THIRD ENERGY EFFICIENCY PLAN (Plan 3) North Shore Gas Company

January 1, 2018 — December 31, 2021













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1. Introduction

The Illinois Public Utilities Act's ("Act") Section 8-104 establishes energy efficiency goals, energy efficiency program filing requirements and cost recovery mechanisms, and energy efficiency program expenditures for Illinois gas utilities serving more than 100,000 gas utility customers.¹ Section 8-104 was recently amended through Public Act 99-0906 ("PA 99-0906") that changed the period of energy efficiency plan² and required Illinois gas utilities to provide energy efficiency programs to low income and public sector customers³.

In addition to the mandated energy-efficiency reductions in natural gas deliveries, Section 19-140 of the Public Utilities Act (220 ILCS 5/19-140) requires each gas utility to create an On-Bill Financing program for energy efficiency upgrades completed by utility customers. Both electric and natural gas utilities offer On-Bill Financing programs to allow certain customers to pay for approved energy efficiency measures on their utility bills. Those energy efficiency measures are financed through a loan with a financial institution participating in the program.⁴

Section 8-104(f) provided the standards for approval. Plan 3 for North Shore Gas, an energy efficiency plan, meets these standards as follows:

 Demonstrate that the proposed energy efficiency measures will achieve the requirements that are identified in Section 8-104(c) as modified by Section 8-104(d) under Section 8-104(f)(1).

North Shore Gas meets the demonstration that it will meet the energy efficiency goals through its modified savings goals. See NS-PG Ex. 1.0 pp.13-19, p.26; NS-PG Ex.1.2, p.9.

2. Present specific proposals to implement new building and appliance standards that have been placed into effect under Section 8-104(f)(2).

North Shore Gas meets the demonstration that it has provided measures and programs for new building and appliance standards. See NS-PG Ex. 1.0 pp.13-19, p.26-27.

 Present estimates of the total amount paid for gas service expressed on a per therm basis associated with the proposed portfolio of measures designed to meet the identified requirements under Section 8-104(f)(3).

North Shore Gas meets the demonstration that is has provided a cost per therm. See NS-PG Ex. 1.0 p.28.

^{1 220} ILCS 5/8-104

² 220 ILCS 5/8-104(f)

³ 220 ILCS 5/8-104 (e-5). Energy efficiency programs for low income and public sector customers had previously been provided by the Illinois Department of Commerce and Economic Opportunity ("DCEO").

⁴ The Commission approved the Companies' On-Bill Financing program in Order No. 10-0090 (Order, June 2, 2010). This On-billing financing program has since expanded to also allow small commercial customers' energy efficiency improvements to be eligible for an On-Bill Financing program.

4. Demonstrate that the overall portfolio of energy efficiency measures, not including programs targeting low income customers (also referred to herein as "income qualified customers"), is cost-effective using the Total Resource Cost ("TRC") test and represents a diverse cross-section of opportunities for customers of all rate classes to participate under Section 8-104(f)(5).

North Shore Gas meets the demonstration of overall program cost-effectiveness using the TRC test and its programs provide a diverse cross-section of opportunities to all ratepayers. See NS-PG Ex. 1.0, p. 29; Ex. 1.2, pp. 11, 27-57.

5. Include a proposed cost-recovery tariff mechanism to fund the proposed energy efficiency measures and to ensure the recovery of the prudently and reasonably incurred costs of the Illinois Commerce Commission ("Commission") approved programs under Section 8-104(f)(7).

North Shore Gas meets the demonstration that is has a tariff in place to recover prudently and reasonably incurred energy efficiency costs. See NS-PG Ex. 2.0, p. 8.

6. Provide for quarterly status reports tracking implementation or and expenditures for the utility's portfolio of measures, an annual independent evaluation of the cost-effectiveness of the portfolio of measures as well as a full review of the 4-year results of the broader net program impacts and, to the extent practical, adjustment of the measures on a going-forward basis as a result of the evaluations under Section 8-104(f)(8). The resources dedicated to evaluation shall not exceed 3% of portfolio resources in any given year.

North Shore Gas will provide said updates and tracking. See NS-PG Ex 1.0 pp. 31-34, Ex. 1.2 pp. 4-5.

Further, North Shore Gas will allocate no more than 3% of energy efficiency measures for demonstration of breakthrough equipment and devices.

Also, as required under Section 8-104(e-5), a minimum 10% of the entire portfolio of cost-effective energy efficiency measures is procured from local government, municipal corporations, school districts and community college districts. Further, spending on energy efficiency measures for low income customers proportionate to the share of total annual utility revenues from households at or below 150% of the poverty level and whose programs are targeted to households with incomes at or below 80% of the area median income. See NS-PG Exhibit 1.0, pp. 16-19.

The plan demonstrates that North Shore Gas proposed energy efficiency portfolio will, in a prudent and cost-effective way, use the limited budget allowed by Section 8-104(d) (the "Cap") to provide energy efficiency measures to North Shore Gas retail customers. The proposed Third Energy Efficiency Plan for PY7-10 (the "Plan" or "Plan 3") cannot, however, meet the cumulative natural gas delivery reductions identified in Section 8-104(c)(4)-(6) within the Cap

under Section 8-104(d). This plan documents the development of the Plan including general research and specific program plans while remaining consistent with the requirements and guidelines outlined in Section 8-104.

Further, North Shore Gas' execution of its Plan 3 will meet the following requirements:

1. Adjustable Savings Goals

- North Shore Gas shall file a completed Adjustable Savings Goal Template for the Section 8-104 Programs and Measures as an attachment to its Plan 3 (see NS-PG Exhibit 1.6.)
- b. For purposes of the Section 8-104 programs Adjustable Savings Goals policy approved in the Policy Manual, the measure participation levels identified in the approved Plan 3 to derive the energy savings goals shall be fixed for the entirety of Plan 3, in the adjustable savings goal calculation.
- c. Consistent with Section 6.2 of the Illinois Energy Efficiency Policy Manual Version 1.0, ⁵ the North Shore Gas annual energy savings goals will be adjusted to align them with the evaluator's final recommended net-to-gross ("NTG") values as appropriate. The Parties will make good faith efforts to reach consensus at the SAG and with the independent evaluators concerning such final recommended NTG values.
- d. In advance of filing the first updated Adjustable Savings Goal Template with the Commission, North Shore Gas will present to the SAG its first updated Adjustable Savings Goal Template containing the savings goal adjustments due to the changes reflected in IL-TRM v6.0 as well as the NTG updates, where applicable, resulting from the existing stakeholder consensus processes in place in order to provide stakeholders with an opportunity to ask questions concerning the updated Adjustable Savings Goal Template and reach agreement on the adjusted savings goal.
- e. North Shore Gas agrees to abide by the Adjustable Savings Goal Policy Guidelines dated August 1, 2016 pursuant to the Policy Manual, as may be amended by a final order of the Commission.
- 2. **Net-To-Gross Values used in Plan 3:** Consistent with Section 7.2 Net-to-Gross ("NTG") Policy of the Policy Manual, the NTG values used in the North Shore Gas Plan 3 are subject to change during the implementation of the Plan by means of an annual review and vetting process through the SAG involving the independent evaluator's recommended deemed NTG values for the upcoming program year.
- 3. Annual Ex Post Total Resource Cost ("TRC") Test Evaluation: North Shore Gas shall direct its independent third-party evaluator to conduct an ex post TRC cost-effectiveness analysis annually during the 4-year portfolio plan. North Shore Gas shall

⁵ It is understanding of North Shore Gas that revisions to the Illinois Energy Efficiency Policy Manual Version 1.0 due to PA 99-0906 are being addressed in the Commission's Docket No. 17-0270. To the extent that the final order in the proceeding requires adjustment to the conditions herein, North Shore would modify the applicable procedures and practices.

also direct its independent third-party evaluator to conduct a TRC cost-effectiveness analysis at the conclusion of the 4-year program plan pursuant to Section 8-104(f)(8) of the Act. Both the annual ex post TRC analysis and the 4-year TRC cost-effectiveness analysis shall include both the gas and electric costs and benefits for the joint energy efficiency programs that North Shore Gas offers in conjunction with another Program Administrator, such as ComEd.

4. Updates to the Illinois Energy Efficiency Policy Manual:

- a. North Shore Gas shall participate in Policy Manual Subcommittee discussions for Illinois Energy Efficiency Policy Manual Version 2.0, following Commission approval of the Electric Program Years 10-13 and Gas Program Years 7-10 Energy Efficiency Plans.
- b. While the policy manual is required to be reviewed annually and updated as needed,⁶ North Shore Gas shall make good faith efforts to assist in the development of the second version of the policy manual by no later than August 1, 2018 of the first program year of the Gas Program Year 7-10 Energy Efficiency Plan, with a filing at the Commission requesting approval of the updated policy manual.⁷
- c. North Shore Gas shall make good faith efforts to expeditiously reach consensus regarding an Illinois Energy Efficiency Policy Manual Version 2.0.
- 5. Reporting: North Shore Gas shall make good faith efforts to have completed statewide common reporting templates for Program Administrator Quarterly Reports required by Section 6.5 of the Illinois Energy Efficiency Policy Manual Version 1.0 or the applicable updated, version of the Illinois Energy Efficiency Policy Manual available in advance of filing the first North Shore Gas Quarterly Report for PY7. North Shore Gas also shall make good faith efforts to have completed statewide common reporting templates for Program Administrator Annual Summary of Activities (Annual Reports) required by Section 6.6 of the Illinois Energy Efficiency Policy Manual Version 1.0 available in advance of filing the fourth North Shore Gas Quarterly Report for PY7.
- 6. **Evaluator Independence:** North Shore Gas shall put protocols into place to ensure that evaluator independence is maintained, as required by Section 8-104 of the Act.⁸ The evaluator would not be "independent" as required by statute if the Program Administrator had control over the Evaluator.
 - a. Evaluator independence protocols include:
 - i. Any contract between North Shore Gas and the independent evaluator shall provide that the Commission has the right to:
 - 1. Approve or reject the contract, in whole or in part;

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⁶ See Illinois Energy Efficiency Policy Manual Version 1.0. Section 2.4. Updates to this Policy Manual.

⁷ Interested SAG participants shall submit proposed policies to SAG Facilitation on or before March 1, 2018, utilizing the Proposed Policy Template, unless SAG Facilitation establishes an earlier deadline. Additionally, if the Commission directs SAG to resolve policy issues outside of this Policy Manual update process, prior to the August 1, 2018 deadline, SAG Facilitation will convene the appropriate SAG participants in a timely manner.

8 220 ILCS 5/8-104(f)(8).

