing the website portal as well as customer eligibility screening, customer education, and information tracking and analytics. Customer insights will inform future initiatives, strategies and customized messaging, as well as marketing and program offerings.

Quality Assurance/Quality Control

National Grid will evaluate the online assessment and the e-commerce tools success rate via metrics of visits to the website, completion of online assessments, email information received, number of visits to the e-commerce website and subsequent efficiency measures purchased, and non-instant measures researched.

National Grid will perform regular tests of the website to ensure a seamless customer experience, and modify and fine tune the online process as needed to maximize the success of the online experience.

As part of the ongoing evaluation of the tool, National Grid will conduct customer surveys at the six-month mark as well as the one-year mark of the launch of the tool to determine customer satisfaction and possible areas of improvement.

Target Market

Eligible: Non-residential customers.

Forecasted Participation: The Company expects to ramp up to 1,100 customers completing the online assessment by end of 2017.

Offering Specific Marketing

Marketing efforts will be designed to drive customers to the National Grid website to complete the online assessment, obtain energy efficiency measures at the e-commerce website, and maximize energy savings.

GAS NON-RESIDENTIAL ENGAGEMENT & EFFICIENCY PLATFORM

Three Year Strategy

2016: Program will not be offered until 2017.

2017: Launch program and investigate new technologies and measures for the on-line e-commerce store. Use the customer insights gained, in the first six months of launch, to determine new offerings and streamline existing offerings.

2018: Conduct a deep review of the customer experience to identify opportunities to streamline and simplify content to drive customers to take action on energy efficiency.

Use the customer insights gained from the online assessments to determine new offerings and streamline existing offerings.

Incentives & Services and Implementation Budgets, and Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

THE GAS RESIDENTIAL PROGRAM

GAS RESIDENTIAL ENGAGEMENT PROGRAM

Program Design

The Gas Residential Engagement Program (this “program”) is a behavioral initiative to encourage residential customers to change their energy use to conserve energy. Behavioral initiatives seek to identify the motivational factors which cause customers to actively employ personal energy saving actions and/or participate in energy efficiency programs. National Grid will provide customers with personalized energy information via an energy information platform.

An energy information platform uses multiple channels (i.e., web, mail, email) to deliver personalized energy information to residential customers. The information motivates customers to take action to conserve energy use and expense.

Customers receive home energy reports that provide snapshots of their current energy use, while also comparing to previous year’s use, and to similar sized homes heating with the same fuel and located within a fixed radius of the customer’s home. Customers also receive personalized information about how to save energy and avoid high bills.

National Grid is using components of an energy information platform in the current EEPS “Residential Building Practices and Demonstration Program.”

The energy information platform has proven to deliver reliable, cost-effective energy savings. It has also increased participation in other efficiency programs when comparing platform recipients to non-recipients.

New Enhancements: National Grid will expand its energy efficiency behavioral program to a larger population of customers.

This program will offer a points and rewards program which provides National Grid customers the opportunity to earn points in exchange for taking energy actions (such as participating in an online home assessment or joining a paperless billing program). These rewards can be redeemed for energy-efficient products, gift cards or charitable donations.

National Grid also plans to introduce energy usage alerts where customers receive alerts when they are on track for a high bill, and provides them targeted tips to help avoid the high bill and take action to save energy. Another component is sustained, informational campaigns promoting energy use best practices, such as optimal thermostat set points and seasonal energy tips.

Alignment with REV: Customized energy reports and messaging increase customer awareness, customer engagement and empowers customers to make informed choices about their energy use.

GAS RESIDENTIAL ENGAGEMENT PROGRAM

Delivery Method

Measures Promoted: This program motivates customers to modify their energy use through education and awareness. Behavioral recommendations focus on motivating energy-conserving actions that residents can control, such as programming thermostats, monitoring and adjusting home temperatures via wireless-enabled thermostats, or turning off or down power using equipment and electronics. This program promotes opportunities available through other programs resulting in uplift in portfolio performance.

Implementation Strategy: A cornerstone of the behavioral initiative through the energy information platform is to deliver energy reports to residential households on an opt-out basis.

