National Fuel

June 1, 2017

Honorable Kathleen H. Burgess
Secretary
New York State Department of Public Service
Three Empire State Plaza, 19th Floor
Albany, NY 12223

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

Dear Secretary Burgess,

Pursuant to Clean Energy Guidance Document "CE-01: Utility Energy Efficiency Program Cycle" and Guidance Document "CE-02: ETIP Guidance," from Department of Public Service Staff ("Staff"), and at Staff's request, attached please find National Fuel Gas Distribution Corporation's ("Distribution" or the "Company") Updated 2017 Energy Efficiency Transition Implementation Plan ("ETIP") for the 2017-2020 program years.

On May 12, 2017, Staff issued a new reporting requirement, outlined in Guidance Document "CE-06: ETIP Annual Reporting Guidance." The Company has worked with Staff to better understand the content of the new reporting requirement. Distribution intends to file its completed 2016 ETIP Annual Report no later than July 7, 2017.

Any questions you may have regarding the attached can be directed to the undersigned at (716)-857-7440 or at crahene@natfuel.com.

Respectfully submitted,

Evan M. Crahen
Director
Rates and Regulatory Affairs

Attachment

NEW YORK STATE
PUBLIC SERVICE COMMISSION

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

Case 07-G-0141 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of National Fuel Gas Distribution Corporation for Gas Service – Conservation Incentive Program

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
CONSERVATION INCENTIVE PROGRAM
UPDATED 2017 ENERGY EFFICIENCY TRANSITION IMPLEMENTATION PLAN
FOR THE 2017-2020 PROGRAM YEARS
DATED: JUNE 1, 2017

I. Introduction

On February 26, 2015, the Public Service Commission ("Commission") issued an Order Adopting Regulatory Policy Framework and Implementation Plan in the Reforming the Energy Vision Proceeding ("REV" or "REV Proceeding").[1] Included in the Track 1 Order was the Commission's affirmation that: (1) energy efficiency remains among the most cost effective ways to reduce emissions, and (2) utilities should continue their natural gas energy efficiency efforts.[2] Also included in the Track 1 Order were requirements that Department of Public Service Staff ("Staff"), in consultation with the Energy Efficiency Working Group ("E^2 Working Group"), develop and file a guidance document specifying the content of energy efficiency transition implementation plan ("ETIP") submissions by May 1, 2015, and that electric utilities[3]

[1] Case 14-M-0101 – Order Adopting Regulatory Policy Framework and Implementation Plan, issued and effective February 26, 2015 ("Track 1 Order").
[2] Case 14-M-0101 – Track 1 Order, at 26, 79, and Appendix C. National Fuel Gas Distribution Corporation ("Distribution" or the "Company") supports the referenced Commission affirmation.
[3] Although the Track 1 Order, at 4, is clear that the Commission is adopting a policy framework for a reformed retail electric industry, and not the natural gas industry, the Company understands the term "utilities" in this instance to be inclusive of natural gas only utilities such as Distribution.

develop and file an ETIP by July 15, 2015. On May 1, 2015, Staff filed Guidance Document CE-02, ETIP Guidance ("ETIP Guidance").[4]

On June 19, 2015, the Commission issued an Order Authorizing Utility-Administered Gas Energy Efficiency Portfolios for Implementation Beginning January 1, 2016 ("2015 Gas Energy Efficiency Order" or "2015 BAM Order").[5] In this Order, the Commission determined that the administration of gas energy efficiency programs should align with that of electric efficiency programs, and therefore required gas utilities to implement their energy efficiency programs under the same framework as that established for electric programs in the Track 1 Order. In response to the Track 1 Order, the 2015 Gas Energy Efficiency Order, and Staff's ETIP Guidance, National Fuel Gas Distribution Corporation ("Distribution" or the "Company") filed its ETIP for the 2016-2018 program years on July 15, 2015, to continue natural gas energy efficiency programming beyond December 31, 2015.

On January 22, 2016, the Commission issued an Order Authorizing Utility-Administered Energy Efficiency Portfolio Budgets and Targets for 2016 – 2018 ("2016 Energy Efficiency Order" or "2016 BAM Order").[6] This Order reaffirmed the authorization of Distribution's annual budget and dekatherm ("Dth") target for 2016, and simultaneously authorized Distribution's annual budget and Dth target for 2017 and 2018. In response to the 2016 Energy Efficiency Order and also at Staff's request, on April 1, 2016, Distribution filed an updated ETIP for the 2016-2018 program years.

[4] Case 15-M-0252 – Guidance Document CE-02, ETIP Guidance, filed on May 1, 2015.
[5] Case 15-M-0252 – Order Authorizing Utility-Administered Gas Energy Efficiency Portfolios for Implementation Beginning January 1, 2016, issued and effective June 19, 2015.
[6] Case 15-M-0252 – Order Authorizing Utility-Administered Energy Efficiency Portfolio Budgets and Targets for 2016-2018, issued and effective January 22, 2016.

On July 28, 2016, Staff updated and re-filed Guidance Document CE-01, Utility Energy Efficiency Program Cycle ("Program Cycle Guidance").[7] Alongside the update to the Program Cycle Guidance, Staff also updated and re-filed new ETIP Guidance for housekeeping changes to comport with the newly issued Program Cycle Guidance, new reporting requirements associated with the inclusion of a current year and subsequent upcoming three year cycle, and the addition of a revision process.[8] Included in the Program Cycle Guidance was a revised schedule of filing dates, with which utilities could update their ETIP filings to document programmatic and portfolio changes.[9] In response to the updated Program Cycle Guidance, the newly specified requirements of the updated ETIP Guidance and also at Staff's request, on December 1, 2016, Distribution filed an updated ETIP for the 2016-2018 program years.

On May 12, 2017, Staff updated and re-filed new ETIP Guidance to include references to newly established annual reporting requirements and additional details related to evaluation, measurement and verification ("EM&V") activities and benefit cost testing.[10] Alongside the update to the ETIP Guidance, Staff also filed Guidance Document CE-06, ETIP Annual Reporting Guidance ("ETIP Annual Report Guidance") to set forth new requirements that specify annual reporting requirements for ETIP programs.[11]

II. Procedural Background

On September 20, 2007, the Commission issued its Order Adopting Conservation Incentive Program ("2007 CIP Order").[12] The Conservation Incentive Program ("CIP")

[7] Case 15-M-0252 – Guidance Document CE-01, Utility Energy Efficiency Program Cycle, filed on July 28, 2016.
[8] Case 15-M-0252 – Guidance Document CE-02, ETIP Guidance, filed on July 28, 2016.
[9] The schedule of filing dates provides a general overview of the current program cycle. The schedule includes target Commission approval dates, as well as key dates of other non-ETIP filings.
[10] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-02, ETIP Guidance, filed on May 12, 2017.
[11] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-06, ETIP Annual Reporting Guidance, filed on May 12, 2017.
[12] Case 07-G-0141 – Order Adopting Conservation Incentive Program, issued and effective September 20, 2007.

preceded the energy efficiency programs established for other natural gas utilities in New York State, as initially established in the Energy Efficiency Portfolio Standard ("EEPS") proceeding.

On October 19, 2009, the Commission issued its Order Approving the Continuation of National Fuel Gas Distribution Corporation's Conservation Incentive Program with Modifications ("2009 CIP Order").[13]

On November 22, 2010, the Commission issued its Order Approving the Continuation of National Fuel Gas Distribution Corporation's Conservation Incentive Program with Modifications ("2010 CIP Order").[14]

On October 25, 2011, the Commission issued its Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge schedule, which incorporated CIP within the EEPS portfolio of statewide energy efficiency programming and authorized the continuation of CIP ("2011 EEPS Order").[15]

On February 19, 2013, the Commission issued its Order Approving in Part and Denying in Part National Fuel Gas Distribution Corporation's Petition to Modify Certain Energy Efficiency (EEPS) Programs ("2012 EEPS Order"), which authorized the Company to reallocate budgets and savings targets between its Residential Rebate Program and its Low Income Usage Reduction Program ("LIURP"), while denying the Company's request to reallocate budgets from its Non-Residential Rebate Program ("NRCIP") to Distribution's Area Development Program ("ADP").[16]

---

[13] Case 07-G-0141 – Order Approving the Continuation of National Fuel Gas Distribution Corporation's Conservation Incentive Program with Modifications, issued and effective October 19, 2009.
[14] Case 07-G-0141 – Order Approving the Continuation of National Fuel Gas Distribution Corporation's Conservation Incentive Program with Modifications, issued and effective November 22, 2010.
[15] Case 07-M-0548 – Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule; issued and effective October 25, 2011.
[16] Case 07-M-0548 – Order Approving in Part and Denying in Part National Fuel Gas Distribution Corporation's Petition to Modify Certain Energy Efficiency (EEPS) Programs, issued and effective February 19, 2013.

On December 18, 2013, Distribution filed a petition with the Commission for CIP program modifications, updating budgets and savings targets for the Company's NRCIP ("2013 Petition"). As of the Company's July 15, 2015 ETIP filing, Distribution's 2013 Petition remained outstanding. As a result, the Company's July 15, 2015 ETIP filing incorporated and updated the budgetary and savings modifications previously sought by Distribution in the 2013 Petition.

On June 19, 2015, the Commission issued the 2015 Gas Energy Efficiency Order, which directed Distribution and other New York State utilities to implement gas energy efficiency programs beginning January 1, 2016. In addition, the 2015 Gas Energy Efficiency Order authorized budgets and Dth targets, in total by utility, for 2016.

On January 22, 2016, the Commission issued the 2016 Energy Efficiency Order, which reaffirmed the Commission's June 19, 2015 authorized budgets and Dth targets. The 2016 Energy Efficiency Order also authorized natural gas and electric annual portfolio budgets and targets (Dth for natural gas and megawatt hours for electric), in total by utility, for 2017 and 2018.