- Direct North Shore Gas to terminate the evaluator if the Commission determines that the evaluator is not acting independently, or is unable or unwilling to independently evaluate the energy savings performance and costeffectiveness of the North Shore Gas efficiency programs; and
- 3. Ensure that the Program Administrator does not have the ability to impede the independence of the Evaluator.
- ii. North Shore Gas shall submit any contract and scope of work with the independent evaluator as a compliance filing in the applicable Energy Efficiency Plan docket within fourteen (14) days of execution.
- iii. Evaluators have the sole discretion to develop EM&V work plans, subject to input and comments from all interested stakeholders and Commission Staff, as described in Policy Manual Version 1.0, Section 10.1 (EM&V Work Plans).
- iv. Evaluators shall ensure that the data used in the evaluations can be made available to the Commission upon request.
- b. The evaluator contract with North Shore Gas shall automatically terminate upon a final order of the Commission finding that the contract should be terminated, after issuance of notice and hearing and an opportunity for North Shore Gas, the evaluator, and other interested parties to be heard.
- c. In the event that North Shore Gas or the evaluator issues a notice of termination or notice of default of the contract, it shall contemporaneously provide a copy of such notice to the Commission.
- 7. **SAG Facilitator Independence:** North Shore Gas agree to implement protocols to ensure that SAG Facilitator independence is maintained. To the extent SAG Facilitator Independence provisions are added to a future Commission-approved Illinois Energy Efficiency Policy Manual, such provisions appearing in the Policy Manual will supersede the SAG Facilitator Independence provisions in this Stipulation. Specifically, North Shore Gas agree to implement the following protocols:
 - a. North Shore Gas shall submit the finalized but not yet executed contract with the independent SAG Facilitator to the Commission by letter to the Executive Director. Staff will submit a report to the Commission containing its assessment of the contract and describing its recommendations for Commission action, if any. In addition, North Shore Gas will submit any contract and scope of work with the independent SAG Facilitator as a compliance filing in the applicable energy efficiency plan docket within fourteen (14) days of execution.
 - b. North Shore Gas will include language in the independent SAG Facilitator contract that provides that the Commission has the right to terminate the SAG Facilitator contract if the Commission determines the SAG Facilitator is not acting independently, or is unable or unwilling to independently facilitate the Illinois Energy Efficiency Stakeholder Advisory Group (SAG).
 - c. The SAG Facilitator contract with North Shore Gas will automatically terminate upon a Commission finding that the contract should be terminated, after issuance

- of notice and hearing and an opportunity for the utilities, the SAG Facilitator, and other interested parties to be heard.
- d. In the event that North Shore Gas or the SAG Facilitator issues a notice of termination or notice of default of the contract, the issuer of the notice shall contemporaneously provide a copy of such notice to the Commission.
- 8. **IL-TRM Administrator Independence:** North Shore Gas agrees to implement protocols to ensure that IL-TRM Administrator independence is maintained. To the extent IL-TRM Administrator Independence provisions are added to a future Commission-approved Illinois Energy Efficiency Policy Manual, such provisions appearing in the Policy Manual will supersede the IL-TRM Administrator Independence provisions in this Stipulation. Specifically, North Shore Gas agrees to implement the following protocols:
 - a. North Shore Gas shall submit the finalized but not yet executed contract with the independent IL-TRM Administrator to the Commission by letter to the Executive Director. Staff will submit a report to the Commission containing its assessment of the contract and describing its recommendations for Commission action, if any. In addition, North Shore Gas will submit any contract and scope of work with the independent IL-TRM Administrator as a compliance filing in the applicable EEP docket within fourteen (14) days of execution.
 - b. North Shore Gas will include language in the independent IL-TRM Administrator contract that provides that the Commission has the right to terminate the IL-TRM Administrator contract if the Commission determines the IL-TRM Administrator is not acting independently, or is unable or unwilling to independently administer the Illinois Statewide Technical Reference Manual for Energy Efficiency.
 - c. The IL-TRM Administrator contract with North Shore Gas will automatically terminate upon a Commission finding that the contract should be terminated, after issuance of notice and hearing and an opportunity for the utilities, the IL-TRM Administrator, and other interested parties to be heard.
 - d. In the event that North Shore Gas or the IL-TRM Administrator issues a notice of termination or notice of default of the contract, the issuer of the notice shall contemporaneously provide a copy of such notice to the Commission.

Further, the following values were used for avoided costs in the revised Plan 3 filing:

- Electricity Avoided Costs: updated with data received from ComEd 8/18/16.
- Natural Gas Avoided Costs: updated with the forecast to utilize an average annual escalator based upon the EIA 2016 Annual Energy Outlook Henry Hub.
- Escalation rate: 1.9% based upon the IL TRM v6.0.
- Carbon adder: \$25 per ton for natural gas and electric, starting in 2020.

PA 99-0906 caused key changes to the previously approved "Plan 3" of North Shore and

Peoples Gas. ⁹ Those changes include:

- 1. Twenty-five percent (25%) of the budget is no longer allocated to the Department of Commerce and Economic Opportunity (DCEO). Likewise, twenty percent (20%) of the goal is no longer allocated to the DCEO. North Shore Gas is now accountable for the entire budget and savings goals.
- 2. The Plan is now based on a calendar year.
- 3. The Plan encompasses four (4) years versus three (3) years.
- 4. For portfolio of energy efficiency measures low income (referred to herein as income eligible) customers shall be proportionate to the share of total annual utility revenues from customers at or below 150% of poverty level customers. Those income eligible programs shall be targeted at households with incomes at or below 80% of area median income.
- 5. The portfolio of energy efficiency measures shall include a minimum of 10% of the energy efficiency measures for local government, municipal corporations, school districts and community college districts. Five percent of the entire portfolio of cost-effective energy efficiency measures may be granted to local government and municipal corporations of market transformation initiatives.

This Plan is submitted in compliance with the Section 8-104.

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⁹ Those plans were approved in the Commission's final order in Docket No. 16-0466.

2. Executive Summary

North Shore Gas, a wholly-owned subsidiary of Integrys Holding LLC, which is a wholly-owned subsidiary of WEC Energy Group, proposes to implement a portfolio of natural gas energy efficiency programs and On-Bill Financing as required by Section 8-104 and Section 19-140 of the Public Utilities Act. The overriding objectives of this Plan are to attempt to achieve the indicated energy efficiency goals as cost-effectively as possible and to provide programs to both residential and commercial/industrial ("C&I") customers.

The previously approved "Plan 3" approved in Docket No. 16-0466 was a plan reached through extensive discussions and negotiations with interested parties and was based on consensus agreement. This currently proposed Plan 3 expands on the original plan with flexible, scalable, best practice programs that allow for partnering with Commonwealth Edison Company ("ComEd"), the electric service provider in North Shore Gas service territory, to streamline administration and delivery while maximizing customer participation based on researched market potential. North Shore Gas also worked with the neighboring gas utilities Ameren Illinois and Nicor Gas to provide consistency in program design where possible. It has been expanded to a four-year plan with programs running on a calendar year basis.

In concert with the requirements of the new legislation for natural gas utilities, North Shore Gas has:

- Allocated ten percent (10%) of the entire budget to efficiency programs for local government, municipal corporations, school districts and community college districts.
- Estimated the percentage of customers at 150% of Federal Poverty Guidelines using
 census data at twenty-one and a half percent (21.5%) of our residential customer base
 and applied that percentage to revenues from residential customers. The actual
 programs will be targeted to customers who are at or below 80% of area median income
 ("AMI").

The savings goal continues to be based on 2009 calendar year throughput. The proposed budget and Cap continues to be based on forecasted revenues for Program Year ("PY") 7 (January 1, 2018 to December 31, 2018) and are as follows:

Table 1: Statutory 2% Cap on Recoveries from Customers

	NORTH SHORE GAS
Total Retail Natural Gas Service	\$207,052,153
Total 2% Statutory Budget Cap	\$4,141,043

The proposed budget and savings estimates are illustrated below. The budget is consistent with the statutory Cap. The savings estimates fall below the statutory targets.

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Table 2: Overall Goals and Budgets

North Shore Gas	PY7	PY8	PY9	PY10	Total
Throughput (Therms)	346,897,375	346,897,375	346,897,375	346,897,375	1,387,589,500
Statutory Savings Goal (Percent)	1.40%	1.50%	1.50%	1.50%	n/a
Statutory Savings Goal (Therms)	4,856,563	5,203,461	5,203,461	5,203,461	20,466,945
Utility Proposed Modified Savings Goal (Therms)	2,533,985	2,138,307	1,984,668	2,122,340	8,779,301
Utility Proposed Modified Savings Goal (Percent)	0.73%	0.62%	0.57%	0.61%	n/a
Portfolio Budget	PY7	PY8	PY9	PY10	Total
Budget Cap	\$4,141,043	\$4,141,043	\$4,141,043	\$4,141,043	\$16,564,172
Research & Development (Emerging Technologies)	\$124,231	\$124,231	\$124,231	\$124,231	\$496,924
EM&V Implementation	\$124,231	\$124,231	\$124,231	\$124,231	\$496,924
Portfolio Administration (Including Planning)	\$207,052	\$207,052	\$207,052	\$207,052	\$828,208
Portfolio Marketing & Education	\$124,231	\$124,231	\$124,231	\$124,231	\$496,925
Market Transformation	\$41,410	\$41,410	\$41,410	\$41,410	\$165,640
Studies (i.e., Potential Studies External costs)			\$240,000		\$240,000
Total Portfolio Costs	\$621,155	\$621,155	\$861,155	\$621,155	\$2,724,621
Available Program Budget	\$3,519,888	\$3,519,888	\$3,279,888	\$3,519,888	\$13,839,551
New Programs					
Local Government (10%)	\$414,104	\$414,104	\$414,104	\$414,104	\$1,656,416
Income Eligible (150% Federal Poverty) 8.8%	\$364,412	\$364,412	\$364,412	\$364,412	\$1,457,648
Income Eligible Actual ¹⁰	\$465,948	\$465,948	\$465,948	\$1,863,791	\$1,863,791

Detailed program budgets provided in Tables 4A and 4B

The Plan has many offerings that incent customers to become more energy efficient. The offerings are integrated with energy efficiency awareness and education efforts designed to encourage customers to make more informed energy use decisions.

The following objectives guided the development of the portfolio of programs. The portfolio will:

- Meet legislative requirements to implement a portfolio of programs that will produce costeffective savings to the extent possible within the budgetary cap. Cost-effectiveness is at
 the portfolio level and 4-year program level.
- Provide opportunities for customers of all rate classes to participate in the programs.
- Absorb the budget and savings goals, along with the legislative requirements, that were
 transferred from the DCEO to North Shore Gas, present a portfolio of energy efficiency
 programs for income eligible customers with a budget that is proportionate to the share of
 total annual utility revenues in Illinois from households at or below 150% of the federal
 poverty level, and target the income eligible programs to households with incomes at or
 below 80% of the AMI.
- Build on past experiences and proven technologies, while introducing limited emerging technologies to the market to spur future demand that would aid in market transformation.
- Be easily scalable and allow for flexible responsiveness to market conditions.

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¹⁰ Actual Income Eligible spending will be greater than the minimum spending

¹¹ Excluding programs that target income eligible customers.

¹² Excluding electric generation and opt-out customers.