By providing customers with better information on their energy use and personalized energy saving advice, this program motivates customers to measurably and verifiably use less energy and save money on their monthly bills. As noted above, this program also helps to increase participation in other National Grid energy efficiency initiatives.

The energy reports initiative assigns customers to treatment and control groups. The treatment groups receive mailer-based reports on an ongoing basis and have access to an online portal. Control groups are retained for the purposes of evaluation.

The other component of the platform is access for all initiative participants to personalized insights and energy usage information on National Grid’s website. This will enable participants to create a profile, access energy savings tips, monitor usage over time, and compare usage to neighbors for benchmarking purposes. This web interface also allows customers to update information about their profile (for instance, correcting square footage or fuel type if it has changed) in order to ensure their home energy report and other program components are current and accurate.

The energy report details and benchmarks customer’s energy usage against their past usage and against similar homes in the area. Customers also have the option of an online platform to gain greater feedback on their energy usage.

Delivery Mechanism: National Grid will contract with a vendor to deliver the energy information platform. National Grid will work with the vendor to define the participant group, the treatment period, engagement mechanisms, and content of messaging and how these messages tie in with other National Grid offerings.

Quality Assurance/Quality Control

The engagement initiative assigns qualifying customers to treatment and control groups. The treatment groups receive mailer-based reports on an ongoing basis and have access to an online

GAS RESIDENTIAL ENGAGEMENT PROGRAM
portal. Control groups are retained for the purpose of evaluation.
Target Market
<p>Eligible: Residential customers.</p> <p>Participation: Up to 250,000</p>
Offering Specific Marketing
The current initiative uses an opt-out model and requires minimal marketing beyond the direct offerings to selected customers.
Three Year Strategy
<p>2016: Introduce the behavioral program to a larger participant group with new points and rewards offering.</p> <p>2017 and 2018: Monitor and adjust this program</p>
Incentive & Services and Implementation Budgets, and Performance Targets
Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

GAS RESIDENTIAL EFFICIENCY PLATFORM

Program Design

The Gas Residential Efficiency Platform includes individualized customer education on specific energy efficiency opportunities for customers' homes. It allows customers to take immediate action and provides instant financial incentives and rebates. This initiative drives action, educates and also provides customer intelligence for a more targeted customized online experience.

Step one of this initiative offers single family residential customers (1-4 units) an online energy assessment and energy efficiency recommendations. Upon completion of the assessment, customers receive reports that provide recommended energy saving activities, an assessment of potential saving, a clear call to action, and a breakdown of savings by energy-use category. These reports are customized to the customer's unique home and energy-use characteristics and identify available energy efficiency incentives for each energy-use savings recommendation.

In step two, customers are directed from the online report to take action on these recommendations via an e-commerce website where they can purchase measures such as smart Wi-Fi thermostats, aerators and appliances, and redeem rebates for these energy efficiency measures instantly. Product offers/promotions are targeted to individual customers based on their energy use and profile and results from the assessment. The above mentioned measures are mailed to the customer, much like any other e-commerce website like Amazon.com®.

National Grid will also explore opportunity for a referral model where customers will be referred to other online retailers for other energy efficient products and services like water heaters, washers, dryers, and HVAC systems.

The online assessment report will recommend a combination of the following:

- Behavioral changes to reduce energy use;
- Energy saving appliances and measures along with associated incentives;
- Weatherization suggestions including air sealing and insulation and associated incentives;
- Heating, cooling, water heating equipment, and other qualified efficient product rebates available through the e-commerce website or larger box store. Customers will be able to compare prices, efficiency levels and savings for appliances and equipment on the e-commerce website.

GAS RESIDENTIAL EFFICIENCY PLATFORM

Alignment with REV: The Gas Residential Efficiency Platform increases customer engagement through education, and the e-commerce website allows customers to take immediate action by purchasing and installing energy efficiency measures. Higher incentives for cutting edge technologies will accelerate customer acceptance of innovative equipment, and support market transformation.