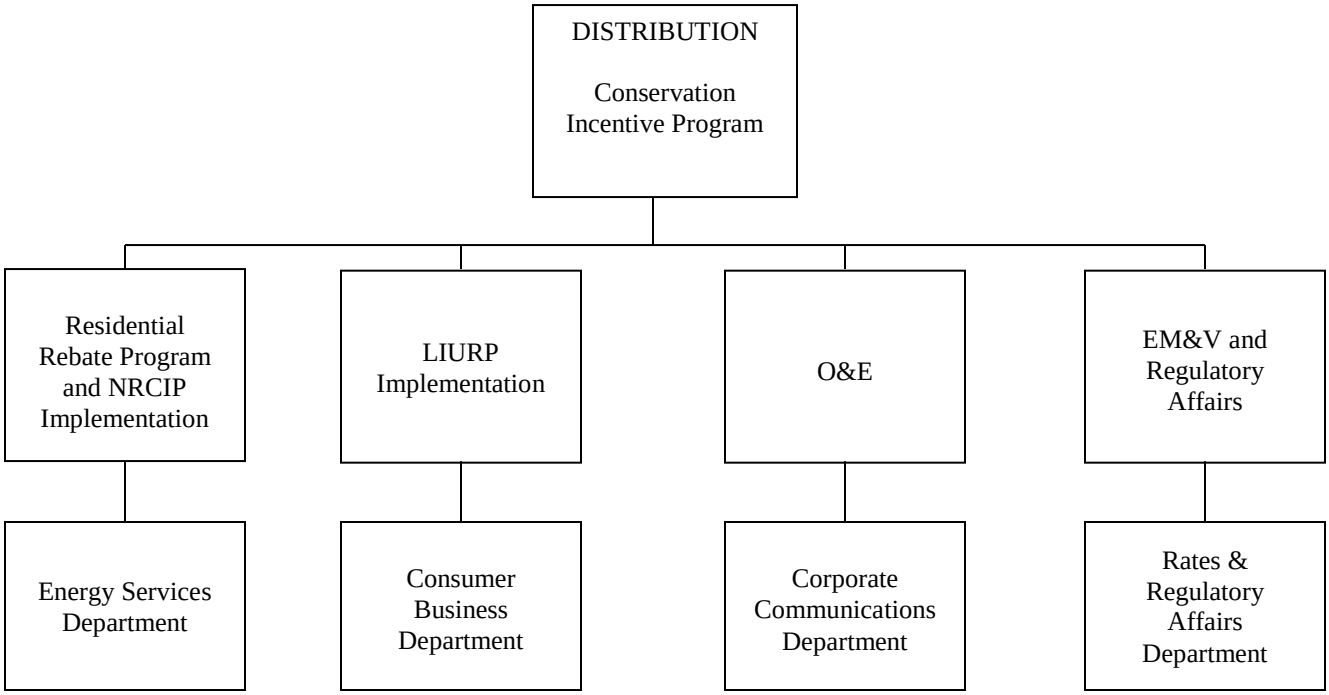
III. Portfolio Description – CIP Overview

CIP includes the following programs: (1) Residential Rebate Program, (2) NRCIP, and (3) LIURP. In addition, each of the programs is supported with Outreach and Education ("O&E") and EM&V initiatives. Exhibit 1 below summarizes budgets previously authorized in each of the Commission's Orders, including calendar years 2016 through 2018.

Exhibit 1 - Approved CIP Budgets							
	2007 CIP		2009 CIP	2010 CIP	2011 EEPS	2012 EEPS	2016 BAM
	Order (two year approval)		Order	Order	Order	Order	Order
Program Year	2008	2009	2010	2011	2012 - 2015	2012 - 2015	2016 - 2018
LIURP	$2,940,000	$2,940,000	$2,940,000	$3,040,000	$3,559,295	$4,618,591	$5,490,000
Residential Rebate Program	$3,400,000	$3,400,000	$3,400,000	$3,500,000	$3,559,295	$2,500,001	$2,650,000
NRCIP	$1,520,000	$1,520,000	$1,520,000	$1,520,000	$1,515,810	$1,515,808	$650,000
O&E	$2,940,000	$2,940,000	$1,940,000	$1,500,000	$903,600	$903,600	$950,000
EM&V	$0	$0	$490,000	$480,000	$502,000	$502,000	$300,000
Total	$10,800,000	$10,800,000	$10,290,000	$10,040,000	$10,040,000	$10,040,000	$10,040,000

Distribution has integrated its energy efficiency program functions into existing departments of the Company and into normal utility operations. Distribution has not created a separate energy efficiency department, but instead has included energy efficiency functions in existing departments best prepared to provide services. As such, the labor, benefits and employee expenses for those employees that work on CIP are already incorporated into the operating expenses of the utility and are not funded through the Company's Energy Efficiency Tracker Surcharge Rate. This practice was established during the inception of CIP in 2007 and has been effective ever since. It should also be noted that the employees who work on CIP only work on the program on a limited, part-time basis. Each employee working on CIP has regular work assignments and other job responsibilities within their respective departments throughout the Company. A summary of Company departments involved with CIP is provided in Exhibit 2 below.

Exhibit 2: Distribution Departments Responsible for CIP Management



The Company believes that as respects its operations, the integration of energy efficiency within existing departments: (1) is the best and most economical way to deliver a consistent energy efficiency program to customers, and (2) provides the ability to directly incorporate the impact of energy efficiency achievements into normal operations and planning efforts of the Company. Further, by integrating energy efficiency within existing departments, a consistent and thorough energy efficiency message and a comprehensive suite of programs (inclusive of energy efficiency offerings and other non-energy efficiency program offerings) can be effectively provided to customers.

IV. Portfolio Description – REV Proceeding Interrelation

According to the Track 1 Order in the REV Proceeding, the Commission has adopted a policy framework for a reformed retail electric industry.[17] In Distribution's REV Proceeding comments, Distribution noted among other things: (1) that the natural gas and electric industries in New York can be radically different businesses, and (2) to the extent that regulatory concepts and policy changes arising out of the REV Proceeding are applied to wholesale natural gas utilities, the results could be counterproductive to natural gas customers.[18]

While the vast majority of REV Proceeding content is only applicable to the electric industry, Distribution's energy efficiency portfolio and certain non-energy efficiency projects and programs, can reasonably be seen as advancing REV Proceeding policy objectives, where it makes sense for natural gas customers. Below is a list of changes made within Distribution's energy efficiency portfolio, transitioning from EEPS to ETIP program years beginning in 2016. These changes are described in greater detail throughout Distribution's ETIP.

- Wireless fidelity ("Wi-Fi") thermostats, a REV-like measure that would provide benefits to natural gas customers, have been added as an available measure in every program within CIP.
- Clothes dryers, a second REV-like measure that would provide benefits to natural gas customers, has been added to the Residential Rebate Program. Distribution is currently in the process of further researching this measure for potential inclusion in the Commercial and Industrial Measures section of the New York Standard Approach for

[17] Case 14-M-0101 – Order Adopting Regulatory Policy Framework and Implementation Plan, issued and effective February 26, 2015, at 4.
[18] Case 14-M-0101 – Initial Comments of National Fuel Gas Distribution Corporation on Department of Public Service Staff's August 22, 2014 Straw Proposal on Track 1 Issues, filed on September 22, 2014, at 2.

Estimating Energy Savings from Energy Efficiency Programs ("New York Technical Manual" or "NYTM").

- The Company has continued and augmented its strong commitment to low income customer participation in energy efficiency, during the transition from EEPS to ETIP program years, by ensuring that low income program funding comprises more than 50% of the total CIP energy efficiency portfolio. Distribution believes that long-term statewide energy and emissions goals can be achieved as long as programs and activities delivered by the utilities and the New York State Energy Research and Development Authority ("NYSERDA") are complimentary and not redundant in nature. Distribution's low income program[19] reduces energy efficiency barriers for low income customers and continues a ten year successful collaboration with NYSERDA. This collaborative effort has minimized duplicative services and customer confusion, and has achieved greater energy efficiency penetration levels.
- During 2016, the Company implemented new elements within its low income program[20] that will: (1) augment existing health and safety protocols, (2) help prevent emergency situations for customers, especially during the winter heating season, and (3) eliminate a barrier to customer program participation while simultaneously achieving a deeper penetration of energy savings.
- Distribution developed and presented innovative proposals for the Commission's potential consideration in its Budget and Metrics Plan companion filing.

[19] This program is referred to as the Low Income Usage reduction Program or LIURP throughout Distribution's ETIP.
[20] This is referred to as the low income "furnace replacement initiative" throughout Distribution's ETIP.

In addition, non-energy efficiency projects and programs that could reasonably be seen as advancing REV Proceeding policy objectives include, but are not limited to the following:

- Distribution has been involved in three microgrid projects, all of which were participants in NYSERDA's New York Prize Program ("NY Prize"):
    1) Buffalo Niagara Medical Campus ("BNMC") - Distribution has issued a letter of support for the project, which was submitted with BNMC's application. This project was selected to receive a Stage 1 award of $100,000 to fund an engineering feasibility study. Subsequently, this project was selected to receive a Stage 2 funding award to develop a comprehensive engineering, financial and commercial assessment associated with installing and operating a microgrid. Distribution is an active participant in energizeBNMC and the Company is funding a thermal load study, as part of Distribution's Research and Development ("RD&D") Program, a non-energy efficiency program, to assess the feasibility of a natural gas combined heat and power ("CHP") technology application.
    2) Village of Westfield – Distribution has issued a letter of support for the project, which was submitted with the Village of Westfield's application. This project was selected to receive a Stage 1 award of $100,000 to fund an engineering feasibility study. To date, this project was not selected to receive a Stage 2 funding award.
    3) Village of Arcade – Distribution has issued a letter of support for the project, which was submitted with the Village of Arcade's application. This project was selected to receive a Stage 1 award of $100,000 to fund an engineering

feasibility study. To date, this project was not selected to receive a Stage 2 funding award.

As respects the current status of NY Prize, NYSERDA issued the Stage 2 competitive Request for Proposals ("RFP") in April 2016 and customer proposals were submitted in October 2016. During Stage 2, the NY Prize Selection Committee expects to award up to $8,000,000 in funding for detailed design activities such as: (1) fulfilling the criteria outlined for Stage 1 and conducting feasibility studies, (2) selecting and appointing consultants to conduct work, (3) bidding projects and evaluating bid results, (4) conducting detailed assessments of the technical design and system configuration, (5) conducting project valuation and investment planning, (6) assessing regulatory, legal, environmental suitability, and financial viability terms, (7) developing formal commercial terms/contractual relationships between project participants, (8) detailing project construction and commissioning proposals, and (9) finalizing project development and operational proposals. Stage 3, the project build-out phase, is expected to begin in January 2018 with NYSERDA's issuance a competitive RFP.