Due to the needs associated with obtaining as much cost-effective energy savings as possible within the Cap, the portfolio has been streamlined and simplified. The North Shore portfolio is grouped into three major program areas, each with two or three participant paths. The programs have been grouped based on targeted audience and allow a more focused and comprehensive approach from the customer's point of view. The Income Eligible and Residential Programs have elements intended to provide a variety of energy efficiency programs for residential dwellings and multi-family units, both existing building retrofits and new construction. The Business Program has provisions intended to provide a range of energy efficiency programs for the multitude of small business, commercial, local government and industrial customers, both existing building retrofits and new construction. Each program contains two or three program paths — Outreach and Education, Assessments, and Rebates/Grants. Each program path contains multiple categories (e.g., Outreach and Education includes behavior change and energy efficiency education).

For the original, consensus Plan 3 filed pursuant to the Commission's final order in Docket No. 16-0466, Peoples Gas and Franklin Energy Services ("Franklin Energy") worked with local experts in the design of the income eligible pilot. These experts included the DCEO, the Community Investment Corporation, Elevate Energy, the Historic Chicago Bungalow Association, and DNR Construction.

The following table summarizes the proposed portfolio. The program details are provided in Section 3.6.

Table 3: Energy Efficiency Portfolio Summary

Programs	Income	Eligible	Resid	ential		Business	
Market Offerings	Single Family	Multi- Family	Single Family	Multi- family	Small Busines	C&I	Local Gov't
Path							
Outreach & Education							
- Behavior	х	х	х	х			
- EEE	х	х	х	х			
Assessments							
- High level (w/DI)	x	x	х	х	х	X	Х
- In Depth		х		х			
- Gas Optimization				х		X	Х
- RCx						X	Х
- Engineering Studies						X	Х
Rebates/Grants							
- Staffing						Х	Х
- Standard Rebate			х	х	х	X	х
- Partner Trade Ally			х	х	х		
- Local Orgn Partner	х	х					
- Custom Rebate				х	х	х	х

Table 4A provides a summary of the Total Resource Cost ("TRC"), savings and budget by program and Table 4B provides a more detailed budget for each program. "PY" means program year. For example, PY7 is the period January 1, 2018 through December 31, 2018. TRC is a benefit cost test (described in Section 3.1.1). The portfolio TRC benefit cost ratio is estimated at

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1.88.

Table 4A: Portfolio Summary

North Shore Gas	PY7		F	PY8		PY9		Y10	
Program	TRC	Therm Savings	Budget	Therm Savings	Budget	Therm Savings	Budget	Therm Savings	Budget
Income Eligible	0.93	229,510	\$465,948	162,235	\$465,948	160,980	\$465,948	220,980	\$465,948
Residential	1.65	828,097	\$1,358,413	640,550	\$1,358,413	632,560	\$1,330,357	804,275	\$1,358,413
Business	2.17	1,158,536	\$1,612,706	1,158,536	\$1,612,706	1,016,765	\$1,400,762	1,158,536	\$1,612,706
TOTAL	1.88	2,533,985	\$3,437,067	2,138,307	\$3,437,067	1,984,668	\$3,197,067	2,122,340	\$3,437,067

Table 4B: Program Budget Detail

North Shore PY7 Gas		PY8		PY9			PY10					
Program	Impl	Incentive	Total									
Income Eligible	\$89,382	\$376,566	\$465,948	\$89,382	\$376,566	\$465,948	\$89,382	\$376,566	\$465,948	\$89,382	\$376,566	\$465,948
Residential	\$727,937	\$630,476	\$1,358,413	\$727,937	\$630,476	\$1,358,413	\$708,165	\$622,192	\$1,330,357	\$727,937	\$630,476	\$1,358,413
Business	\$423,266	\$1,189,440	\$1,612,706	\$423,266	\$1,189,440	\$1,612,706	\$388,461	\$1,012,301	\$1,400,762	\$423,266	\$1,189,440	\$1,612,706
TOTAL	\$1,240,585	\$2,196,482	\$3,437,067	\$1,240,585	\$2,196,482	\$3,437,067	\$1,186,008	\$2,011,059	\$3,197,067	\$1,240,585	\$2,196,482	\$3,437,067

Note: Evaluation is not included in individual program budgets but at the portfolio level.

3. The Components of the Plan

The creation of this Plan adheres to a rigorous planning process, beginning with market analysis and a potential study and culminating in program design. The diagram in Figure 1 provides an illustration of the energy efficiency planning process and coincides with the topics in the balance of this section.

Plan Development (including Risk

Figure 1: Energy Efficiency Planning Process Overview



A market potential assessment ("Market Potential Study") was performed by Seventhwave. The purpose of the study was to (1) identify the economic potential for natural gas savings in the North Shore Gas service territory, (2) identify opportunities for program enhancements and new program offerings to realize this potential and (3) estimate the achievable potential gas savings and program costs for these opportunities. The Market Potential Study, along with the experience gained and lessons learned from the previous Plan period, is the basis for the development of this Plan 3.

North Shore Gas is committed to continuously improving the design and delivery processes for its programs. During the course of the Plan 3, as done during the prior Plan period, programs will be improved and refined on an ongoing basis, particularly as program evaluation and reporting activities identify opportunities for program enhancement.

3.1 Plan Development

Plan development incorporates a number of tasks that help structure the portfolio design process and the steps that follow.

- Develop a database of energy saving measures, including estimated costs, energy savings and measure life. The energy savings measures are compared to baseline conditions – current practices, if available, or, alternatively, minimum standards. Measures are screened for cost-effectiveness based on North Shore Gas specific avoided cost and other data.
- Take into consideration experiences by other utilities, consultants and program
 implementation contractors and information on generally accepted best practices
 and put them into the context of the North Shore Gas market to ensure
 participants are available and the measures will meet their needs.
- Bundle measures into programs that are logical and facilitate participation from
 the customers' perspectives. Best practices and the experiences of other
 program administrators and implementers are taken into consideration when
 developing the program design. Program level budgets are prepared and the
 program is screened for cost-effectiveness. All programs are finally bundled into
 one portfolio and the total portfolio, including general costs that are not program
 specific, is screened for cost-effectiveness.
- Perform a risk analysis and identify risk mitigating measures.

North Gas, Peoples Gas and Franklin Energy Services¹³ ("Franklin Energy") worked with experts in the design of the income eligible program. These experts included the DCEO, Community Investment Corporation, Elevate Energy, the Illinois Home Weatherization Assistance Program, the Historic Chicago Bungalow Association, and DNR Construction.

3.1.1 Benefit Cost Analysis

There are many methods used to assess the cost-effectiveness of an energy efficiency measure. Section 8-104(f) requires using the total resource cost test ("TRC") as the primary method to determine cost-effectiveness of the portfolio.

TRC measures the net costs of an energy efficiency program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. The TRC test represents the effects of a program on both participating customers and those not participating in a program. The benefits are the avoided supply cost – the reduction in transmission, distribution, commodity and capacity costs valued at marginal cost for the periods when there is a reduction in usage of natural gas. The costs in this

¹³ The Companies have contracted with Franklin Energy as their program administrator for the Plan 3. Franklin Energy was also the Companies' program administrator for Plan 1 and Plan 2. North Shore Gas expects to engage local vendors for its Income Eligible Programs along with the Illinois Home Weatherization Assistance Program.

test are the program costs paid by the utility and the participants plus the increase in supply costs for the periods in which demand is increased. Thus, all incremental equipment costs, operation and maintenance, cost of removal and administration costs, no matter who pays for them, are included in this test. The benefit cost ratio resulting from the application of the TRC test is the ratio of the discounted total benefits of the program to the discounted total costs over a specified time period. A benefit cost ratio above one indicates that the program is beneficial to the utility and its customers on a TRC basis.

Even though the TRC test is prescribed by Section 8-104(f), there are three other costeffectiveness tests that analyze the programs from different perspectives. The additional tests are the Participant Test, the Ratepayer Impact Measure ("RIM") Test, and the Utility or Program Administrator Cost Test.

The Participant Test is the quantifiable benefits and costs to the customer due to participation in a program from the participant's perspective. The benefits include a reduction in the participant's bill, and incentives paid to them. The costs are out-of-pocket expenses incurred as a result of participation in the program plus any increases to utility bills.

The RIM Test measures what happens to customer's bills or rates due to changes in utility revenues and operating costs caused by a program. The benefits are the savings from avoided supply costs. The costs are the program costs incurred by the utility and/or other entities for creating or administering the program, incentives paid to the participant, decreased revenues for any periods for which demand decreased, and increased supply costs for instances when demand increased.

The Utility or Program Administrator Cost Test measures the net costs of a program as a resource option based on the costs incurred by the program administrator, excluding any net costs incurred by the participant. The benefits are the avoided supply costs of energy and demand (similar to the TRC benefits). The costs are the program costs incurred by the administrator, the incentives paid to the customers, and the increased supply costs for the periods in which demand is increased.

To determine energy efficiency measures that should be considered opportunities for achievable energy savings, a comprehensive benefit cost analysis was conducted on a wide range of measures that affect natural gas consumption across all customer classes. The benefit cost tests were performed using data specific to North Shore Gas. When the TRC test results produce a value greater than one for any given measure or bundle of measures, it is judged to be a cost-effective application, implying that it is more beneficial to implement the energy efficient technology. Measures are grouped into programs and budget amounts are allocated. Then the TRC test is run again on each program, or bundle of measures, to determine cost-effectiveness. Table 4A in Section 2 above included the TRC test results for each proposed program and the total portfolio.

For this Plan, the avoided costs also included a 7.5% natural gas and a 10% electric

adder for Non-Energy Benefits ("NEBs") as well as a \$0.13 per therm and \$0.01 per kWh adder for greenhouse gases.¹⁴ The Illinois Technical Reference Manual ("TRM")¹⁵ was utilized to calculate savings for measures that were specified in the TRM. Section 8-104(f) requires that North Shore Gas meet a TRC of 1.0 or higher at the portfolio level.

In addition to the results of the four tests mentioned above, this Plan also provides the cost per therm saved based on levelized (life cycle) savings. This measures the lifetime savings against the program costs, rather than just the first year savings.

3.1.2 Current and Future Coordination with Stakeholders

North Shore Gas recognizes the importance of obtaining agreement among stakeholders in all phases of the Plan life cycle from planning and program design, to implementation, evaluation, tracking and cost recovery. Stakeholders were invited to participate as intervenors in the original Plan 3. Discussions were held with stakeholders that chose to participate and signed a non-disclosure. Stakeholders were also provided information and an opportunity to provide input for this revised Plan 3.

North Shore Gas will continue to actively participate in the Stakeholder Advisory Group ("SAG") and the Technical Advisory Committee of the SAG ("TAC"). These forums allow all stakeholders to work together to ensure high quality, high performance energy efficiency programs in the State of Illinois. In addition, North Shore Gas will continue to have conversations with utilities to discuss what's working, what's not and how to improve coordination where it makes sense and is mutually beneficial for both entities.

3.2 Risk Management

The objective of risk management is to limit the liability to North Shore Gas and develop a proactive plan to identify and resolve the most critical and/or most likely potential risk events. It is particularly important in the planning and development stages to document risks and identify mitigation and contingency options that can be applied to risks.