Delivery Method

Measures Promoted: Customers will complete an online assessment and will be directed to an e-commerce website to receive low cost measures or take advantage of rebates for instant measures. The following measures are some of those offered to customers on the website: faucet aerators, showerheads, and smart Wi-Fi thermostats.

Implementation Strategy: Customers will be directed to the Efficiency Platform via the National Grid website, home energy reports, National Grid marketing messaging, and at community events.

Customers who do not have internet access will be mailed a paper version of the assessment, and subsequently will be mailed an energy assessment report with the opportunities and actions they can take to improve energy efficiency within their home.

Delivery Mechanism: The online assessment software as well as the e-commerce website will be delivered by vendors selected through a competitive procurement process. Vendors will be required by contract to provide services to any eligible customer. This ensures all eligible National Grid customers will have access to the online assessment tool and e-commerce website. The site will be hosted on the National Grid website to create a seamless customer experience. Lead vendors will be responsible for managing the website portal as well as customer eligibility screening, customer education, and information tracking and analytics. Customer insights will inform future initiatives, strategies and customized messaging, as well as marketing and additional offerings.

Quality Assurance/Quality Control

National Grid will evaluate the online assessment and the e-commerce tools success rate via metrics of visits to the website, completion of online assessments, email information received, number of visits to the e-commerce website and subsequent efficiency measures purchased, non-instant measures researched.

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<p>National Grid will perform regular tests of the website to insure a seamless customer experience, and modify and fine tune the online process as needed to maximize the success of the online experience.</p> <p>As part of the ongoing evaluation of the tool, National Grid will conduct customer surveys at the six-month mark as well as the one-year mark of the launch of the tool to determine customer satisfaction and possible areas of improvement.</p>
Target Market
<p>Eligible: Residential customers</p> <p>Forecasted Participation: Expect to ramp up to 14,500 customers by end of 2017</p>
Offering Specific Marketing
<p>Marketing efforts will be designed to meet the objectives of driving more customers to the National Grid website to complete the online assessment and take advantage of gas energy efficiency measures at the e-commerce website and maximize energy savings. National Grid will conduct market segmentation to target homes and communities with the most opportunity to save energy. This initiative may include outreach via bill inserts and outreach campaign via radio, print advertising, or web-based marketing through social media.</p>
Three Year Strategy
<p>2016: Program start up.</p> <p>2017: Investigate new technologies and measures for the on-line e-commerce store. Use the customer insights gained from the online assessments to determine new offerings and streamline existing offerings.</p> <p>2018: Conduct a deep review of the customer experience to identify opportunities to streamline and simplify content to drive customers to take action on energy efficiency. Use the customer insights gained from the online assessments to determine new offerings and streamline existing offerings.</p>

GAS RESIDENTIAL EFFICIENCY PLATFORM

Incentives & Services and Implementation Budgets, Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

GAS RESIDENTIAL PROGRAM
Program Design
<p>The Gas Residential Program overcomes market barriers and increases market awareness and penetration of high efficiency equipment including gas heating, water heating, associated controls, pipe insulation and water tank wraps. Rebates are provided to customers to offset the higher cost of their investment in high-efficiency equipment.</p> <p>New Enhancements: New technologies under consideration include: smart Wi-Fi thermostats, combined space and water heating equipment, electronically commutated motor (“ECM”) circulator pumps for boilers, or heat recovery units.</p> <p>Alignment with REV: Higher incentives for cutting edge technologies will accelerate customer acceptance of innovative equipment, and support market transformation.</p>
Delivery Method
<p>Measures Promoted: Incentives are provided for qualifying consumer products. The list is continuously updated, adding new technologies and retiring those that have gained market acceptance. Current offerings include furnaces (with electronic commutated motors), boilers, water heaters, controls, pipe insulation and water tank wraps.</p> <p>Implementation Strategy: The Residential HVAC Program educates consumers, plumbing/heating installers, and vendors regarding the benefits of high efficiency equipment to increase consumer acceptance of these products and to encourage consumers to purchase ENERGY STAR[®] certified models when they shop. Customers may apply for equipment rebates online or by mail.</p> <p>Educational <i>thank you kits</i> are sent to program participants. Designed to keep energy efficiency at the top of consumers’ minds, this kit provides a showerhead and aerator along with an educational message describing the associated savings. The kits also includes information on how consumers can take additional steps to improve their home with other electric and gas energy efficiency offerings and a call to action directs consumers to National Grid’s website.</p> <p>National Grid has well established trade ally networks in place. Through periodic training and one-on-one assistance, these trade allies are educated on the benefits of high efficiency equipment and controls along with the current incentive offerings and online rebate application process.</p> <p>National Grid is also investigating retail partnerships to educate consumers at the point of</p>