- Network Enhancement Program (formally referred to as "Gas Expansion Program" or "GEP") – On June 4, 2015, December 9, 2015 and June 1, 2016, Distribution provided Staff with an update on its network enhancement initiatives, target customer segments and tools, including: the Wilson pilot program, the Richmond pilot program, Phase II projects, Phase III projects, non-heating customers, skips, non-customer clusters near mains, utilizing the Company's Geographic Information System ("GIS") to identify candidates for network enhancement projects, plans for potential franchise expansion, low income initiatives, gas conversion initiatives, and the availability of network

enhancement customer incentives. On February 8, 2016, Distribution filed its latest Gas Network Enhancement Collaborative Annual Report in Case 13-G-0136, providing a written update on all Company network enhancement initiatives.

- Distributed Generation ("DG") Program – Under the DG Program, Distribution utilizes shareholder funds to help customers buydown the cost of installing DG equipment, which in turn lowers customer payback periods. Customers sign performance contracts with the Company and may be required to provide security. Funding for customer buydowns is recovered through incremental transportation revenues. This program was reauthorized by the Commission to operate through March 31, 2018.
- Natural Gas Vehicle ("NGV") Program – Under the NGV Program, Distribution utilizes shareholder funds to help customers buydown the cost of installing NGV refueling stations, procuring NGV-related equipment, and/or procuring NGV vehicles, which in turn lowers customer payback periods. Customers sign performance contracts with the Company and may be required to provide security. Funding for customer buydowns is recovered through incremental transportation revenues. This program was reauthorized by the Commission to operate through March 31, 2018. In addition, on June 4, 2015, December 9, 2015 and June 1, 2016, Distribution provided Staff with updates on the issuance of a RFP for a management company to operate the Mineral Springs NGV station, and on the state of the NGV market in western New York. On January 29, 2016, Distribution filed its latest Partnership for NGV Program Report in Case 14-G-0551, providing a written update on all Company NGV initiatives.
- Prime-WNY Program – Under the Prime-WNY Program, Distribution utilizes shareholder funds to incent large commercial and industrial customers to install

incremental natural gas fired equipment at their existing facilities (e.g., system improvements, associated piping, and/or customer equipment). Customers sign performance contracts with the Company and may be required to provide security. Funding for customer buydowns is recovered through incremental transportation revenues. This program was authorized by the Commission to operate through March 31, 2018.

V. Budget and Target Summary – Total Portfolio

Exhibit 3 provides a budget summary for Distribution's full CIP portfolio. It should be noted that the Portfolio Administration category includes outreach and education supporting the full CIP portfolio. In addition, a description of energy efficiency administrative costs that are recovered through base rates has already been provided above in the "Portfolio Description – CIP Overview" section of the Company's ETIP filing.

Exhibit 3: Total Gas Portfolio Budgets				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
Commercial and Industrial Sector				
NRCIP				
Incentives and Services	$598,000	$605,000	$605,000	$605,000
Program Implementation	$52,000	$40,000	$40,000	$40,000
Total Program Budget	**$650,000**	**$645,000**	**$645,000**	**$645,000**
Residential Sector				
Residential Rebate Program				
Incentives and Services	$2,500,000	$2,450,000	$2,450,000	$2,450,000
Program Implementation	$150,000	$130,000	$130,000	$130,000
Total Program Budget	**$2,650,000**	**$2,580,000**	**$2,580,000**	**$2,580,000**
LIURP				
Incentives and Services	$4,979,100	$4,581,750	$4,581,750	$4,581,750
Program Implementation	$510,900	$318,250	$318,250	$318,250
Total Program Budget	**$5,490,000**	**$4,900,000**	**$4,900,000**	**$4,900,000**
Total Portfolio				
Total Commercial and Industrial Sector	$650,000	$645,000	$645,000	$645,000
Total Residential Sector	$8,140,000	$7,480,000	$7,480,000	$7,480,000
Portfolio Administration	$950,000	$790,000	$790,000	$790,000
Portfolio EM&V	$300,000	$125,000	$125,000	$125,000
Total Gas Portfolio Budget	**$10,040,000**	**$9,040,000**	**$9,040,000**	**$9,040,000**

Exhibit 4 provides a metric summary for Distribution's full CIP portfolio. The Company is proposing Dth as a primary metric in this ETIP filing. Distribution remains an active participant in the Metrics, Tracking and Performance Assessment ("MTPA") Working Group, as part of the Clean Energy Advisory Council ("CEAC"). Although Distribution is not proposing secondary metrics in this ETIP filing, the Company notes that the work of the MTPA Working Group may potentially inform the development and proposal of secondary metrics with REV-like outcomes in the future, as NYSERDA continues development of an Online Dashboard in conjunction with MTPA Working Group member input and feedback.

Exhibit 4: Total Gas Portfolio Targets				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
Commercial and Industrial Sector				
NRCIP				
Dth - Primary Metric	172,909.14	150,566.54	150,566.54	150,566.54
Residential Sector				
Residential Rebate Program				
Dth - Primary Metric	120,803.93	135,544.25	135,544.25	135,544.25
LIURP				
Dth - Primary Metric	51,628.58	60,810.57	60,810.57	60,810.57
Total Portfolio				
Dth - Primary Metric	345,341.65	346,921.36	346,921.36	346,921.36

VI. Forecasted Portfolio Level Activity

Exhibit 5 and Exhibit 6 provide an estimate, forecasting CIP expenditures and Dth achievements, respectively, for commitment and encumbrance planning purposes.

Exhibit 5: Total Gas Portfolio Forecasted Expenditures							
	Previous Year (2016)	**Current Year (2017)**	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**	**Planned Year (2021)**	**Total**
2016	$6,124,080	$2,975,336					**$9,099,416**
2017		$5,759,750	$3,280,250				**$9,040,000**
2018			$5,759,750	$3,280,250			**$9,040,000**
2019				$5,759,750	$3,280,250		**$9,040,000**
2020					$5,759,750	$3,280,250	**$9,040,000**
Total	**$6,124,080**	**$8,735,086**	**$9,040,000**	**$9,040,000**	**$9,040,000**	**$3,280,250**	**$45,259,416**

Exhibit 6: Total Gas Portfolio Forecasted Achievements (Dth)							
	Previous Year (2016)	**Current Year (2017)**	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**	**Planned Year (2021)**	**Total**
2016	130,051.27	37,029.34					**167,080.61**
2017		245,665.45	101,255.91				**346,921.36**
2018			245,665.45	101,255.91			**346,921.36**
2019				245,665.45	101,255.91		**346,921.36**
2020					245,665.45	101,255.91	**346,921.36**
Total	**130,051.27**	**282,694.79**	**346,921.36**	**346,921.36**	**346,921.36**	**101,255.91**	**1,554,766.05**

VII. Evaluation, Measurement and Verification (EM&V)

Distribution and its evaluation contractor have developed a comprehensive EM&V Plan for CIP, for the 2016 through 2020 program years, which will be continuously refined as needed. This plan could potentially be expanded to additional program years in the future, as necessary. A copy of this EM&V Plan was filed on June 1, 2017 in Case 15-M-0252 and in Matter 16-02180.[21] Exhibit 7 and Exhibit 8 provide Distribution's EM&V activity schedule and each EM&V activity's forecasted expenditures, respectively, for planning purposes.

Exhibit 7: EM&V Activity Schedule – Total Gas Portfolio

EM&V Activity	Expected Plan Submission Date	Expected Start Date	Expected Completion Date	Cycle Year Informed	Status
Process Evaluation (All Programs)	6/1/2017	12/9/2016	12/31/2017	2018	In Progress
LIURP Impact Evaluation Field Work	6/1/2017	1/1/2018	4/30/2018	2019	Upcoming
Residential Rebate Program Impact Evaluation Field Work	6/1/2017	5/1/2018	8/31/2018	2019	Upcoming
NRCIP Impact Evaluation Field Work	6/1/2017	9/1/2018	12/31/2018	2019	Upcoming
Outreach and Education Impact Evaluation Field Work	6/1/2017	1/1/2019	4/30/2019	2020	Upcoming
Impact Evaluation Report (All Programs)	6/1/2017	5/1/2019	9/30/2019	2020	Upcoming
TRM Implementation and On-Going Support	6/1/2017	On-Going	On-Going	All Years	On-Going / In Progress

[21] Matter 16-02180 – In the Matter of Clean Energy Program Evaluation, Measurement and Verification.

Exhibit 8: EM&V Activity Forecasted Expenditures - Total Gas Portfolio				
EM&V Activity	**Current Year (2017)**	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
Process Evaluation (All Programs)	$50,000			
LIURP Impact Evaluation Field Work		$75,000		
Residential Rebate Program Impact Evaluation Field Work		$75,000		
NRCIP Impact Evaluation Field Work		$50,000	$25,000	
Outreach and Education Impact Evaluation Field Work			$25,000	
Impact Evaluation Report (All Programs)			$20,000	$10,000
TRM Implementation and On-Going Support	$42,500	$42,500	$42,500	$42,500
Total EM&V Forecasted Expenditures	**$92,500**	**$242,500**	**$112,500**	**$52,500**

VIII. Benefit Cost Analysis ("BCA")

Since Distribution's December 1, 2016 ETIP filing in Case 15-M-0252 was last completed, Staff provided new natural gas prices to utilities in April 2017 for use in prospective ETIP filings. The Company has had productive conversations with Staff regarding the new natural gas prices that were provided. Based on these conversations, the following information was conveyed to Distribution:

- The New York Independent System Operator ("NYISO") develops natural gas price forecasts for electric system production cost modeling, as part of the Congestion Assessment and Resource Integration Study ("CARIS") economic planning process.
- The new natural gas prices received by Staff were developed in conjunction with NYISO Staff, and are based on data from NYISO's CARIS economic planning process.
- NYISO's CARIS gas price forecasts start with the Energy Information Administration ("EIA") base case forecast of annual United States average delivered gas prices.
- NYISO then develops base costs at various hubs based on historical information.
- NYISO breaks down its annual gas price forecasts into weekly gas price forecasts, which are modeled in CARIS electric system simulations to capture seasonality.

Exhibit 9 provides the latest BCA for Distribution's total gas portfolio of programs. It should be noted Societal Cost Test ("SCT") results, including the Staff-provided new natural gas prices and the Staff-provided value of avoided CO_2 emissions (both unmodified by Distribution), are presented in the table below. The Company also notes that this BCA analysis assumes a $0.00 value as respects benefits associated with: avoided ancillary reserves, avoided distribution capacity infrastructure, avoided operations and maintenance expenses, avoided distribution losses, net avoided restoration costs, net avoided outage costs, net avoided criteria pollutants, avoided water impacts, avoided land impacts, and net non-energy benefits relating to utility operations. Stated otherwise, the Company took a very realistic and conservative position on the valuation of benefits that would accrue from the Company's total gas portfolio of programs.