North Shore Gas defines a risk as any factor (event) that may potentially interfere with success of the portfolio in reaching its objectives. A risk is not a problem; a risk is the possibility that a problem might occur. By recognizing potential problems, North Shore Gas can attempt to avoid a problem through proper actions, or risk responses. The best mitigation is to take action upfront to prevent a risk event from occurring. If a risk cannot be prevented, contingency planning involves the preparation of prescribed actions should a risk event be triggered.

North Shore Gas' assessment of the portfolio concluded that there are currently five main risks that require responses. These risks are:

¹⁴ Greenhouse gas adders were developed from the Department of Energy 2016 Annual Energy Outlook.

¹⁵ Illinois Statewide Technical Reference Manual for Energy Efficiency Version 5.0 (June 1, 2016), developed by members of the Illinois Energy Efficiency Stakeholder Advisory Group.

- 1. Performance risk: The risk that the programs do not deliver expected results.
- 2. Market risk: The risk that the program participation will suffer as a result of poor economic conditions.
- 3. Technology risk: The risk that certain technologies or measures fail to deliver expected savings.
- 4. Evaluation risk: The risk that independent evaluation, measurement and verification ("EM&V") will conclude that either deemed savings, plan assumptions, or estimates fall short of what implementers have estimated.
- 5. Regulatory risk: The risk that achievements are not recognized and cost recovery is affected.

North Shore Gas' risk responses to these identified risks are as follows. They do not necessarily correlate to the above risks on a one-on-one basis.

- Transfer performance related risk by entering into a performance-based contract with an experienced program implementer with a proven track record, Franklin Energy.
- Mitigate technology and market risks by designing a diversified portfolio that does not rely heavily on one single program or technology.
- Mitigate market risks by designing programs that help overcome many of the market challenges and barriers.
- Mitigate technology risk by incorporating technologies and measures based on market research and technologies with proven results in similar markets.
- Mitigate evaluation risk by using TRM algorithms if available and obtain SAG agreement on the net-to-gross ("NTG") ratios to be used in planning assumptions using EM&V results. The Policy Manual, which was recently approved by the Commission, allows for goals to be adjusted that are beyond the control of the utility. The annual energy savings goals will be adjusted to align with (1) changes to TRM values and (2) Evaluator's recommended NTG values for the entire Plan period prior to the start of the first Plan year (i.e., prior to PY 7). This change drastically, if not completely, removes technology and evaluation risk.
- Mitigate regulatory risk by clearly stating objectives, expectations and assumptions in the plan and obtaining approval of these expectations and assumptions. Continue to work closely with SAG members to develop processes and expectations that minimize negative retrospective applications that exacerbate regulatory risk.

Risk management is an on-going process; it is not performed once and then set aside. Risk identification, management, and resolution continue after the portfolio is launched. New risks will develop as the programs evolve and external and internal situations change.

3.3 Implementation

The majority of the programs and paths outlined in this Plan are currently being

implemented and ongoing adjustments are applied to improve program processes. Implementation planning involves a continual assessment of program and measure mix to assure that the portfolio is on track to meet goals. As a result, in subsequent years, North Shore Gas may add/subtract measures or modify the scope of a program based on market data, changes in technology, or other relevant information.

In addition to ensuring that North Shore Gas reaches savings and budget goals in a cost-effective way, some of the key goals identified in implementation planning are:

- Continue to implement new measures or remove less cost-effective measures in a seamless manner, working with affected trade allies.
- Continue building on the trade ally network.
- Work more closely with local organizations and communities to increase awareness of and activity in the programs.
- Continue to coordinate with ComEd's complementary electric energy efficiency offerings where it makes sense and is mutually beneficial to both entities.

As to income eligible programs, North Shore Gas plans to utilize local energy efficiency vendors for performing implementation services for income eligible customers. Further, North Shore Gas expects to leverage program resources currently present with the Illinois Home Weatherization Assistance Program.

The Research & Development budget focuses on supporting:

- Training and compliance with new Codes and Standards. It is a joint effort among the DCEO, all the utilities, and other interested parties.
- Participating with the Gas Technology Institute in their effort to research and prepare new gas technologies for commercialization.

The Market Transformation budget may focus on the following areas:

- Building Operator Certification: host trainings, provide tuition reimbursement, and offer continuing education webinars.
- Illinois Home Performance: train contractors, homeowner outreach and education, coordinate with U.S. Department of Energy on Home Performance program developments.

3.3.1 Overall Management Strategy

Franklin Energy will continue to provide turnkey energy efficiency implementation services for North Shore Gas. Franklin Energy has identified key positions for the ongoing management of the portfolio and has developed a program staffing structure as described below.

The Executive Manager and Regional Director will be responsible, with the approval of North Shore Gas, for:

- Portfolio and program strategy.
- External and internal coordination.
- · Budget and financial management.
- QA/QC design / internal EM&V.
- Marketing and communication strategy.

Franklin Energy staff, working under the direction of the Regional Director, will be responsible for:

- Implementation planning.
- · Process design and implementation.
- Program implementation.
- Management of third-party vendors.
- Day-to-day operations and oversight.
- Tracking and reporting.
- Internal QA/QC checks.

3.3.2 Communications/Marketing

Each program in the portfolio has a specific marketing and communication strategy to recruit customers in the target audience for the services being delivered. Some paths may also have an individual marketing and communication strategy. However, at the portfolio level, a broad communication plan that addresses program branding, communication and collateral standards, messaging, and customer service standards for all implementation contractors will be reviewed and revised as needed.

Franklin Energy will lead a marketing group made up of North Shore Gas staff, program managers, and contact center staff to update the overall communication plan as well as detailed plans for individual programs and, where appropriate, paths. Utility staff will provide branding guidelines including trademarks, communication styles and color palettes. Market drivers are consistently reviewed for North Shore Gas, allowing for adjustments to these marketing strategies, messaging, and specific unique program tactics. In general, the goals of the communication plan are to:

- Ensure awareness and participation to meet energy saving goals during the Plan 3 period, to the extent possible within the Cap.
- Deliver a clear, consistent, compelling message about the benefits of energy efficiency and provide a call to action.
- Build a strong marketing channel through the trade allies.
- Manage expectations regarding program availability, offerings, and incentives.
- Coordinate closely with other utilities, energy efficiency program providers, such as Elevate Energy, the Illinois Home Weatherization Assistance Program, the Historic Chicago Bungalow Association, as well as key industry and trade ally associations and organizations, such as Retrofit Chicago and the Illinois Dry Cleaners Association.

A multi-pronged marketing communication approach will be utilized to establish awareness of the portfolio. Primary channels for overall program awareness:

- Mass Communications Outlets Bill messaging, bill inserts, e-bill messaging, newsletters, and website promotions are a few of the existing low cost mass communication vehicles available to build program awareness.
- Program Field Staff Franklin Energy staff conduct targeted outreach to relevant customer groups and industry associations in addition to working with the customers daily.
- Stakeholder Account Managers Franklin Energy will leverage the existing relationships utility account managers have with larger customers. Utility account managers will serve as a conduit to inform customers of the energy efficiency programs.
- Trade Allies This channel reaches customers through existing relationships so
 that the program can influence a buying decision. Franklin Energy provides
 marketing materials and training to ensure trade allies understand the various
 programs available, terms and conditions to which they must comply, and
 required procedures.
- Direct Delivery Franklin Energy develops marketing materials that are incorporated into program training sessions, mailed directly to customers, and distributed at events.
- Targeted Relationship Marketing Strategies by sector, region, business type, or end-use to target specific audiences to increase the effectiveness of promotional activities.

Marketing effectiveness will be closely monitored so that marketing strategies and tactics can be altered based on program performance and marketplace opportunities. Increased marketing effectiveness will result in improved cost-effectiveness of the portfolio.

3.3.3 Customer Service/Contact Center

Contact center operations are critical operational components of the energy efficiency portfolio. Franklin Energy is responsible for establishing, staffing, and reporting on contact center activities to support the North Shore Gas programs. The contact center goals are to:

- Support the portfolio of energy efficiency programs.
- Minimize impact on the utility contact center.
- Facilitate regular communication between contact centers to cultivate smooth relationship management.
- Respond to customer inquiries on the energy efficiency programs.
- Enable and encourage participation in the energy efficiency programs.

Franklin Energy will utilize its existing contact center to support the North Shore Gas program efforts. Contact center staff handle inquiries about customer and measure

eligibility, completing program applications, requests to participate in a program, scheduling, and supporting documentation requirements. Each person handling teleservices is proficient in North Shore Gas offerings, customer qualification, program business rules, paperwork and procedures. Furthermore, contact center staff have completed introductory training on all core technologies which comprise the majority of trade ally and customer inquiries. Ongoing and refresher training is performed as needed. Contact center staff has access to a wide variety of bilingual resources to communicate with customers as needed.

Franklin Energy's contact center meets the expectations regarding North Shore Gas customer care protocol and call center standards. Furthermore, metrics are closely followed to provide the best customer experience. Call volumes, wait times and callback turnaround are closely monitored.

3.3.4 Fulfillment

Franklin Energy is responsible for processing incentive payments, or rebate fulfillment. The programs will continue to receive applications by e-mail, mail and fax, with online applications available where practicable.

The general workflow of the fulfillment process is as follows:

- Receive application and supporting documentation.
- Verify the completeness of the application package.
- Determine customer/program eligibility (account/premises).
- Determine measure/project eligibility.
- Input customer, measure, and energy savings data.
- Request approval for and issue incentive payment.

Franklin Energy will coordinate all quality control reviews related to fulfillment processing. They will track failed or flawed applications to understand and incorporate process improvements to application forms or program design.

3.3.5 Quality Assurance/Quality Control

The quality of an energy efficiency program is ultimately a function of the program staff's ability to deliver results on time, within budget, and to properly track customer and trade ally participation without compromising program specifications.

- Quality Assurance ("QA"). Procedures intended to ensure that a program, product, or performed service meets specified requirements.
- Quality Control ("QC"). Procedures intended to ensure that a program, product, or performed service adheres to a defined set of quality criteria or meets the requirements of the utility, regulators, or customer.

The goal of Quality Assurance is to prevent errors, rework, process problems, fraud, and other quality risks from occurring. Creating quality processes upfront reduces the risk of

errors, ultimately ensures better customer/trade ally satisfaction and minimizes the cost of program administration. As a part of the QA strategy, Franklin Energy will:

- Qualify internal employees, providers, and sub-contractors by ensuring proper background checks, verifying credentials, and addressing provider performance requests for proposals and contracts.
- Provide clear standard qualifications/credentials of providers and partners to assure quality workmanship.
- Ensure proper tools, forms, training, and materials are available for employees and other implementers.
- Make every effort to ensure errors are not repeated by identifying errors/ exceptions in testing and providing solutions for errors prior to launching.
 This includes multiple independent checks and balances built into processes.
- Incorporate anti-fraud protocols specified or approved by the Companies that protect both systems and customer data.
- Utilize common QA tools to meet program specifications. Some of these tools are benchmarking, best practices, process flow charts, design for quality, and lessons learned documentation.
- Conduct periodic inspections for compliance with QA protocols.