GAS RESIDENTIAL PROGRAM
<p>purchase regarding the energy benefits of various gas appliances, insulation and controls.</p> <p>Methods to cross promote the residential HVAC program through home energy reports, online assessments, and an e-commerce website will also be explored to better inform customers regarding the full suite of residential offerings.</p> <p>Delivery Mechanism: National Grid employs outreach contractors who recruit manufacturers, wholesale distributors and retailers to participate in the incentive program. The outreach contractors train wholesale / retail employees, place point of purchase materials in participating wholesale and retail stores, and act as a liaison between the utility, manufacturers, wholesale distributors and retailers so all are aligned to promote efficient equipment adoption.</p> <p>The Residential HVAC Program initiative employs a competitively bid rebate processing contractor, also used in the residential electric initiatives, to process both mail in and online rebates. This vendor provides documentation for program tracking and evaluation purposes.</p>
Quality Assurance/Quality Control
<p>National Grid conducts a random post-inspection of up to 10% of approved rebates to verify the incentivized equipment is installed.</p>
Target Market
<p>Eligibility: Residential customers.</p> <p>Participation: 11,000</p>
Three Year Strategy
<p>2016: To increase consumer participation, this program will explore ways to shorten rebate cycle times, automate processes, increase consumer awareness and adoption of the highest efficiency appliances, and identify tactics to support deeper savings through education, promotion, and higher incentives for cutting edge measures, if appropriate.</p> <p>This program will continue to monitor more efficient products for consumers, such as those with higher tier ratings by ENERGY STAR[®] and the Consortium for Energy Efficiency (“CEE”).</p> <p>2017: To increase residential customer engagement, a behavioral initiative will educate customers on their energy use and encourage behavioral changes to reduce energy consumption.</p>

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To further enhance the customer experience, the Company and its rebate implementation vendor will explore opportunities to offer instant rebates using mobile technology.

2018: Refinement of strategies introduced in first two years.

Incentives & Services and Implementation Budgets, and Performance Targets

Refer to “Budget and Target Summary.” This program may have financial encumbrances and committed savings associated with projects not completed within a given program year.

GAS MULTIFAMILY PROGRAMS

GAS MULTIFAMILY PROGRAM

Program Design

The Multifamily core initiative is designed to increase installation of energy efficiency measures in existing, multifamily buildings in National Grid’s service territory. The Company works with property owners, managers, trade allies and tenants to encourage installation of energy saving measures. The initiative offers free energy audits which identify energy saving opportunities for electric and gas measures. It is delivered in coordination with the Electric Multifamily Program.

Multifamily buildings provide opportunity for upgrades in common areas, building envelope and in units.

This program currently includes a free energy audit, incentives for attic ventilation, ductwork wrapping, air infiltration testing, programmable thermostats, low-flow shower heads, faucet aerators, hot water pipe wrap and tank wrap.

National Grid is seeking to thoroughly evaluate, refine, enhance and explore new ways to animate this market and deliver comprehensive energy efficiency measures and solutions to this highly segmented and complex market.

New Enhancements: This program will be available to all eligible multifamily buildings. There will be no restrictions based on number of units.

The Existing Market: The Multifamily housing industry is highly segmented and complex. The scope for energy efficiency and diversity of this market segment underscore the importance of finding the right people and targeting their individual needs. Within this industry there exist multiple decision makers including property managers, building operators, on-site managers and of course the owners. The motivations of these decision makers, to invest in energy efficiency, vary with the type of property owners. There are broadly speaking two types of owners, larger property owners and smaller property owners.