Exhibit 9: Benefit Cost Ratios				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
Commercial and Industrial Sector				
NRCIP				
Benefits	$10,626,666	$11,209,038	$11,895,742	$12,583,770
Costs	$11,006,039	$11,006,039	$11,006,039	$11,006,039
Benefit Cost Ratio	**0.9655**	**1.0184**	**1.0808**	**1.1434**
Residential Sector				
Residential Rebate Program				
Benefits	$8,159,861	$8,609,556	$9,142,141	$9,675,139
Costs	$7,536,035	$7,536,035	$7,536,035	$7,536,035
Benefit Cost Ratio	**1.0828**	**1.1425**	**1.2131**	**1.2839**
LIURP				
Benefits	$4,659,988	$4,915,616	$5,217,268	$5,519,441
Costs	$4,900,000	$4,900,000	$4,900,000	$4,900,000
Benefit Cost Ratio	**0.9510**	**1.0032**	**1.0647**	**1.1264**
Total Portfolio				
Total Benefits	$23,446,515	$24,734,210	$26,255,151	$27,778,350
Total Costs	$23,442,074	$23,442,074	$23,442,074	$23,442,074
Total Gas Portfolio Benefit Cost Ratio	**1.0002**	**1.0551**	**1.1200**	**1.1850**

The method employed for the development of new natural gas prices has limitations, as respects the applicability of CARIS data to natural gas utilities. First of all, annual United States average delivered gas prices and historical information form the foundation with which CARIS data is built. In contrast, for financial forecasting purposes, Distribution develops forward looking gas price information. This information is specific to the Company's service territory, the specific basins the Company transacts in (including basis price differentials), and specific contracts for natural gas commodity (i.e., quantities of gas, contract term, and cost) that the Company has entered into. In addition, the process with which the Company utilizes to develop this information is thoroughly examined in rate cases, including the Company's most recent rate case.[22] Secondly, CARIS forecast information makes use of historical price information. In contrast, the Company's methodology employs forward looking price strips, based on publicly available information, again applying the specific basis differentials to the forward looking price strips, in order to replicate accurate market conditions and expectations. Third, NYISO makes use of electric system simulations to account for seasonality. The electric and natural gas industries are radically different businesses, and it wouldn't be appropriate to apply electric industry seasonality to the natural gas industry. A tangible example of this fact can be seen through a peak day comparison across industries; the electric industry's peak day typically falls in the summer, while the natural gas industry's peak day typically falls in the winter. Furthermore, the vast majority of Distribution's customers are using natural gas in their homes and businesses, and as such, they are not electric generation customers.

While the limitations described above at a very high-level persist, Distribution understands that Staff's intent was to afford gas utilities flexibility in terms of using their own

[22] Case 16-G-0257 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of National Fuel Gas Distribution Corporation for Gas Service.

forecasts of distribution costs. This flexibility is imperative and is the most realistic "yardstick" to use in valuing benefits associated with avoided natural gas use associated with energy efficiency programming. Exhibit 10 provides a second BCA for Distribution's total gas portfolio of programs. The only difference between the numbers calculated in Exhibit 9 and Exhibit 10 is the underlying natural gas prices assumed in modeling. Specifically, Exhibit 10 is based on an analysis that removes the Staff-provided natural gas prices, and then replaces them with Distribution's forward looking gas prices, which were developed for volumetric forecasting used for, among other things, the Company's gas purchasing plan. No other changes were made to the BCA analysis presented in Exhibit 10.

Exhibit 10: Benefit Cost Ratios				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
Commercial and Industrial Sector				
NRCIP				
Benefits	$13,524,015	$14,220,522	$14,336,112	$14,729,853
Costs	$11,006,039	$11,006,039	$11,006,039	$11,006,039
Benefit Cost Ratio	**1.2288**	**1.2921**	**1.3026**	**1.3383**
Residential Sector				
Residential Rebate Program				
Benefits	$10,473,636	$11,014,478	$11,090,980	$11,388,965
Costs	$7,536,035	$7,536,035	$7,536,035	$7,536,035
Benefit Cost Ratio	**1.3898**	**1.4616**	**1.4717**	**1.5113**
LIURP				
Benefits	$5,939,274	$6,245,297	$6,294,782	$6,467,016
Costs	$4,900,000	$4,900,000	$4,900,000	$4,900,000
Benefit Cost Ratio	**1.2121**	**1.2746**	**1.2846**	**1.3198**
Total Portfolio				
Total Benefits	$29,936,925	$31,480,297	$31,721,874	$32,585,834
Total Costs	$23,442,074	$23,442,074	$23,442,074	$23,442,074
Total Gas Portfolio Benefit Cost Ratio	**1.2771**	**1.3429**	**1.3532**	**1.3901**

As respects the Utility Cost Test ("UCT") and the Ratepayer Impact Measure ("RIM") BCA screening approaches, the Company notes that it received clarification from Staff that these tests would only apply to the BCA Handbooks that were ordered by the Commission in the REV Proceeding.[23] In addition, the Company notes that any requirements set forth in the ETIP Annual Report Guidance[24] would separately be addressed in the Company's ETIP Annual Report filing.

IX. Residential Rebate Program Description

Program Design

The Residential Rebate Program is an equipment replacement program, modeled after a Vermont Gas Systems program, which was cited by the American Council for an Energy-Efficient Economy ("ACEEE"), as one of the nation's exemplary natural gas energy efficiency programs. Distribution's program offers equipment replacement rebate incentives for single-family and multi-family residential dwellings, to encourage them to install high efficiency space heating and water heating appliances. These types of appliances are by far the largest two users of natural gas in residential buildings, and are therefore most likely to show the largest savings to customers when they upgrade their appliances. Distribution sets minimum efficiency levels for each appliance type based on federal Energy Star and New York State Energy Smart guidelines. The goal of the Residential Rebate Program is to encourage the installation of high efficiency appliances or equipment by customers.

[23] Case 14-M-0101 – Order Establishing the Benefit Cost Analysis Framework, issued and effective January 21, 2016.
[24] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-06, ETIP Annual Reporting Guidance, filed on May 12, 2017.

Program Delivery Method

All measures must be installed using a licensed contractor or a contractor that can supply a federal tax identification number, a certificate of insurance, or a business certificate. All measures must be purchased as new and installed prior to submitting a completed rebate application and other necessary required documentation. Proof of purchase for eligible measures must include the following information:

1) Paid invoice or receipt(s) indicating the retailer/contractor name, business address, and phone number. The paid invoice should contain an itemized description of each product including:
    a. Manufacturer, and complete model number of equipment replaced and installed;
    b. Efficiency rating for furnaces or boilers ("AFUE");
    c. Efficiency rating for tank and tankless water heaters ("Energy Factor" or "EF"); and
    d. Product installation date.
2) A copy of the retailer/contractor federal tax identification number, certificate of insurance, or business certificate.

Distribution's rebate processor serves as the primary contact for customer inquiries and/or requests for information. A call center and toll-free telephone number is maintained so that customers can contact the rebate processor directly. Many of the customer interactions are handled directly by the rebate processor, but contact is made in the event that an issue arises which requires Distribution's direction, judgment, or interpretation of Residential Rebate Program policies and procedures. This communication is completed through e-mails and

telephone calls, and occurs on an ad-hoc basis, as needed, which can be as often as a daily basis. Customers that have submitted a rebate application and the necessary paperwork, and have questions about their submittal or rebate status, can call 1-877-285-7824. In the event that customers have a question, problem or request, they can contact Distribution's Customer Response Center ("CRC"). In the Buffalo area, that phone number is 716-686-6123 and in all other areas that phone number is 1-800-365-3234.

The Company worked collaboratively with the rebate processor to implement an online services web portal for customers, which includes two key components to this service:

- Customer E-mail Status Alerts: Customers who supply e-mail addresses on their Residential Rebate Program application form will receive status updates via e-mail as their application moves through processing. Customers will receive confirmation that: (1) the application has been received, (2) the application is under review, (3) the application has been processed, and (4) the rebate check has been approved and mailed. E-mails to customers also include a link to a status webpage, so that customers can see the details of their application (e.g., measures applied for, rebate amount, etc.) at any time.
- Client Portal for Dashboards and Reporting: Company personnel can get immediate access to program data and customer participation levels. The portal includes a suite of standardized graphs, as well as the functionality to create custom reports and graphs for program administration and design purposes. The portal also provides visibility of pending applications so that Distribution can assess its program queuing, processing speed, and overall effectiveness.

In addition, Distribution and the rebate processor are currently in the process of developing an online portal to accept Company applications for CIP. This will incorporate a landing page (outlining online application instructions), with an electronic rebate form that can be completed and submitted online. Once implemented, customers will be able to log in to a rebate status page and have the option to subscribe to e-mail alerts, which provides customers further visibility on their application status.

Target Market and Eligibility

The target market for the Residential Rebate Program is all residential customers within Distribution's New York service territory. All residential customers are eligible to participate in the Residential Rebate Program. Rebates are available for existing single-family dwellings, multi-family dwellings, condominiums and mobile dwellings. New construction is also eligible for this program.[25] Measures included in the 2017 Residential Rebate Program are outlined below in Exhibit 11A.

[25] Distribution is proposing to include new construction prospectively, with an effective date of January 1, 2018.

Exhibit 11A: Measure Summary – Calendar Year 2017		
	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	90% AFUE	$325
Hot Air Furnace with ECM	90% AFUE	$400
Hot Water Boiler	90% AFUE	$700
Steam Boiler	82% AFUE	$200
Water Heating		
Storage Tank Water Heater (55 Gallons or Less)	0.67 EF	$100
Storage Tank Water Heater (More Than 55 Gallons)	0.77 EF	$200
Tankless Water Heater	0.90 EF	$375
Other Gas Appliances		
Clothes Dryer	Energy Star Rated	$50
Controls		
Wi-Fi Thermostat	N/A	$75

After consideration of the BCA screening results and the current natural gas price environment, Distribution is proposing several updates to the measures offered in the Residential Rebate Program. Once implemented, the measures to be prospectively included in the Residential Rebate Program are outlined below in Exhibit 11B.