The goal of Quality Control is to inspect work to ensure it met the defined program quality standards. The defined quality standards for North Shore Gas energy efficiency programs are:

- Execute programs in accordance with the business rules established for each program with minimal mistakes and customer service issues.
- Protect utilities' customer data and prevent program fraud, either internal or external.
- Ensure work claimed and charged has been performed as described to meet the requirements of each program through various periodic QC inspections.

During the detailed implementation planning process, Franklin Energy will develop a QC plan that meets these standards, increasing the likelihood that customers and trade allies have a positive experience with the energy efficiency programs. When developing QC protocols, Franklin Energy will consider the following on a program by program basis:

- Decide which specific standards and key performance indicators the product, service or provider must meet from a customer, measure, and provider perspective.
- Determine what QC techniques best determine a product, process, provider, or application failure. Common techniques include data audits/reviews, field inspections, product sampling, invoice reconciliation, contractor reviews, process testing, trade ally surveys and program surveys.
- Collect, track, and analyze key performance indicators and determine the proper corrective action to resolve process failures, improve processes, and provide

- implementer feedback.
- Determine reporting frequency on key performance indicators customized to the needs of each program.

Franklin Energy's Quality and Continuous Improvement Department conducts all internal process audits, QA/QC reviews and assists with implementation of field work. Franklin Energy's Program Manager is responsible for overall implementation of the program.

The Project Coordinator is responsible for day-to-day office activities of the program, assisting field staff in scheduling activities and reviewing project applications. Energy Advisors are responsible for customer visits and audits to ensure the technical review of customer applications is performed properly and accurately. It is their priority to ensure a quality experience for the customer. Franklin Energy's Training Department is responsible for ensuring that all staff members are properly trained for their positions.

3.3.6 Data Management/System

Franklin Energy's Efficiency Manager™ data tracking and reporting system is built upon the Salesforce.com platform that leverages the customer relationship management capability of Salesforce.com. This system has been enhanced to provide a robust and comprehensive utility-scale energy efficiency program data management solution. This tracking system provides top-tier security, reliability, and functionality. It captures and manages data at all levels of the implementation effort, from program planning data through program delivery and review.

Franklin Energy's tracking system provides real-time access and visibility into energy efficiency projects and applications at every stage, while providing consistent tracking of projected energy savings and other key program information such as marketing leads, outbound marketing campaign success rates, and trade ally activity. In addition to tracking completed projects, Franklin Energy closely monitors the "pipeline" of projects moving forward in order to estimate contributions from upcoming marketing and promotion campaigns. Franklin Energy will be tracking multiple metrics and can report against a plan by location, measure, or other demographics.

3.4 Evaluation

Evaluation is the process of determining and documenting the results, benefits, and lessons learned from an energy efficiency program. Energy efficiency evaluations are conducted to estimate actual energy savings compared to predicted estimates. An evaluation should be viewed as one part of an ongoing process to improve planning and implementation to maximize the effectiveness of the program.

There are limited evaluation resources. Therefore, all activity should focus first on programs that have not been evaluated, have been significantly modified, provide the most savings or have activities that were not fully evaluated in an earlier round of evaluations, such as quantification of spillover.

Two types of evaluation generally undertaken for energy efficiency programs include process and impact evaluations. These are discussed in detail below. A third type of evaluation that is sometimes performed is a market transformation evaluation. Market transformation evaluations attempt to quantify the adoption of a measure in the market place. They analyze the availability and adoption of a product, along with changes in pricing if available and relevant.

North Shore Gas will cooperate with an independent third-party evaluation firm to evaluate the programs and measures. The third-party evaluator will perform evaluations consistent with generally accepted rules for evaluation and will address net-to-gross ("NTG") matters consistent with the Policy Manual and IL TRM.

Many issues associated with evaluations and the application of evaluation results have been discussed during SAG meetings and in separate meetings focusing on evaluation. North Shore Gas has participated in these meetings. SAG meetings have also been a forum for development of the Illinois Energy Efficiency Policy Manual ("Policy Manual"), which details evaluation policies. North Shore Gas will continue to actively participate in these meetings and evaluation efforts. In addition to SAG meetings, North Shore Gas will continue to participate in bi-weekly meetings with the third-party evaluation firm and other interested parties.

3.4.1 Impact Evaluation

The primary objective of impact evaluation is to estimate gross and net energy savings for the programs. These results are used to validate program-claimed savings and to adjust estimates of savings to improve their accuracy.

Although the plan is to evaluate the most important measures offered in the programs, not all measures will be evaluated with the same level of rigor. An important part of the planning will be to prioritize the programs and their measures and define the level of rigor that will be applied to the evaluation for each component. New measures and new processes will be given a higher priority than measures that have already been evaluated or are standard.

3.4.2 Process Evaluation

Timely process evaluations are critical for ensuring (1) that the appropriate information is being tracked and (2) that the program is being implemented effectively and efficiently. Process evaluations provide insights and recommendations to improve each program as well as to ensure the reliability of inputs to the impact evaluation.

Where relevant (particularly where a program is expected to go beyond energy savings to influence various aspects of a market), we will also conduct research to understand and document the relevant market. The primary objective of this effort will be to help program designers and managers structure their programs to achieve cost-effective savings and reduce barriers to participation while maintaining high levels of customer

satisfaction.

The process evaluation for each program will include in-depth qualitative interviews with North Shore Gas staff and program implementers. These interviews will be used to develop a complete understanding of the final design, procedures, and implementation strategies for each program. Through these interviews, available program materials, including marketing and outreach materials such as web-based promotional content, point of purchase (POP) materials, print and radio advertising copy, and any cooperative marketing materials developed, will be collected.

3.5 Reporting

Program reporting serves two key objectives:

- Provide information to regulators needed to assess the programs and their achievements.
- Provide timely information to program implementers needed to manage the programs including progress towards goals and expenses versus budgets.

Quarterly and annual reports will be prepared to meet these objectives. Program evaluation also requires that the information needed to properly evaluate a program is tracked and reported. Each of these items is discussed further below.

Accurate reporting is essential to the successful administration of a program. Program reporting reflects the progress or results of the programs, helps determine program changes that need to be made, and is a key tool used in the decision-making process. Program changes made as a result of reporting can have financial implications, which add to the importance of accurate reporting.

Accurate reporting is also important because it provides needed information to track whether mandated requirements are being met. Most energy efficiency programs have specific goals and benchmarks that must be achieved by certain dates. Accurate reporting provides the vehicle to evaluate whether these goals and benchmarks are being achieved cost-effectively in the allotted time frame and whether goals or programs need to be adjusted.

Providing information for the program evaluation is also an important aspect of reporting. Evaluation is a key aspect in gauging the success of the programs because it:

- Reports if the utilities have met their portfolio goals.
- Reports if a program has met its goals.
- Presents reasons why a program has succeeded or failed.
- May be used for compliance with regulations.

Evaluation relies heavily on data tracking and reporting to be comprehensive, reliable, and robust. Evaluation determines whether the portfolio results were cost- effective and feeds into the identification of potential adjustments to the Illinois TRM.

The most important data pieces to track are the total annual energy savings, the total yearly participation and accurately categorized costs. The first two data points are the benchmark for all goals and targets. The costs associated with the savings allows us to track where we are in terms of reaching the cap as well as reviewing cost effectiveness of the program at year end.

Franklin Energy continues to work closely with the EM&V Contractor to ensure the appropriate and needed data is being collected. Franklin Energy has given the EM&V Contractor access to the tracking system to enable timely and direct downloading of data needed for evaluation purposes.

More recently, stakeholders have requested a consistent format for quarterly and annual reporting among all utilities. North Shore Gas has agreed to take an active role in developing standardized reports and will report using the formats agreed to by all.

3.6 Proposed Program Details

This section provides details on the programs that North Shore Gas proposes to include in its gas energy efficiency portfolio.

North Shore Gas is committed to meeting the proposed energy savings targets within the budget allocations in the most cost-effective way. To this end, North Shore Gas requests the latitude to reallocate funding between programs, to add or delete cost-effective measures, and increase or decrease incentive amounts, at their discretion, to ensure performance criteria are met. North Shore Gas envisions the nature of the portfolio adjustments would relate to specific designs developed in response to customer/implementer feedback and/or rebalancing the portfolio based on individual program performance or emerging market/technology opportunities. Lastly, as North Shore Gas continues to learn from the market response to these and other utility programs, additional programs may be added to enhance the portfolio performance.

The proposed portfolio is a comprehensive set of proven programs that reach all customer classes. All of the programs in the proposed portfolio with the exception of Income Eligible programs screened as cost-effective for the 4-year plan period. Furthermore, all programs are scalable, meaning they can easily expand to incorporate additional measures in the future or remove measures that are no longer cost effective.

There are three programs that correspond with customer sectors — Income Eligible, Residential, and Business. The Income Eligible and Residential Programs have elements intended to provide a variety of energy efficiency programs for residential dwellings and multi-family units, both existing building retrofits and new construction. The Business Program has provisions intended to provide a range of energy efficiency programs for the multitude of small business, commercial, local government and industrial customers, both existing building retrofits and new construction. Each program contains two or three program paths — Outreach and Education, Assessments, and

Rebates/Grants. Each program path contains multiple categories (e.g., Outreach and Education includes behavior change and energy efficiency education).

Savings estimates for individual measures or programs have been developed in various manners. This includes calculating impacts using algorithms in the TRM if the measure is listed in the TRM or generally accepted engineering algorithms based on a set of reasonable assumptions to input variables and building simulation modeling. Because of the diversity in equipment and energy consumption patterns across multiple building types and end-uses, there exists a variability in the savings estimates as they relate to program design and target markets. A collaborative effort throughout the planning process between the utilities allowed for comparison of the measures and has led to a consistency in approach, even if the saving values differed. The proposed rebate levels are based mostly on current incentives or on the levels of incentives we believe are needed to encourage customers to pursue efficiency during a time of lower gas costs and longer payback periods. We have also tried to balance the impact of higher incentives against the impact of reaching our budget cap.

Details on each program are provided in the following pages. The Plan 3 for PY7 – PY10 is based on a "One-Stop-Shop" approach to energy efficiency. Each program has a variety of paths in which a customer can participate and provides all customers an opportunity to participate in as much of the program as they want. Each path of a program can serve as an individual, stand-alone activity or as part of complete process to energy efficiency. However, the more the customer does, the more they save. And the more satisfied the customer is with the energy efficiency experience and results, the more likely they are to participate over time.

Table 5: Energy Efficiency Portfolio Summary

Programs	Low I	ncome	Resid	ential	Business				
Market Offerings	Single Family	Multi- Family	Single Family	Multi- family	Small Business	C&I			
Path	Path								
Outreach & Education									
- Behavior	x	X	X	X					
- EEE	x	X	X	X					
Assessments									
- High level (w/DI)	x	х	Х	х	x	х			
- In Depth		X		X					
- Gas Optimization				X		X			
- RCx						X			
- Engineering Studies						X			
Rebates/Grants									
- Staffing						X			
- Standard Rebate			х	х	х	X			
- Partner Trade Ally			х	х	х				
- Local Orgn Partner	x	х							
- Custom Rebate				х	х	x			

3.6.1 Proposed Program Details – Income Eligible Program

North Shore Gas anticipates offering three paths – Outreach and Education, Assessments, and Rebates/Grants to income eligible customers. These paths are designed to work together to offer customers a comprehensive suite of efficiency programs.