As tenants are become increasingly interested in energy and environment this has become a selling point for property owners. Larger property owners are motivated by impact on property value, attracting and retaining tenants. Their decisions are based on ROI and payback and typically property owners review capital upgrades annually.

Smaller property owners are motivated to do capital upgrades to increase property value, but unlike larger property owners upfront costs and cash flow are more important than ROI and payback. They also tend to be less aware of energy saving opportunities.

Split Incentives: Multiple research studies over the past few years have indicated that streamlining rebates and incentives, and educating building owners of the indirect benefits of investing in efficient appliances and equipment, such as reduced common area energy costs and reduced tenant turnover costs, can alleviate the barrier of split incentives that exists in this market

GAS MULTIFAMILY PROGRAM

segment and encourage owners to invest in tenant spaces, even if owners do not benefit from energy savings.

National Grid will look to engage building owners with outreach and education on our multifamily program and potential benefits of energy efficiency to encourage participation in the multifamily program.

In communities where National Grid does not provide both electric and gas service, we will explore opportunities to collaborate with other utilities to engage a single implementation vendor who will coordinate leads, audits and savings between the gas and electric utilities.

This program will offer energy efficiency incentives to both residential and commercial meters and will serve in-unit as well as common areas. Also, it will offer energy education and outreach campaigns to increase energy efficiency awareness of multifamily customers.

This program will continue to offer direct install measures like faucet aerators, low-flow showerheads, water heater pipe wrap, advanced power strips, pipe wraps and tank wraps. National Grid will look to expand the direct install offerings with new technologies like smart Wi-Fi thermostats.

This program will explore opportunities to offer incentives for non-direct install measures like building shell improvements, appliances and heating equipment, to achieve deeper more comprehensive energy savings.

Alignment with REV: Outreach and education will increase customer engagement. Higher incentives for cutting edge technologies will accelerate customer acceptance of innovative equipment, and support market transformation.

Delivery Method

Measures Promoted: The measures available to buildings will vary depending on the building characteristics, like age, construction, locational constraints, but may include: in-unit direct savings measures, common area direct savings measures, and contractor installed capital intensive measures.

Implementation Strategy: National Grid will implement a comprehensive approach to the multifamily segment. An integral part of the program design involves the service of an implementation vendor, who will provide a single point of contact throughout program participation. The point of contact will help the customer through the process of audit, application, direct install, retrofit and payment.

National Grid will leverage customer data and building data within our territory to determine the characteristics of the building stock and the potential for energy efficiency to determine appropriate strategies and approach. Partner with local agencies to screen properties with

GAS MULTIFAMILY PROGRAM
<p>housing data and property information to determine pre-screening for program applicants.</p> <p>Audit: The National Grid implementation vendor’s team will engage property owners and managers directly, and perform a detailed audit and prepare a customized audit report that recommends a list of energy conservation measures (“ECM”) upgrade options. This report and the potential ECM upgrades are then discussed with the owner.</p> <p>Analysis and Proposal: Based on the audit results, a project proposal is drafted that includes eligible measures, incentives and other available services. A set of approved ECMs are selected for the project by the owner with the help of the National Grid implementation vendor. A comprehensive action plan is provided to the property owner/manager that outlines a road map to implement all ECMs within their property.</p> <p>Installation and Inspection: The implementation vendor(s) will coordinate the delivery of the measures and services requested and agreed to by the property owner/manager. To the extent possible, all dwelling unit measures will be installed in a single visit to minimize disruption for the tenants, however, multiple visits may be required for the installation.</p> <p>Additional Core Initiative Design Elements: Audit reports will be streamlined and abbreviated so as to not overwhelm building owners with information. National Grid will develop leave behind operations and maintenance materials for building owners as well as tenants.</p> <p>Delivery Mechanism: National Grid will look to administer the program collaboratively with other gas utilities so that the customer experience and engagement is seamless. National Grid will explore opportunities to engage a single implementation vendor jointly to deliver a fully integrated Multifamily initiative. The implementation vendor will be responsible for facilitating and coordinating the delivery of the program services with the various vendors engaged to deliver the program.</p>
Quality Assurance/Quality Control
<p>Random post-inspections are performed at up to 10% of installed projects.</p>
Target Market
<p>Eligible: Multifamily buildings.</p> <p>Participation: 8,000</p>
Offering Specific Marketing