Exhibit 11B: Measure Summary – Calendar Years 2018 through 2020		
	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	92% AFUE	$225
Hot Air Furnace with ECM	92% AFUE	$250
Hot Water Boiler	90% AFUE	$600
Steam Boiler	82% AFUE	$150
Water Heating		
Storage Tank Water Heater (55 Gallons or Less)	0.67 EF	$50
Storage Tank Water Heater (More Than 55 Gallons)	0.77 EF	$100
Tankless Water Heater	0.82 EF	$200
Tankless Water Heater	0.90 EF	$300
Other Gas Appliances		
Clothes Dryer	Energy Star Rated	$50
Controls		
Wi-Fi Thermostat	N/A	$75

In addition to the equipment outlined above, Distribution may elect to provide customers that have participated in CIP with low cost measures, utilizing competitive procurement processes. The provision of these measures would occur within the Residential Rebate Program in accordance with the Commission's June 20, 2011 Order, and any applicable installation requirements specified in the NYTM.[26] Distribution believes that customers previously participating in CIP would be the most likely to install new, low-cost energy saving measures, as

[26] Case 07-M-0548 – Order Approving Modifications to the Energy Efficiency Portfolio Standard (EEPS) Program to Streamline and Increase Flexibility in Administration, issued and effective June 20, 2011.

these customers have already demonstrated their interest in energy conservation through past practice.

Program Participation and Savings Derivation

Exhibit 12 provides a derivation of anticipated program participation levels and program savings, for the newly proposed program offerings (i.e., Exhibit 11B), assuming the full program budget is expended. This derivation analysis was based on Distribution's newly proposed rebate dollar amounts, per unit savings calculations, and the engineering algorithms presented in the NYTM.[27] The assumed measure mix within the Residential Rebate Program is based on actual program activity from its 2007 inception through the end of calendar year 2016, scaled to the program budget outlined below. With respect to Wi-Fi thermostats and clothes dryers, two new REV-related measures initiated by Distribution, limited historical data was available from the program on historical measure uptake. As such, for the purposes of this derivation analysis, Distribution made a facilitating assumption that 1,500 Wi-Fi thermostats and 1,500 clothes dryers would be incented as part of the Residential Rebate Program.

[27] New York State Public Service Commission website, New York Technical Manual, at: http://www3.dps.ny.gov/W/PSCWeb.nsf/All/72C23DECFF52920A85257F1100671BDD?OpenDocument.

Exhibit 12: Residential Rebate Program - Participation and Savings Derivation					
Measure	**Number of Participants**	**Per Unit Rebate ($)**	**Total Rebates ($)**	**Per Unit Savings (Dth)**	**Total Savings (Dth)**
Space Heating					
Hot Air Furnace	5,094.69	$225	$1,146,304.78	13.9320	70,979.19
Hot Air Furnace with ECM	3,177.99	$250	$794,497.78	13.9320	44,275.77
Hot Water Boiler	286.24	$600	$171,744.20	11.0751	3,170.15
Steam Boiler	26.94	$150	$4,040.92	2.8380	76.45
Water Heating					
Storage Tank Water Heater	708.95	$75	$53,171.20	5.2891	3,749.69
Tankless Water Heater	370.96	$250	$92,741.13	8.3298	3,090.07
Controls and Other Appliances					
Clothes Dryer	1,500.00	$50	$75,000	0.5019	752.92
Wi-Fi Thermostat	1,500.00	$75	$112,500	6.3000	9,450.00
Total Incentives and Services	**12,665.77**		**$2,450,000**		**135,544.25**

Anticipated Changes

If Residential Rebate Program changes are to be proposed prospectively for 2019, 2020, or future program years (aside from the changes described herein), those changes would be incorporated into future ETIP filings completed by Distribution, in accordance with Staff's Program Cycle Guidance Document.

Quality Assurance ("QA") / Quality Control ("QC")

Distribution has put in place a comprehensive QA/QC plan. This plan is implemented primarily by the rebate processor through several mechanisms to assure that rebates are only given out to qualified customers. Distribution's current rebate processor administers energy efficiency programs for utilities nationwide and has been in the energy industry since 1982. The rebate processor screens all applications against a Distribution database to ensure that the applicant is a customer and that eligibility requirements have been met. The rebate processor also reviews appliance specification sheets and compares equipment make/model data against an appliance database to ensure that equipment installed is meeting required energy efficiency

levels. Contractor invoices are also reviewed to ensure that equipment was installed by a licensed contractor. Any flaws found in the application are turned back to the customer for additional information or clarification, and then are either approved or rejected based on additional data provided.

The rebate processor also coordinates the process of conducting two additional QC aspects of the program. First, they work with a third party vendor to conduct random monthly on-site inspections of equipment installations to verify that the equipment receiving a rebate was actually installed by the customer. Second, the rebate processor conducts telephone surveys to random samples of customers to gain their insight on program awareness, the purchase decision, the rebate's impact on the purchase decision, and overall customer satisfaction with the rebate application process.

Program Budget and Performance Targets

The overall Residential Rebate Program budget, by category, is shown below in Exhibit 13. Distribution expects greater customer participation and program expenditures during the winter heating season, as opposed to the summer months. In addition, there is usually a lag in getting program results early in the program year (first quarter or two), as a measure needs to be installed, paperwork and supporting documentation needs to be assembled, reviewed and processed, and a rebate payment needs to be provided to the customer.

Exhibit 13: Residential Rebate Program Budgets				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
ANNUAL				
Incentives and Services	$2,500,000	$2,450,000	$2,450,000	$2,450,000
Program Implementation	$150,000	$130,000	$130,000	$130,000
TOTAL ANNUAL	$2,650,000	$2,580,000	$2,580,000	$2,580,000
CUMULATIVE				
Customer Incentives	$2,500,000	$4,950,000	$7,400,000	$9,850,000
Program Administration	$150,000	$280,000	$410,000	$540,000
TOTAL CUMULATIVE	$2,650,000	$5,230,000	$7,810,000	$10,390,000

It is not uncommon that rebate applications and necessary supporting documentation is submitted after the conclusion of a program year, especially for installs that were completed during the fourth quarter of the current program year. The vast majority of these submittals are typically completed in the first six months of the subsequent program year. After the six month period ends, Distribution will not preclude customers from submitting paperwork and participating in the program. However, the majority of these customers would be required to complete an on-site inspection in order to receive a rebate. This QA practice verifies that the equipment was actually installed and minimizes the potential for fraudulent rebate claims to be submitted.

The primary performance target for this program is total savings, as outlined below in Exhibit 14. Distribution's savings target is based on the derivation analysis prepared and engineering algorithms from the NYTM, both of which were described above.

Exhibit 14: Residential Rebate Program Targets	
Program Year	**Primary Metric**
	Gross Total Savings (Dth)
Current Year (2017)	120,803.93
Planned Year (2018)	135,544.25
Planned Year (2019)	135,544.25
Planned Year (2020)	135,544.25

Previous Year Considerations

The Company notes that any requirements set forth in ETIP Annual Report Guidance[28] would separately be addressed in the Company's ETIP Annual Report filing.

X. NRCIP Description

Program Design

NRCIP is a space, water and process heating equipment replacement program that offers fixed and customized rebate incentives to non-residential customers. NRCIP was modeled after a Vermont Gas Systems program that was cited by the ACEEE as an exemplary natural gas energy efficiency program. The goal of NRCIP is to provide cost effective incentives to non-residential customers utilizing natural gas efficiently in their business operations.

Fixed rebates on pre-qualified equipment are available to customers and are designed to be quick and easy, utilizing a straightforward application process. For fixed rebates, Distribution sets minimum efficiency levels for each appliance type based on federal Energy Star and New York State Energy Smart guidelines.

Customized rebates are also available to customers on a case-by-case basis, at a level of $15 per Mcf multiplied by an estimate of natural gas energy savings to be achieved from the completion of a project. These rebates are available for energy efficient: furnaces, boilers, water heaters, process heating equipment, steam/hot water distribution piping insulation, boiler control systems, thermostats and cooking equipment. All energy efficiency projects resulting in natural gas savings will be considered for a customized rebate. Technical engineering analyses are performed in order to validate and confirm energy savings.

[28] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-06, ETIP Annual Reporting Guidance, filed on May 12, 2017.

NYSERDA previously performed day-to-day project management and administration of NRCIP, in conjunction with the Existing Facilities Program, based on contractual agreements executed with Distribution. However, in 2015, the Company has received informal communication from NYSERDA that they no longer wish to perform day-to-day project management and administration services for Distribution's NRCIP. As a result, the Company was involved in a competitive procurement process to solicit a new Implementation Contractor. Distribution completed the RFP process and necessary contractual requirements in December 2015 and a new Implementation Contractor was in place for January 1, 2016. Based upon the Company's expectations for the new Implementation Contractor, as well as the new Implementation Contractor's performance, Distribution took immediate action by re-initiating the competitive procurement process to solicit a second Implementation Contractor, on November 14, 2016. A second Implementation Contractor for NRCIP was selected and assumed full responsibility for the program, effective March 1, 2017. Distribution is collaboratively working with NYSERDA and the former Implementation Contractor throughout the transition period, in order to ensure a smooth transition for customers.

From NRCIP's inception in 2007, through December 31, 2016, the program was limited to non-residential customers using 12,000 Mcf or less per year. This practice ensured that Distribution's program offerings were not duplicative with NYSERDA programming, and that the two entities did not "compete" to enroll the same population of customers. Beginning January 1, 2017, NRCIP has been officially "opened up" to all non-residential customers (i.e., the 12,000 Mcf cap has been removed from the program). This determination was made: (1) resulting from an on-going dialogue with NYSERDA to discuss the change and ensure that it would not be duplicative, (2) after learning about NYSERDA's Clean Energy Fund ("CEF") and

jointly coordinating NRCIP and CEF program offerings for non-residential customers, and (3) based on the fact that larger non-residential customers (i.e., greater than 12,000 Mcf per year) are required to pay the Energy Efficiency Tracker in accordance with the Company's currently effective tariff.

Program Delivery Method

Procedures for customer enrollment include:

- Upon receipt of a completed application (includes application and technical engineering study) the Implementation Contractor will:
    - Review the application for completeness and eligibility.
    - Ensure all necessary supporting documentation has been submitted.
    - Review the engineering study for technical merit.
    - Log the application into a Project Tracking Database.
    - Contact the customer and/or contractor to conduct a pre-installation site visit to verify existing conditions.[29]
    - Summarize the proposed natural gas project and provide a recommendation of potential energy savings and an appropriate financial incentive.
- Once an application is approved:
    - The customer will be notified by the Implementation Contractor that they are eligible to receive funding. This notification is in writing, unless requested otherwise by the customer.