Income Eligible Programs at a Glance

Programs	Income Eligible						
Market Offerings	Single	Family	Multi-Family				
Market Offerings	Existing	NC	Existing	NC			
Path							
Outreach & Education							
- Behavior	х		х				
- EEE	х		x				
Assessments							
- High level (w/DI)	х		х				
- In Depth			х				
Rebates							
- Local Orgn Partner		x		x			

The Income Eligible Program is presented in detail based upon three paths:

Outreach and Education. This path is designed to provide awareness and education that motivates customers to change behavior and implement smaller but meaningful efficiency measures through education and provision of low cost measures. It will also provide information on rebate programs and ties reports to information on incentives available for longer term savings measures.

The path is comprised of Home Energy Reports (Behavior Change) and Energy Efficiency Education and delivered jointly to both income eligible and residential customers. ¹⁶

Income Eligible Single Family. North Shore Gas will cooperate with a variety of partners to help income eligible customers save energy. Income eligible is defined as at or below 80% of the Area Median Income (AMI). The path will target all income eligible customer residences within the North Shore Gas service territory with grants for comprehensive retrofits. It will also provide enhanced rebates to income eligible single family new construction.

Income Eligible Multi-Family. North Shore Gas will cooperate with a variety of partners to offer a comprehensive, one-stop-shop to multi-family building owners who target income eligible renters. The path will initially target owners and managers of income eligible multi-family

¹⁶ Based upon data provided by the DCEO, North Shore Gas estimated that 8.8% of its customers are low income (income eligible). For planning purposes, North Shore Gas utilized the DCEO estimate to allocate participation and costs between the Income Eligible and Residential Programs.

buildings in North Shore Gas service territory with enhanced rebates for energy-efficient measures. Rental amounts must be affordable to households at or below 80% of the AMI. It will also provide enhanced rebates to income eligible multi-family new construction.

Path	3.6.1.1 INCOME ELIGIBLE OUTREACH AND EDUCATION
Description	Outreach and Education is designed to provide awareness and education that motivates customers to change behavior and implement small but meaningful efficiency measures through education and provision of low cost measures. It will also provide information on rebate programs and incentives available for long-term savings measures.
	Home Energy Reports. Utilizing a software platform that combines energy usage data with customer demographic, housing and GIS data, it benchmarks customer energy use and provides targeted efficiency recommendations and information on other programs in the North Shore Gas portfolio through Home Energy Reports that are mailed directly to the customer's home. The Home Energy Reports include customized recommendations that educate and influence consumers to reduce their energy consumption. The reports and associated web portal provide "neighbor" usage comparisons and suggest opportunities for customers to reduce their usage. The reports are targeted to high natural gas use customers with the greatest potential to capture energy savings.
	Energy Efficiency Education . Fifth-grade teachers are provided lesson plans and activities aligned with state curriculum standards that are designed to teach students about energy production and conservation. Each student will receive a take-home kit containing energy efficient products to install at home with their families.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	The <i>Home Energy Reports</i> vendor is currently unable to provide reports for North Shore Gas and ComEd jointly. It is the intent of North Shore Gas and ComEd to explore opportunities to cooperate in offering joint reports as they become available and if such collaboration is of mutual benefit for both entities.
	It is the intent of North Shore Gas to continue to jointly offer <i>Energy Efficiency Education</i> with ComEd.
Delivery Strategy	Home Energy Reports. A vendor will deliver this program via a turnkey process. The vendor will develop the reporting and website content, issue the reports according to the designated schedule, track participant savings, and train customer service representatives to field customer questions. Select customers will receive mailed, hard copy reports each heating season that benchmark their energy use, compare their usage to a screened group of like homes and provide targeted recommendations.
	Customers are selected to receive reports and must submit a request to no longer receive reports (i.e., opt out of receiving reports). Follow-up questionnaires will assess why some customers choose to opt out. The vendor will utilize various methods to identify and mitigate threats to reliability of savings results.
	Energy Efficiency Education. A vendor jointly selected by North Shore Gas and ComEd will solicit schools to participate, provide teacher lesson plans and deliver student kits. Fifth-grade teachers in participating schools will receive lesson plans and low cost energy efficiency measures to distribute to students for installation at home as a homework assignment. Students and parents will be required to complete a survey, reporting on installations completed. The vendor will maintain contact with educators and report on activity, counts of students versus kits, and other QC processes.
Target Market	Home Energy Reports is targeted to individually-metered, income eligible customers, with a focus on high natural gas users. Energy Efficiency Education is applicable to income eligible customers with a child
	in 5 th grade that attends a participating school.

Path	3.6.1.1 INCOME ELIGIBLE	3.6.1.1 INCOME ELIGIBLE OUTREACH AND EDUCATION									
Marketing Strategy	There is no marketing of <i>Home Energy Reports</i> . The strategy to gain participants is to analyze the customer population to identify high energy users and to target those customers for participation. Customers opt out from receiving reports rather than opt in. <i>Energy Efficiency Education</i> will be offered to schools located in North Shore Gas service territory. If more educators sign up to participate than is budgeted for, they will be put on a waiting list.										
Eligible Measures	included in kits for students	There are no measures eligible for incentives in this path. Measures that will be included in kits for students to install at home will be finalized before <i>Energy Efficiency Education</i> is launched.									
Targets	Participation										
			PY7	PY8	PY9	P	PY10				
	Home Energy Reports		14,256	13,939	13,6	22 1	.3,306				
	Energy Efficiency Education		125	125	1	25	125				
	Total		14,381	14,064	13,7	47 1	3,431				
	Annual Savings										
		P'	Y7	PY8	PY9	P	PY10				
	Home Energy Reports	1	51,800	84,525	83,2	70 143,270					
	Energy Efficiency Education		1,250	1,250	1,2	50	1,250				
	Total	1	53,050	85,775	84,5	20 14	4,520				
	Program Budget										
	Budget Category	PYZ	7	PY8	P	Y9	PY	10			
	Incentives		\$0	\$0		\$0		\$0			
	Third Party Incentives		\$0	\$0		\$0		\$0			
	Implementation	\$29	,000	\$29,000	\$	29,000	\$2	9,000			
	TOTAL	\$29	,000	\$29,000	\$2	29,000	\$2	9,000			
	Cost-Effectiveness										
	Ratepayer Impact	Utility	,	Total Resou	rce	Partic	ipant				
	Measure Test	Cost Te	st	Cost Test		Te	est				
	0.52 1.48 0.32										
	Levelized Cost per Therm Saved										
	PY7 PY8 PY9	PY1	LO _								
	\$0.18 \$0.32 \$0.33										

Path	3.6.1.2 INCOME ELIGIBLE SINGLE FAMILY							
Description	Income Eligible Single Family is designed to help income eligible customers save energy and reduce their utility bills.							
	Retrofit. Qualifying customers in existing homes will receive an energy assessment and a comprehensive retrofit that focuses on a whole building approach to improving energy efficiency in the customer's home. Customers may receive free installation of insulation and air sealing based upon the results of the energy assessment. North Shore intends to purchase saved therms from the Illinois Home Weatherization Assistance Program. As needed, customers will receive emergency replacement of heating and water heating systems or a heating system tune-up, and health and safety measures. ¹⁷							
	New Construction . Enhanced grants will be offered to affordable housing developers for substantial rehabilitation or new construction of single family homes.							
Duration	January 1, 2018 through December 31, 2021							
Utility Collaboration	It is the intent of North Shore Gas to jointly deliver with ComEd and cooperate with a variety of partners wherever possible.							
Delivery Strategy	Delivery strategy will include the use of local experts wherever practicable. Costs and savings will be based upon an allocation agreement with ComEd, as appropriate. The allocation may be periodically reviewed to ensure the allocations are appropriate. The retrofits will not require any funding from the customer. North Shore Gas will provide enhanced rebates for developers of new construction homes targeted to income eligible residents within the service territory.							
Target Market	Retrofit. North Shore Gas will target single family or duplex residences within the North Shore Gas service territory. Households must be at or below 80% of the AMI. Both owner-occupied and rental premises are eligible.							
	New Construction . New Construction will target for-profit and non-profit affordable housing developers. Projects must target households at or below 80% of the AMI.							
Marketing Strategy	Retrofit. North Shore Gas will work with a variety of partners to create awareness. New Construction. Rebates will be marketed to affordable housing developers such as Habitat for Humanity, Community Development Agencies, Affordable Housing Agencies, etc.							
Eligible Measures	Eligible measures may include:							

 $^{^{17}}$ Emergency replacements include equipment that is non-repairable and/or unsafe due to the age and condition of the equipment.

Path 3.6.1.2 INCOME ELIGIBLE SINGLE FAMILY

Targets

Participation

	PY7	PY8	PY9	PY10
Retrofit	65	65	65	65
New Construction	0	0	0	0
Total	65	65	65	65

Annual Savings

	PY7	PY8	PY9	PY10
Retrofit	44,216	44,216	44,216	44,216
New Construction	0	0	0	0
Total	44,216	44,216	44,216	44,216

Program Budget

Budget Category	PY7	PY8	PY9	PY10
Third Party Incentives (Retrofit)	\$267,072	\$267,072	\$267,072	\$267,072
Incentives (New Construction)	\$0	\$0	\$0	\$0
Implementation	\$46,777	\$46,777	\$46,777	\$46,777
TOTAL	\$46,777	\$46,777	\$46,777	\$46,777

Cost-Effectiveness

Ratepayer Impact	Utility	Total Resource	Participant
Measure Test	Cost Test	Cost Test	Test
0.70	8.65	1.29	1.99