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National Grid will use its customer data and information and any other additional information from partnerships with other state agencies to segment the customer and multifamily building type. The Company will use appropriate strategies to target and market the various segments with appropriate value propositions (increased in property value, ROI, tenant retention, lower maintenance and energy costs, and environmental benefits).

The Company will use success stories and case studies to help educate property owners and managers, and explore opportunities in industry newsletters to educate market actors such as engineers, realtors, landlord associations, architects, and/or property managers. The Company will participate, as appropriate, in trade ally shows for realtors and multifamily property managers.

Three Year Strategy

2016: National Grid will market and target multifamily properties with 5 or more units.

2017: Explore opportunities to introduce new technologies and measures to the program and develop leads for in-home audits through an online assessment that will be made available to multifamily residential customers for non-direct install measures to deliver more comprehensive, deeper electric energy savings.

2018: The Company will explore opportunities to provide on-bill financing to offset upfront costs for property owners to help finance electric energy efficiency projects.

Incentives & Services and Implementation Budgets, and Performance Targets

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H. PROPOSED 2016 UTILITY INCENTIVE MECHANISM

National Grid proposes a utility incentive mechanism for its 2016 utility gas energy efficiency program portfolios similar to that of EEPS 2 II, but with certain modifications.

The EEPS 2 gas utility incentive is based on performance during the four-years, 2012-2015. The statewide pool for potential payout for the gas EEPS 2 utility incentive mechanism is \$14 million. The performance reward is in two tiers: one for individual utility performance, and another for statewide performance toward the jurisdictional gap. Individual utility performance rewards are calculated using a twenty basis point scale for savings achievements that exceed 80% of targets up to 100% of targets. There are no penalties for under-performance and no reward for performance that exceed 100% of the above approved targets.

National Grid proposes a single-tiered 2016 utility incentive mechanism of \$3.5 million statewide (one-fourth of the previous four-year performance period). Payout of this pool to the gas utilities would be based on performance against the cumulative utility targets of 1,737,607 dekatherms prescribed in the Gas ETIP Order. Each dekatherm savings achieved would have the potential to pay out at a rate of approximately \$2.00 per dekatherms (i.e., \$3.5 million divided by 1,737,607 dekatherms). Actual pay-out would be determined based on performance.

National Grid proposes that for 2016 the twenty basis point scale be applied to a common baseline across all utilities, and that performance above that baseline be rewarded at 100% earnings per dekatherm rate. For example, if the common baseline were defined as a 1% reduction of forecasted sales at a fixed point in time for each utility, the twenty basis point scale would apply to energy savings equivalent to 0.81% to 1% of forecasted sales. Within that range there are twenty basis points. Each basis point is equal to 5% of the approximate \$2.00 per dekatherm. Performance within the twenty basis point range would be rewarded at a pro-rated per dekatherm rate. For example, if a utility's savings performance is at .85% of forecasted sales, the reward would be calculated at five basis points or \$0.50 per dekatherm ($\$0.50 = 5 \text{ basis points} \times 5\% \times \2.00). If a utility's performance is at .95% of forecasted sales, the reward would be calculated at fifteen basis points or \$1.50 per dekatherm ($\$1.50 = 15 \text{ basis points} \times 5\% \times \2.00). Utilities with approved targets and performance at or above the 1% percent of sales would be rewarded at \$2.00 per dekatherm. There would be no reward for performance at or below 80% of the common baseline. .

This model establishes a level of parity across the electric utilities for potential utility performance rewards while encouraging, recognizing and rewarding the achievement of savings targets and performance beyond a defined common threshold.

National Grid seeks to propose future utility incentive mechanism structures for future years as REV develops.