[29] This procedure is only applicable for customized rebates.

  - The Implementation Contractor will maintain contact with the customer to confirm that the project is expected to move forward and to check the status of the project during its execution.
  - The Project Tracking Database will be updated to reflect the funding expectation and customer communications.

- Once the customer completes the project:
  - The Implementation Contractor will conduct a post-installation site-inspection to verify that the project has been completed and that the same equipment specified in the application was installed. This includes a verification of the efficiency levels submitted on the application and the efficiency levels of equipment installed.[30]
  - Based on the site-inspection, the Implementation Contractor will either: (1) sign off on the energy savings achieved and financial incentives to be awarded, or (2) document changes to energy savings achieved and financial incentives to be awarded.[31]
  - The customer will be notified of the results of the on-site inspection, the energy savings actually achieved by the project, and the final financial incentive. This notification is in writing, unless requested otherwise by the customer. Accompanying this notification is a financial incentive payment to the customer. If the customer requested a non-writing notification, the financial incentive payment is mailed out on its own.[32]

[30] This procedure is only applicable for customized rebates.
[31] This procedure is only applicable for customized rebates.
[32] This procedure is only applicable for customized rebates.

- The Project Tracking Database will be updated to reflect the completion of construction, completion of the on-site inspection, customer communications, final energy savings achieved, final financial incentive dollar amount, and payment information.

The Implementation Contractor serves as the primary point of contact for any customer inquiries and/or requests for information. Customers can contact the Implementation Contractor via phone, e-mail, or in writing. Many of the customer inquiries are handled directly by the Implementation Contractor, but they also work closely with Distribution if there is an issue which requires the Company's direction, judgment or interpretation of NRCIP policies and procedures. This communication is done mainly through e-mails and occasional phone calls, and usually occurs on a weekly basis. Communication also occurs on an ad hoc basis, as needed, outside of the typical weekly communication. Customers can also call Distribution's CRC at 1-800-365-3234 to learn more about the basics of NRCIP.

Distribution typically holds training sessions with trade allies involved in NRCIP, which consists primarily of heating and cooling contractors and mechanical contractors. The Company will continue to hold training sessions in the future. These training sessions have largely been focused on educating trade allies on the availability of fixed and customized rebates, the differences between the two types of rebates, a detailed review of program application forms and procedures, and the provision of contact information for both the Implementation Contractor and Distribution. The training sessions also provide an opportunity to receive feedback on the program from trade allies. In addition, trade allies have the opportunity to ask any questions they may have.

Target Market and Eligibility

The target market for NRCIP is non-residential customers within Distribution's New York service territory. All installations must be completed by a licensed contractor. Customers applying to participate in the program and the contractor that performs the installation must be able to supply one of the following: the contractor's federal tax identification number, a Certificate of Insurance, or a Business Certificate showing the contractor's name and address. This information must be provided in order for an application to be considered complete. Building retrofits, as well as new construction, are both eligible for NRCIP.[33] Measures included in the 2017 NRCIP are outlined below in Exhibit 15A.

Exhibit 15A: Measure Summary – Calendar Year 2017

Measure	Required Minimum Efficiency	Equipment Size (MBtu/h) or (feet)	Rebate Amount
Space Heating			
Hot Air Furnace	90% AFUE	≤ 300	$3.00/MBtu/h
Hot Air Furnace	92% AFUE	≤ 300	$4.00/MBtu/h
Hot Air Furnace	95% AFUE	≤ 300	$5.00/MBtu/h
Hot Water Boiler	Energy Star-Rated or 85% AFUE	≤ 300	$600
Hot Water Boiler	85% E_t	301 – 500	$750
Hot Water Boiler	85% E_t	501 – 1,000	$1,500
Hot Water Boiler	85% E_t	1,001 - 1,700	$2,500
Hot Water Boiler	85% E_t	> 1,700	$3,000
Hot Water Boiler	90% AFUE	≤ 300	$1,000
Hot Water Boiler	90% E_t	301 - 500	$1,500
Hot Water Boiler	90% E_t	501 - 1,000	$2,500
Hot Water Boiler	90% E_t	1,001 - 1,700	$3,500
Hot Water Boiler	90% E_t	> 1,700	$4,500
Steam Boiler	82% AFUE	≤ 300	$2.00/MBtu/h
Steam Boiler	79% E_t	301 - 2,500	$1.00/MBtu/h
Steam Boiler	80% E_t	> 2,500	$1.00/MBtu/h
Unit Heater	≥ 90% AFUE or E_t		$2.00/MBtu/h

[33] Distribution is proposing to include new construction prospectively, with an effective date of January 1, 2018.

Infrared Heater	N/A		$2.50/MBtu/h
Vent Damper	N/A		$1.00/MBtu/h
Pipe Insulation	R-Value > 4		$3.00/foot
Duct Insulation	R-Value > 6		$0.50/foot
Demand Control Ventilation	N/A		$200/sensor
Water Heating			
Storage Tank Water Heater (55 Gallons or Less)	0.67 EF		$150
Storage Tank Water Heater (More Than 55 Gallons)	0.77 EF		$250
Storage Tank Water Heater (140 Gallons or Less)	0.90 E_t		$350
Tankless Water Heater	0.90 EF		$425
Storage Tank Insulation	R-Value > 9		$1.00/sq.ft.
New Circulation Controls	N/A		$500/unit
Cooking Equipment			
Fryer	Energy Star-Rated		$750
Broiler	Cooking Efficiency ≥ 30%		$500
Convection Oven	Energy Star-Rated		$500
Combination Oven	Food Service Technology Center-Rated		$750
Steamer	Energy Star-Rated		$750
Griddle	Energy Star-Rated	≤ 2 feet wide	$350
Griddle	Energy Star-Rated	3 feet wide	$525
Griddle	Energy Star-Rated	4 feet wide	$700
Griddle	Energy Star-Rated	5 feet wide	$875
Griddle	Energy Star-Rated	≥ 6 feet wide	$1,050
Controls			
Wi-Fi Thermostat	N/A		$75

Once implemented, the measures to be prospectively included in NRCIP are outlined below in Exhibit 15B.

Exhibit 15B: Measure Summary – Calendar Years 2018 through 2020			
Measure	**Required Minimum Efficiency**	**Equipment Size (MBtu/h) or (feet)**	**Rebate Amount**
Space Heating			
Hot Air Furnace	90% AFUE	≤ 300	$3.00/MBtu/h
Hot Air Furnace	92% AFUE	≤ 300	$4.00/MBtu/h

Hot Air Furnace	95% AFUE	≤ 300	$5.00/MBtu/h
Hot Water Boiler	Energy Star-Rated or 85% AFUE	≤ 300	$600
Hot Water Boiler	85% E_t	301 – 500	$750
Hot Water Boiler	85% E_t	501 – 1,000	$1,500
Hot Water Boiler	85% E_t	1,001 - 1,700	$2,500
Hot Water Boiler	85% E_t	> 1,700	$3,000
Hot Water Boiler	90% AFUE	≤ 300	$1,000
Hot Water Boiler	90% E_t	301 - 500	$1,500
Hot Water Boiler	90% E_t	501 - 1,000	$2,500
Hot Water Boiler	90% E_t	1,001 - 1,700	$3,500
Hot Water Boiler	90% E_t	> 1,700	$4,500
Steam Boiler	82% AFUE	≤ 300	$2.00/MBtu/h
Steam Boiler	79% E_t	301 - 2,500	$1.00/MBtu/h
Steam Boiler	80% E_t	> 2,500	$1.00/MBtu/h
Unit Heater	≥ 90% AFUE or E_t		$2.00/MBtu/h
Infrared Heater	N/A		$2.50/MBtu/h
Vent Damper	N/A		$1.00/MBtu/h
Pipe Insulation	R-Value > 4		$3.00/foot
Duct Insulation	R-Value > 6		$0.50/foot
Demand Control Ventilation	N/A		$200/sensor
Water Heating			
Storage Tank Water Heater (55 Gallons or Less)	0.67 EF		$100
Storage Tank Water Heater (More Than 55 Gallons)	0.77 EF		$200
Storage Tank Water Heater (140 Gallons or Less)	0.90 E_t		$300
Tankless Water Heater	0.82 EF		$200
Tankless Water Heater	0.90 EF		$300
Storage Tank Insulation	R-Value > 9		$1.00/sq.ft.
New Circulation Controls	N/A		$500/unit
Cooking Equipment			
Fryer	Energy Star-Rated		$750
Broiler	Cooking Efficiency ≥ 30%		$500
Convection Oven	Energy Star-Rated		$500
Combination Oven	Food Service Technology Center-Rated		$750
Steamer	Energy Star-Rated		$750
Griddle	Energy Star-Rated	≤ 2 feet wide	$350

Griddle	Energy Star-Rated	3 feet wide	$525
Griddle	Energy Star-Rated	4 feet wide	$700
Griddle	Energy Star-Rated	5 feet wide	$875
Griddle	Energy Star-Rated	≥ 6 feet wide	$1,050
Controls			
Wi-Fi Thermostat	N/A		$75

It should be noted that Distribution has put in place a $100,000 per project rebate cap for NRCIP. The Company will continue to evaluate program eligibility as well as the per project rebate cap, making any necessary modifications during future ETIP filings. In addition, to the extent that Distribution elects to remove the per project rebate cap immediately, this change will be promptly disclosed in a future ETIP filing.

Program Participation and Savings Derivation

Exhibit 16 provides a derivation of anticipated program participation levels and program savings, for the newly proposed program offerings (i.e., Exhibit 15B), assuming the full program budget is expended. This derivation analysis was based on savings calculations included in the Implementation Contractor and NYSERDA's reports to Distribution. Distribution's Implementation Contractor utilizes the NYTM for fixed, pre-qualified savings valuation, and engineering analysis for custom, performance-based savings valuation. NYSERDA's savings calculations for NRCIP were consistent with NYSERDA's statewide Existing Facilities program, and were based on algorithms utilized in NYSERDA's savings databases, which were directly informed by the NYTM. The average cost per job and average incentive per job are based on actual program activity from 2007 (NRCIP's inception) through the end of calendar year 2016, scaled to the program budget outlined below. The average savings per job is based on actual program activity from calendar years 2014 and 2015, which Distribution believes most

accurately reflects current market conditions and proper operation of NRCIP by the Implementation Contractor (described in greater detail above).