Levelized Cost per Therm Saved

PY7	PY8	PY9	PY10
\$0.48	\$0.48	\$0.48	\$0.48

Path	3.6.1.3 INCOME ELIGIBLE MULTI-FAMILY
Description	Income Eligible Multi-Family is designed to offer a comprehensive, one-stop-shop to multi-family building owners whose buildings are targeted to income eligible residents. Participating multi-family building owners and managers will benefit directly from free energy assessments, financial guidance and enhanced rebates, installation support, project oversight and continuing engagement. **Retrofit.** A technician will conduct a comprehensive energy assessment to identify energy savings opportunities. This will include a site visit with a visual and diagnostic inspection as well as an analysis of utility bills. The assessment will report on opportunities for direct installation of low cost measures both in-unit and common areas, plus comprehensive retrofit opportunities that focus on a whole building approach to improving energy efficiency. Building owners will receive a report detailing estimated costs and savings for the efficiency improvements. They will receive enhanced incentives and possibly financing for the purchase and installation of efficient equipment. The incentives help offset the incremental cost of high efficiency equipment and the cost of installation. As needed, buildings will receive health and safety measures. **New Construction**. Enhanced rebates will be offered to affordable housing developers for substantial rehab and new construction of income eligible multi-family buildings.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	It is the intent of North Shore Gas to jointly deliver with ComEd and cooperate with a variety of partners.
Delivery Strategy	Delivery strategy will include use of local experts wherever practicable. Costs and savings will be based upon an allocation agreement with ComEd for measures that affect both electric and gas usage. The allocation may be periodically reviewed to ensure the allocations are appropriate. North Shore Gas will provide enhanced rebates for retrofits and new construction for buildings targeted to income eligible residents within the service territory.
Target Market	The path will target owners and managers of income eligible multi-family buildings in North Shore Gas service territory. Rents must be affordable to households at or below 80% of the AMI.
Marketing Strategy	Retrofit. North Shore Gas will work with a variety of partners to create awareness. New Construction. North Shore Gas will coordinate with partners to increase awareness of enhanced rebates for developers of income eligible multi-family buildings.
Eligible Measures	Eligible measures may include: Air Sealing Attic Insulation Wall Insulation Pipe Insulation Boiler Tune-Up Boiler Reset/Cutout Boiler Water Heater Health and Safety

Path 3.6.1.3 INCOME ELIGIBLE MULTI-FAMILY

Targets

Participation

	PY7	PY8	PY9	PY10
Retrofit	5	5	5	5
New Construction	0	0	0	0
Total	5	5	5	5

Annual Savings

	PY7	PY8	PY9	PY10
Retrofit	32,244	32,244	32,244	32,244
New Construction	0	0	0	0
Total	32,244	32,244	32,244	32,244

Program Budget

Budget Category	PY7	PY8	PY9	PY10
Incentives	\$65,550	\$65,550	\$65,550	\$65,550
Third Party Incentives	\$43,944	\$43,944	\$43,944	\$43,944
Implementation	\$13,604	\$13,604	\$13,604	\$13,604
TOTAL	\$123,098	\$123,098	\$123,098	\$123,098

Cost-Effectiveness

Ratepayer Impact	Utility	Total Resource	Participant
Measure Test	Cost Test	Cost Test	Test
0.55	2.68	1.15	2.16

Levelized Cost per Therm Saved

PY7	PY8	PY9	PY10
\$0.33	\$0.33	\$0.33	\$0.33

3.6.2 Proposed Program Details – Residential Program

North Shore Gas anticipates offering three program paths – Outreach and Education, Assessments, and Rebates/Grants. These paths are designed to work together to offer customers a comprehensive suite of efficiency programs. Each path is described in detail below.

Residential Programs at a Glance

Programs	Residential						
Market Offerings	Single	Family	Multi-Family				
Market Offerings	Existing			NC			
Existing NC Existing NC Path							
Outreach & Education							
- Behavior	x		х				
- EEE	х		х				
Assessments							
- High level (w/DI)	х		х				
- In Depth			х				
- Gas Optimization			х				
Rebates							
- Standard Rebate	x	х	х	х			
- Partner Trade Ally	х		х				
- Custom Rebate			х	х			

The Residential Program is presented in detail based upon three paths:

Outreach and Education. The path is designed to provide awareness and education that motivates customers to change behavior and implement smaller but meaningful efficiency measures through education and provision of low cost measures. It will also provide information on rebate programs and tie reports to information on incentives available for longer term savings measures. The path is comprised of Home Energy Reports (Behavior Change) and Energy Efficiency Education and is delivered jointly to both income eligible and residential customers.

Single Family. The path is designed to help customers save energy via multiple avenues, including energy assessments with direct install of low cost measures, incentives for efficient equipment and incentives for new construction projects. The path targets customers with individually metered residences that are either single family or duplexes and that have natural gas heating.

Multi-Family. The path is designed as a one-stop-shop for customers who live in non-income eligible multi-family buildings and multi-family building owners/property managers. The target audience will be able to access options offered through one point of contact with assistance as needed and requested.

Path	3.6.2.1 OUTREACH AND EDUCATION
Description	Outreach and Education is designed to provide awareness and education that motivates customers to change behavior and implement small but meaningful efficiency measures through education and provision of low cost measures. It will also provide information on rebate programs and incentives available for long-term savings measures. *Home Energy Reports*. Utilizing a software platform that combines energy usage data with customer demographic, housing and GIS data, it benchmarks customer energy use and provides targeted efficiency recommendations and information on other programs in the North Shore Gas portfolio through Home Energy Reports that are mailed directly to the customer's home. The Home Energy Reports include customized recommendations that educate and influence consumers to reduce their energy consumption. The reports and associated web portal provide "neighbor" usage comparisons and suggest opportunities for customers to reduce their usage. The reports are targeted to high natural gas use customers with the greatest potential to capture energy savings. *Energy Efficiency Education*. Fifth-grade teachers are provided lesson plans and activities aligned with state curriculum standards that are designed to teach students about energy production and conservation. Each student will receive a take-home kit
	containing energy efficient products to install at home with their families.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	The <i>Home Energy Reports</i> vendor is currently unable to provide reports for North Shore Gas and ComEd jointly. It is the intent of North Shore Gas and ComEd to explore opportunities to cooperate in offering joint reports as they become available and if such collaboration is of mutual benefit for both entities. It is the intent of North Shore Gas to continue to jointly offer <i>Energy Efficiency Education</i> with ComEd.
Delivery Strategy	Home Energy Reports. A vendor will deliver this program via a turnkey process. The vendor will develop the reporting and website content, issue the reports according to the designated schedule, track participant savings, and train customer service representatives to field customer questions. Select customers will receive mailed, hard copy reports each heating season that benchmark their energy use, compare their usage to a screened group of like homes and provide targeted recommendations. Customers are selected to receive reports and must submit a request to no longer receive reports (i.e., opt out of receiving reports). Follow-up questionnaires will assess why some customers choose to opt out. The vendor will utilize various methods to identify and mitigate threats to reliability of savings results. Energy Efficiency Education. A vendor jointly selected by North Shore Gas and ComEd will solicit schools to participate, provide teacher lesson plans and deliver student kits. Fifth-grade teachers in participating schools will receive lesson plans and low cost energy efficiency measures to distribute to students for installation at home as a homework assignment. Students and parents will be required to complete a survey, reporting on installations completed. The vendor will maintain contact with educators and report on activity, counts of students versus kits, and other QC processes.
Target Market	Home Energy Reports is targeted to individually-metered customers, with a focus on high natural gas users. Energy Efficiency Education is applicable to customers with a child in 5 th grade that attends a participating school.

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Path	3.6.2.1 OUTREACH A	ND E	DUCATI	ON				
Marketing Strategy	There is no marketing of <i>Home Energy Reports</i> . The strategy to gain participants is to analyze the customer population to identify high energy users and to target those customers for participation. Customers opt out from receiving reports rather than opt in. <i>Energy Efficiency Education</i> will be offered to schools located in North Shore Gas service territory. If more educators sign up to participate than is budgeted for, they will be put on a waiting list.							
Eligible Measures	There are no measure included in kits for stu Efficiency Education	dents	to install			•		
Targets	Participation							
			PY7	PY8	PYS	PY1	0	
	Home Energy Reports		39,744	38,861	37,97			
	Energy Efficiency Educa	tion	1,250	1,250	1,25			
	Total		40,994	40,111	39,22	28 38,34	4	
	Annual Savings							
			PY7	P'	Y8	PY9	PY10	
	Home Energy Reports		423,20		,653	232,16		
	Energy Efficiency Educa	tion	12,50		2,500	12,50		
	Total		435,70	00 248	3,153	244,66	0 411,87	8
	Program Budget							
	Budget Category	P۱	<i>(</i> 7	PY8		PY9	PY10	
	Incentives		\$0	\$(\$0	\$0	
	Third-Party Incentives		\$0	\$1	_	\$0	\$0	
	Implementation			\$361,000		361,000	\$361,000	
	TOTAL	\$36	1,000	\$361,000) \$:	361,000	\$361,000	
	Cost-Effectiveness							
	Ratepayer Impact	Utility	Total Re	esource	Particip	pant		
		ost Test			Tes			
	0.34	0.56	0.5	51	6.47	<u>'</u>		
	Levelized Cost per Th	erm S	aved					
	PY7 PY8	PY9	PY10					
		\$1.28	\$0.58					
		-						

Path	3.6.2.2 SINGLE FAMILY ASSESSMENTS & REBATES
Description	The Single Family Assessments and Rebates path is designed to help customers save energy via multiple avenues, including energy assessments with direct install of low cost measures, incentives for efficient equipment and incentives for new construction projects. Energy Assessment and Direct Install. Customers will receive an energy assessment and direct installation of low cost energy and water saving measures including low flow
	showerheads, kitchen and bathroom faucet aerators, programmable/smart thermostats and pipe insulation at no cost. Field technicians complete a high-level energy assessment to identify other energy saving opportunities and provide the customer with estimated costs and savings for these opportunities. The technician will educate residential customers on financial incentives available for eligible measures identified during the assessment and provide referrals for appropriate vendors.
	Rebates. Customers may receive incentives for the purchase and installation of higher efficiency furnaces, boilers, thermostats and insulation/air sealing. The incentives offset the incremental cost of high efficiency equipment and the cost of installation. Trade allies install measures and engage customers.
	New Construction. Incentives will be available to customers/contractors that build a single family home above the current building code.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	It is the intent of North Shore Gas to cooperate with ComEd to offer this path as there are some measures that could benefit both gas and electric energy use. In addition, the utilities will collaborate in educating customers and trade allies on the benefits of energy efficiency.
Delivery Strategy	Direct Install. A technician will perform a high-level assessment and install low cost energy and water savings measures. The assessment will identify energy savings
Sudisgy	opportunities as well as estimates of costs and savings so the resident can prioritize future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore Gas.
	future actions based on payback if desired. Customers will be educated on available
	future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore Gas. **Rebates.** In general, incentives for high efficiency equipment are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards,
	future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore Gas. **Rebates.** In general, incentives for high efficiency equipment are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. North Shore Gas will develop a network of weatherization trade allies based upon qualified contractors that apply to participate. Customers will be required to utilize a partner trade ally to receive weatherization incentives. An online and hardcopy
	future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore Gas. **Rebates**. In general, incentives for high efficiency equipment are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. North Shore Gas will develop a network of weatherization trade allies based upon qualified contractors that apply to participate. Customers will be required to utilize a partner trade ally to receive weatherization incentives. An online and hardcopy application will be available to customers and trade allies. **New Construction**. North Shore Gas will offer incentives to encourage customers and builders to push building efficiency beyond what is required through compliance with current building code. North Shore Gas will utilize support from contractors to promote
	future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore Gas. **Rebates**. In general, incentives for high efficiency equipment are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. North Shore Gas will develop a network of weatherization trade allies based upon qualified contractors that apply to participate. Customers will be required to utilize a partner trade ally to receive weatherization incentives. An online and hardcopy application will be available to customers and trade allies. **New Construction**. North Shore Gas will offer incentives to encourage customers and builders to push building efficiency beyond what is required through compliance with current building code. North Shore Gas will utilize support from contractors to promote the benefits of building above the current building code. **Quality control activities will include:** Field inspections to confirm installation and eligibility for at least 2.5% of rebated equipment. Transaction surveys to measure customer satisfaction and identify potential
	future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore Gas. **Rebates**. In general, incentives for high efficiency equipment are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. North Shore Gas will develop a network of weatherization trade allies based upon qualified contractors that apply to participate. Customers will be required to utilize a partner trade ally to receive weatherization incentives. An online and hardcopy application will be available to customers and trade allies. **New Construction**. North Shore Gas will offer incentives to encourage customers and builders to push building efficiency beyond what is required through compliance with current building code. North Shore Gas will utilize support from contractors to promote the benefits of building above the current building code. **Quality control activities will include:** Field inspections to confirm installation and eligibility for at least 2.5% of rebated equipment.