Exhibit 16: NRCIP - Participation and Savings Derivation					
Job Type	**Number of Participants**	**Per Job Rebate ($)**	**Total Rebates ($)**	**Per Unit Savings (Dth)**	**Total Savings (Dth)**
NRCIP Incentives and Services	438.26	$1,380.45	$605,000	343.5530	150,566.54
Total Incentives and Services	**438.26**		**$605,000**		**150,566.54**

Anticipated Changes

If NRCIP changes are to be proposed prospectively for 2019, 2020, or future program years (aside from the changes described herein), those changes would be incorporated into future ETIP filings completed by Distribution, in accordance with Staff's Program Cycle Guidance Document.

QA/QC

Distribution has put in place a comprehensive QA/QC plan. This plan is implemented primarily by the Implementation Contractor through several mechanisms to assure that customers meeting eligibility criteria are the only customers participating in the program. For fixed rebates, the Implementation Contractor completes a robust application review process, as described above. The review process will include Distribution on an as needed basis when direction, judgment, or interpretation of NRCIP policies and procedures is necessary. The Implementation Contractor is equipped with technical engineering expertise in order to accurately determine if a job meets required energy efficiency levels. Contractor paperwork is also reviewed by the Implementation Contractor to ensure that installations are completed by licensed contractors. Any flaws found in the application or supporting paperwork are turned back to the customer for additional information or clarification, and then are either approved or rejected based on the data provided. The Implementation Contractor also completes random, on-

site inspections of approximately 5% of the fixed rebate population to confirm that the equipment stated on the application was actually installed. This is completed to help ensure that no fraudulent applications are processed. Distribution also reserves the right to request that specific fixed rebate jobs undergo an on-site inspection upon job completion.

For customized rebates, the Implementation Contractor performs a detailed review of the application and any engineering analysis submitted. First, the Implementation Contractor visits the customer's jobsite to confirm the existing equipment on hand and existing energy usage. The customer's estimated energy savings and estimated financial incentive for the proposed job is analyzed by the Implementation Contractor to ensure that both numbers are correct and reasonable. During a post-installation site inspection, the Implementation Contractor confirms that makes and models meet required energy efficiency levels and that the equipment specified on the application form was actually installed. Any flaws or missing information found in the application or engineering analysis are turned back to the customer for additional information or clarification, and then are either approved or rejected based on the data provided.

The Implementation Contractor will monitor program progress and expenditure levels to ensure that program objectives are met within approved budgets. Distribution and the Implementation Contractor will conduct telephone calls and hold meetings to ensure that contractors understand and are following program procedures. Contractor feedback will also be sought during these telephone calls and meetings, as well as during training sessions. The Implementation Contractor will conduct periodic reviews of the Project Tracking Database to ensure the accuracy of data entry. At Distribution's request, the Implementation Contractor shall permit Company personnel to monitor and participate in administrative tasks.

Program Budget and Performance Targets

The overall NRCIP budget, by category, is shown below in Exhibit 17. Typically there is no seasonality or unusual patterns of customer participation during a program year. The vast majority of projects within NRCIP (i.e., greater than 95%) are fixed rebate projects. Customized rebates usually take longer to complete due to a detailed review of the engineering analyses submitted and the necessary completion of pre/post jobsite visits.

Exhibit 17: NRCIP Budgets				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
ANNUAL				
Incentives and Services	$598,000	$605,000	$605,000	$605,000
Program Implementation	$52,000	$40,000	$40,000	$40,000
TOTAL ANNUAL	$650,000	$645,000	$645,000	$645,000
CUMULATIVE				
Customer Incentives	$598,000	$1,203,000	$1,808,000	$2,413,000
Program Administration	$52,000	$92,000	$132,000	$172,000
TOTAL CUMULATIVE	$650,000	$1,295,000	$1,940,000	$2,585,000

NRCIP does not typically have a large number of encumbrances at the end of a program year, as the majority of jobs tend to be fixed rebates, and jobs are managed to be completed on-time during the current program year. However, since NRCIP projects are dependent on the completion of work at non-residential customer facilities, commitments and encumbrances can span several months in some cases.

The primary performance target for this program is total savings, as outlined below in Exhibit 18. Distribution's savings target is based on the derivation analysis prepared and described above.

Exhibit 18: NRCIP Targets	
Program Year	**Primary Metric**
	Gross Total Savings (Dth)
Current Year (2017)	172,909.14
Planned Year (2018)	150,566.54
Planned Year (2019)	150,566.54
Planned Year (2020)	150,566.54

Previous Year Considerations

The Company notes that any requirements set forth in ETIP Annual Report Guidance[34] would separately be addressed in the Company's ETIP Annual Report filing.

XI. LIURP Description

Program Design

LIURP is a weatherization program designed specifically for low income customers. Participants receive a heating system check, an energy audit, weatherization measures, an infiltration reduction, natural gas usage reduction measures and consumer education. The program design is consistent with, and is being administered as part of NYSERDA's EmPower New York ("EmPower") program. Contractors follow procedures and guidelines developed for the EmPower program. Households receiving gas efficiency services paid for by Distribution will also be evaluated by NYSERDA for electric reduction measures. The main goal of LIURP is to conserve energy, reduce residential energy bills, and improve the health, safety, and comfort levels for participating households. A secondary goal includes reducing the incidence and risk of delinquencies and the costs associated with uncollectible accounts, late payment collections, and termination of service expenses.

[34] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-06, ETIP Annual Reporting Guidance, filed on May 12, 2017.

Program Delivery Method

Procedures for customer enrollment include:

- Distribution generates referrals from:
    - The Company's Low Income Customer Affordability Assistance Program ("LICAAP")
    - Home Energy Assistance Program ("HEAP") status/consumption reports
    - Customer Assistance Centers / Company CRC locations / social service agencies / other
- Distribution screens for:
    - 12-month consumption history (priority referral status is given to customers with the highest usage of natural gas)
- NYSERDA Program Implementer screens for eligibility:
    - NYSERDA's Program Implementer sends a cover letter from Distribution, with a LIURP/EmPower application included, to each potential participant. Subsequent cover letters and applications will be sent if the customer is non-responsive within a reasonable time frame.
    - Upon receipt of a completed application, NYSERDA's Program Implementer will examine the potential for natural gas energy efficiency services funded through Distribution, as well as the eligibility for electric reduction services, which are available to low-income electricity customers of National Grid and the New York State Electric & Gas Corporation.
        - If the customer is a tenant, NYSERDA's Program Implementer will send a letter (on Distribution letterhead) to the landlord outlining program

requirements and soliciting landlord participation/consent. Upon receipt of a satisfactory landlord authorization, the customer may then be accepted for energy services, if all eligibility requirements are met.

- If a customer is not eligible, NYSERDA's Program Implementer will:
    - Send a "no further services" letter to the customer (printed on Distribution letterhead).
    - Inform the referring office/social service agency the reason(s) why a customer is not eligible, if the referral was from Distribution or an outside agency.
- If a customer is eligible, NYSERDA's Program Implementer will:
    - Assign the customer to a participating contractor. Assignments will be made on the basis of current job backlogs, contractor availabilities and past program performance.
    - Send a letter to the customer, on Distribution letterhead, informing them of their acceptance and providing contact information for the assigned contractor.
    - Enter relevant customer data into the EmPower database, including county designations and other information/data fields required by Distribution.
    - Enter a weatherization-approved status.
- Once work is in progress:
    - Distribution has access to the EmPower database, including screens/reports to identify, among other things: (1) placed jobs that have yet to be picked up by contractors, and (2) the status of any placed jobs.
    - Distribution has the ability to retrieve customer weatherization service records and can obtain an electronic report of jobs with information required by

Distribution, such as first name, last name, address, city, state, postal code, installation contractor, home phone number, account number, meter number, mailing address, city, state, zip, and the date a job was sent to a contractor.

- NYSERDA's Program Implementer administers customer interactions/document procurements (letters sent to Distribution's customers on Distribution letterhead), including:
  - Customer Acceptance Letter
  - Audit Forms
  - Landlord/Tenant Agreements
  - Distribution LIURP Eligibility Affidavit/Information Waiver
  - Distribution Work Proposal Agreement
  - Customer Agreement
  - Distribution Safety Check List
  - Certificate of Completion

- Contractor Duties:
  - Within two weeks of receiving a job, the contractor calls customers to set up an initial appointment.
  - The contractor goes to the customer's property and performs a comprehensive home assessment, including:
    - Heating system inspection and combustion efficiency test;
    - Blower door test for air leakage, where feasible;
    - Inspection and measurement for insulation;

- Health and safety checks, such as ambient carbon monoxide ("CO") testing and gas leak checks;
- Energy education for customers;
- An instrumented audit that is documented on EmPower forms;
- A discussion of a potential work scope with an appropriate household member; and
- An assessment to determine if a household is eligible for electric measures, such as compact fluorescent light bulbs or electric appliances.

- If furnace problems are identified, a contractor follows the appropriate emergency and referral procedures, as outlined in the EmPower Guidelines and Procedures Manual.
- If issues or problems are identified which preclude the successful installation of measures, such as severe structural damage or serious code violations related to the work, the contractor will notify NYSERDA's Program Implementer and further work will be cancelled until the conditions are corrected.
- NYSERDA's Program Implementer will send a letter (on Distribution letterhead) to customers explaining why work was cancelled, while also offering a timeline for work to be resumed if the conditions are corrected.
- The contractor develops work scopes and proceeds with work, according to EmPower Guidelines and the Procedures Manual.
- If a customer does not respond to contractor calls, letters, or refuses to communicate with the contractor, then NYSERDA's Program Implementer is advised. Contractors may still be reimbursed for services rendered such as

customer education, etc., despite the weatherization job not being fully executed as designed.

  - Once a job is completed, the contactor sends all completed forms and an invoice to NYSERDA's Program Implementer for payment processing.
  - Jobs are targeted to be completed within 60 days from the date of the initial referral.

- Invoice processing:
  - Invoices that are submitted must follow Invoicing Requirements listed in the EmPower Guidelines and Procedures Manual.
  - The Program Implementer reviews all forms and verifies invoices for accuracy. A standard invoice is used for all contractors.
  - If any discrepancies are found with an invoice, NYSERDA's Program Implementer contacts the contractor directly to resolve the issue.
  - If any forms are not returned or are incomplete, NYSERDA's Program Implementer contacts the contractor directly to resolve the issue.
  - The Program Implementer provides the third-party QA Contractor with information in order to complete QA inspections.
  - If the invoice is submitted correctly, NYSERDA's Program Implementer recommends an approval of the invoice, and then enters final approved costs into NYSERDA's energy savings and costing database ("CRIS"), locking information in place.
  - NYSERDA approves and processes contractor and vendor invoices, arranges payments, and resolves payment issues.

- NYSERDA tracks program expenditures and maintains all payment records.
- Job completion processing:
    - NYSERDA's Program Implementer maintains a file of the following household data:
        - Customer application;
        - Energy usage;
        - Audit forms and work scope documentation;
        - Certificate of Completion; and
        - Required permissions.

All customer inquiries and questions are directed to Distribution's CRC, by calling 1-800-365-3234.

Target Market and Eligibility

As noted above, participants receive a heating system check, an energy audit, weatherization measures, an infiltration reduction, natural gas usage reduction measures and consumer education. The target market for LIURP is all low income residential customers within Distribution's New York service territory. A preferred application status is given to participants in Distribution's LICAAP. Customers meeting all of the following criteria will be eligible to participate in LIURP:

- HEAP eligible;
- Account is active and the customer has occupied the residence for at least one year;
- Must be an owner of the residence or a tenant with the proper landlord authorization requirements completed and on-file; and
- Must be a single-family dwelling, or a two unit residence if each unit has its own meter.

It should be noted that referrals are made on the basis of consumption, meaning the highest users of natural gas are referred for weatherization services first, once the eligibility criteria is met. In addition, if a two unit residence is being considered, both customers individually need to meet the program eligibility requirements.

Distribution may elect to provide customers that have participated in CIP with low cost measures, utilizing competitive procurement processes. The provision of these measures would occur within LIURP in accordance with the Commission's June 20, 2011 Order, and any applicable installation requirements specified in the NYTM.[35] Distribution believes that customers previously participating in CIP would be the most likely to install new, low-cost energy saving measures, as these customers have already demonstrated their interest in energy conservation through past practice.

Program Participation and Savings Derivation

Exhibit 19 provides a derivation of anticipated program participation levels and program savings, assuming the full program budget is expended. This derivation analysis was based on savings calculations included in NYSERDA's reports to Distribution. The savings calculations for LIURP are consistent with NYSERDA's statewide EmPower program, and were based on algorithms utilized in NYSERDA's EmpCalc savings database, which is directly informed by the NYTM. For traditional LIURP measures, the average incentive per job is based on actual program activity from completed jobs during the 2016 program year (i.e., the most recent year of the program), scaled to the program budget outlined below. The average savings per job is based on actual program activity from 2007 (LIURP inception) through calendar year 2015. For the

[35] Case 07-M-0548 – Order Approving Modifications to the Energy Efficiency Portfolio Standard (EEPS) Program to Streamline and Increase Flexibility in Administration, issued and effective June 20, 2011.

low income furnace replacement initiative, the NYTM is utilized for savings valuation and the average cost per job is based on results achieved from a competitive procurement process.

With respect to Wi-Fi thermostats, a new REV-related measure initiated by Distribution, limited historical data was available from the program on historical measure uptake. As such, for the purposes of this derivation analysis, Distribution made a facilitating assumption that every LIURP job will prospectively include the installation of a Wi-Fi thermostat. For the purpose of valuing energy savings from Wi-Fi thermostats, Distribution utilized the Wi-Fi thermostat engineering algorithm in the NYTM.

Exhibit 19: LIURP - Participation and Savings Derivation

Job Type	Number of Participants	Per Job Incentive ($)	Total Incentives ($)	Per Unit Savings (Dth)	Total Savings (Dth)
Traditional LIURP Incentives and Services	1,276.09	$3,472.92	$4,431,750	46.4748	59,305.96
Furnace Replacement Incentives and Services	72.43	$2,070.83	$150,000	20.7720	1,504.61
Total Incentives and Services	**1,348.52**		**$4,581,750**		**60,810.57**

Anticipated Changes

If LIURP changes are to be proposed prospectively for 2019, 2020, or future program years (aside from the changes described herein), those changes would be incorporated into future ETIP filings completed by Distribution, in accordance with Staff's Program Cycle Guidance Document.

QA/QC

Distribution has put in place a comprehensive QA/QC plan. The plan functions on a standalone basis, but also is highly integrated into program design, as described above. Standalone QA/QC practices include:

- LIURP and NYSERDA's EmPower program both require contractors to obtain a Building Performance Institute ("BPI") certification. NYSERDA coordinates regional

BPI contractor training once per year. NYSERDA also conducts periodic teleconferences with contractors, both scheduled and on an as-needed basis.

- NYSERDA's QA Contractor will perform independent, third-party QA field inspections of completed jobs. In addition, the QA Contractor will also conduct QA interviews via telephone with customers and/or contractors performing work. QA activities will typically be finalized within one month of work completion.
- Distribution reserves the right to communicate with NYSERDA or NYSERDA's QA Contractor and request that specific jobs undergo QA assessments upon job completion.
- NYSERDA will reassess and enhance program procedures on an on-going basis, ensuring that practices are consistent with standards of the BPI and that best practices are followed by contactors participating in EmPower. Forms, guidelines, software and other materials will be modified as needed. NYSERDA program staff will consult with counsel and the contract management group to ensure that the program is implemented correctly.
- NYSERDA and Distribution will monitor program progress and expenditure levels to ensure that program objectives are met within budget allocations. NYSERDA will conduct meetings with the Program Implementer, and maintain daily contact as needed, to ensure that the program is progressing as required.
- NYSERDA will conduct meetings with the QA Contractor and maintain daily contact as needed, to ensure that QA procedures are being followed in accordance with the contract, and that QA issues are being resolved.
- NYSERDA and the Program Implementer will meet with contractors on a regular basis, both on-site and by teleconference, to ensure that contractors understand and are following program procedures, while also obtaining feedback regarding the program.

- NYSERDA will conduct periodic reviews of the EmpCalc savings database to verify the accuracy of data entry.
- NYSERDA will develop and process incentives for contractors who participate in the program and become BPI accredited. These incentives will consist of a 75% reimbursement of BPI contractor fees for training, accreditation and QA.
- NYSERDA will collaborate with the Weatherization Assistance Program ("WAP") to ensure consistency between programs and to maximize opportunities for collaboration, thereby allowing for enhanced work scopes.
- At Distribution's request, NYSERDA shall permit Company personnel to monitor and participate in administrative tasks.

Program Budget and Performance Targets

The overall LIURP budget, by category, is shown below in Exhibit 20. Distribution expects very few job completions and program expenditures during the first and second quarter of the calendar year, as Distribution and NYSERDA are jointly focusing on: (1) contracting efforts, (2) payment processing and reporting requirements to close out the previous program year, and (3) customer referrals and enrollment activities to build a robust pipeline of customer jobs for the current year.

Exhibit 20: LIURP Budgets				
	Current Year (2017)	**Planned Year (2018)**	**Planned Year (2019)**	**Planned Year (2020)**
ANNUAL				
Traditional LIURP Incentives and Services	$4,729,100	$4,431,750	$4,431,750	$4,431,750
Furnace Replacement Incentives and Services	$250,000	$150,000	$150,000	$150,000
Program Implementation	$510,900	$318,250	$318,250	$318,250
TOTAL ANNUAL	$5,490,000	$4,900,000	$4,900,000	$4,900,000
CUMULATIVE				
Traditional LIURP Incentives and Services	$4,729,100	$9,160,850	$13,592,600	$18,024,350
Furnace Replacement Incentives and Services	$250,000	$400,000	$550,000	$700,000
Program Administration	$510,900	$829,150	$1,147,400	$1,465,650
TOTAL CUMULATIVE	$5,490,000	$10,390,000	$15,290,000	$20,190,000

Roughly half of the LIURP program is completed using commitments and encumbrances at the end of a program year, as the program is designed to run from a "June to June" schedule. Weatherization jobs have a very short-term duration, as respects work to be completed in the field, and tend to be completed on-time, once fielded. There is usually a lag in getting final results, as final contractor payments are being processed, and financial information is dependent on books and records being closed for both NYSERDA and Distribution. Final program year numbers are typically completed in the summer of the subsequent program year.

It should be noted that Distribution has earmarked $150,000 of incentives and services funding per year for a low income health and safety furnace replacement initiative, as part of LIURP. This initiative was originally launched in the 2016 program year and is modeled after the HEAP Heating Equipment Repair and Replacement Program, which historically exhausts funding during the middle of the HEAP season. To the extent that HEAP eligible customers contact Distribution directly about old and inefficient heating equipment, malfunctioning heating equipment, or potential safety concerns, especially during the winter heating season, the Company would be able to have a Heating, Ventilation and Air Conditioning ("HVAC")

contractor immediately install a high efficiency furnace and programmable thermostat at no cost to the customer. This furnace replacement initiative: (1) augments existing limited health and safety protocols currently in place as part of LIURP and EmPower, (2) supports the primary goal of LIURP, (3) helps prevent emergency situations for customers due to an underfunded portion of HEAP programming or a general lack of available options, and (4) produces energy savings by replacing legacy heating equipment with high efficiency heating equipment that low income customers may not otherwise be able to afford.

The primary performance target for this program is total savings, as outlined below in Exhibit 21. Distribution's savings target is based on the derivation analysis prepared and described above.

Exhibit 21: LIURP Targets	
Program Year	**Primary Metric**
	Gross Total Savings (Dth)
Current Year (2017)	51,628.58
Planned Year (2018)	60,810.57
Planned Year (2019)	60,810.57
Planned Year (2020)	60,810.57

Previous Year Considerations

The Company notes that any requirements set forth in ETIP Annual Report Guidance[36] would separately be addressed in the Company's ETIP Annual Report filing.

XII. Annual Report Appendix

The Company notes that any requirements set forth in ETIP Annual Report Guidance[37] would separately be addressed in the Company's ETIP Annual Report filing.

[36] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-06, ETIP Annual Reporting Guidance, filed on May 12, 2017.
[37] Case 15-M-0252 and Matter 16-01008 – Guidance Document CE-06, ETIP Annual Reporting Guidance, filed on May 12, 2017.

XIII. Conclusion

Distribution respectfully requests that all CIP budgets and targets be authorized by the Commission, as described above in this ETIP and as outlined in the Company's Budget and Metrics Plan companion filing.