Path	3.6.2.2 SINGLE FAMILY ASSESSMENTS & F	REBATES				
Target Market	family or duplexes and that have natural gas heating. Customers must be an active North Shore Gas residential customer. Both owner-occupied and rental premises are eligible provided the purpose of the premises is for a residential dwelling.					
Marketing Strategy	The marketing strategy will continue to be building awareness of the paths available for participation. Messaging will be aimed at two audiences: 1) property owners and 2) dealers, distributors, contractors and other trade allies.					
	Campaigns directed at home owners will include relations, and other special events, all supporte North Shore Gas will also work with community promote <i>Direct Install</i> .	d by the North Shore Ga	as website.			
	The tactics for trade ally involvement will be to provide marketing support and periodic trade ally incentives. Trade ally support and engagement is a key element to the success of energy efficiency programs. Franklin Energy will establish trade ally advisory groups to educate and ultimately champion the path. Different trade ally groups will be established for equipment versus building envelope improvements versus new home construction.					
	groups will be established for equipment versus versus new home construction.	s building envelope impr	ovements			
Elizible			ovements			
Eligible Measures	versus new home construction.		ovements			
Eligible Measures	versus new home construction. Eligible measures and their incentives may incl	ude the following:	ovements			
	versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One	ude the following:	ovements			
	versus new home construction. Eligible measures and their incentives may incl Measure	ude the following: Per Unit Incentive \$600	ovements			
	versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh	Per Unit Incentive \$600 \$400	ovements			
	versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh	Per Unit Incentive \$600 \$400 \$500	ovements			
	versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE	Per Unit Incentive \$600 \$400 \$500 \$150	ovements			
	versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE	yer Unit Incentive \$600 \$400 \$500 \$150 \$200	ovements			
	Versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat	yer Unit Incentive \$600 \$400 \$500 \$150 \$200 \$50	ovements			
	Versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat Air Sealing	\$600 \$400 \$500 \$150 \$200 \$0.40 per CFM	ovements			
	Versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat Air Sealing Attic Insulation	\$600 \$400 \$500 \$150 \$200 \$50 \$0.40 per CFM \$0.30 per sq.ft.	ovements			
	Versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat Air Sealing Attic Insulation Duct Sealing	\$600 \$400 \$500 \$150 \$200 \$50 \$0.40 per CFM \$0.30 per sq.ft. \$2.00 per CFM	evements			
	versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat Air Sealing Attic Insulation Duct Sealing Wall Insulation	\$600 \$400 \$500 \$150 \$200 \$50 \$0.40 per CFM \$0.30 per sq.ft. \$2.00 per CFM	ovements			
	Versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat Air Sealing Attic Insulation Duct Sealing Wall Insulation Foundation Insulation	\$600 \$400 \$500 \$150 \$200 \$50 \$0.40 per CFM \$0.30 per sq.ft. \$2.00 per Sq.ft. \$0.50 per sq.ft.	ovements			
	Versus new home construction. Eligible measures and their incentives may incl Measure Boiler - DHW Two-in-One Boiler ≥90% AFUE, <300MBh Boiler ≥95% AFUE, <300MBh Furnace >95% AFUE Furnace >97% AFUE Advanced Thermostat Air Sealing Attic Insulation Duct Sealing Wall Insulation Foundation Insulation New Construction 20-25% over IL 2015 Code	\$600 \$400 \$500 \$150 \$200 \$50 \$0.40 per CFM \$0.30 per sq.ft. \$0.50 per sq.ft. \$0.30 per sq.ft. \$1,000	ovements			

Path

3.6.2.2 SINGLE FAMILY ASSESSMENTS & REBATES

Targets

Participation

	PY7	PY8	PY9	PY10
Energy Assessment & Direct Install	2,500	2,500	2,475	2,500
Rebates & New Construction	2,997	2,997	2,997	2,997
Total	5,497	5,497	5,472	5,497

Annual Savings

	PY7	PY8	PY9	PY10
Energy Assessment & Direct Install	128,222	128,222	126,898	128,222
Rebates & New Construction	226,017	226,017	226,017	226,017
Total	354,239	354,239	352,915	354,239

Program Budget

Budget Category	PY7	PY8	PY9	PY10
Incentives	\$256,094	\$256,094	\$256,094	\$256,094
Third-Party Incentives	\$315,244	\$315,244	\$312,535	\$315,244
Implementation	\$304,237	\$304,237	\$297,165	\$304,237
TOTAL	\$875,575	\$875,575	\$865,794	\$875,575

Cost-Effectiveness

Ratepayer Impact	Utility	Total Resource	Participant
Measure Test	Cost Test	Cost Test	Test
0.81	5.29	2.08	3.42

Levelized Cost per Therm Saved

PY7	PY8	PY9	PY10
\$0.23	\$0.23	\$0.23	\$0.23

Path	3.6.2.3 MULTI-FAMILY ASSESSMENTS & REBATES/GRANTS
Description	Multi-Family Assessment and Rebates/Grants targets customers who live in multi-family buildings and multi-family building owners/property managers. The path is designed as a one-stop-shop, meaning that the target audience will be able to access all offerings through one point of contact with assistance as needed and requested. North Shore Gas intends to work with local organizations with expertise in the multi-family market such as Elevate and Community Investment Corporation.
	Energy Assessment and Direct Install. An energy advisor performs a comprehensive energy audit of the building and makes recommendations for direct install and rebate opportunities. A report is provided to building owners/managers on the energy and water saving opportunities present within their facility. Residents receive direct installation of low cost energy and water saving measures including low flow showerheads, kitchen and bathroom faucet aerators, programmable/smart thermostats and pipe insulation (at no cost).
	Rebates – Standard and Partner Trade Ally (PTA) . Pre-qualified, standardized rebates are available for measures such as heating systems, steam traps, and pipe insulation. Incentives are based on the size and efficiency of the equipment installed. A network of selected trade allies, screened and registered, offer measures with higher incentives (20%-30% higher on average).
	Rebates – Custom . Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a \$/first year therm savings basis.
	Gas Optimization . An energy advisor/engineer performs an advanced gas usage study to identify operation and maintenance issues as well as energy conservation measures related to the building heat system. Qualifying buildings must be 75,000 square feet or more and use a minimum of 60,000 therms per year.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	It is the intent of North Shore Gas to cooperate with ComEd to offer the path as there are some measures that could benefit both gas and electric energy use. In addition, the utilities will collaborate in educating customers and trade allies on the benefits of energy efficiency. North Shore Gas and ComEd will continue to offer <i>Direct Install</i> jointly.
Delivery Strategy	Direct Install. Technicians will perform the building energy assessment and install low cost energy and water savings measures in customer units. An energy advisor will perform a comprehensive energy audit of the entire complex and provide recommendations for direct install, trade ally partner, and standard installation opportunities. A report is provided to building owners/managers on the energy saving opportunities.
	Rebates. Standard incentives will be offered to building owners along with an option for owners to use a group of registered trade ally partners who will offer upgrades at a higher incentive. The Company will develop a network of partner trade allies based upon qualified contractors that apply to participate.
	Standard/PTA incentives for high efficiency equipment are based on approximately 30-70% of incremental costs. Actual incentives are provided in the table of eligible measures.
	Custom incentives are based on the lesser of a buy down to a 1-year payback, 50% of the project cost, or a \$/therm saved during the first year.
	North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. An online and hardcopy application will be available to customers and trade allies.
	Gas Optimization. Services will be delivered by staff and independent engineering firms

Path	3.6.2.3 MULTI-FAMILY ASSESS	SMENTS &	REBATES/	GRANTS		
	with expertise uncovering these types of opportunities.					
	Quality control activities will in	nclude:				
	 Field inspections to confirm installation and eligibility for at least 2.5% of rebated equipment. Transaction surveys to measure customer satisfaction and identify potential measure and process improvements. Trade ally advisory groups and surveys to ensure the process is easy to work with and helpful to trade allies in selling high efficiency equipment. 					
Target Market	The path targets individually met served by the Residential market Gas customer. Community Deve Federally-owned multi-family hou living and nursing homes may also	t offering. Celopment housing structu	ustomers musing projectives will be a	nust be an a cts not serve a target mar	ctive North Shore ed by the DCEO and	
Marketing Strategy	The path will be marketed primarily through partnerships with building owners, property managers and real estate professionals. North Shore Gas and partners will use strategic communication channels to inform building owners about the path and recruit new participants. The primary outreach strategies will involve working with key businesses, institutions, associations and organizations that are already connected with a broad range of local property owners. Case studies, testimonials, and presentations will feature successes of participation.					
	Eligible measures and their ince	ntives may i	nclude the f	following:		
Eligible Measures	Measure	Per	Unit Incentiv	e		
mododroo	Custom Rebate	\$1.00 per th				
	Gas Optimization	\$1.25 per th				
				Std Per Un	it PTA Per Unit	
	Measure		Unit	Incentive		
	Air Sealing (MF)		CFM		/a \$0.40	
	Duct Sealing (MF)		CFM_25		/a \$2.00	
	Boiler ≥88% AFUE, <300MBh		MBH	\$2.2		
	Boiler ≥88% AFUE, ≥300MBh TE	ſ	MBH			
	Boiler Reset Controls	_		\$2.5		
			MBH	\$0.5	\$0.60	
	Boiler Tune Up	1	MBH MBH	\$0.5 \$0.3	\$0.60 \$0.40	
	Boiler Tune Up Condensing Unit Heater	1	МВН ИВН ИВН	\$0.5 \$0.3 \$2.0	\$0.60 \$0.40 \$0.50 \$2.50	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters	1	ИВН ИВН ИВН ИВН	\$0.5 \$0.3 \$2.0 \$1.0	\$0.60 \$0.40 \$00 \$2.50 \$00 \$1.00	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE	1 1	MBH MBH MBH MBH each	\$0.5 \$0.3 \$2.0 \$1.0 \$27	\$0.60 \$0.60 \$0.40 \$0.0 \$2.50 \$0.0 \$1.00 \$75 \$325	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit)	1 1 1 6	MBH MBH MBH MBH each	\$0.5 \$0.3 \$2.0 \$1.0 \$27	\$0.60 \$0.60 \$0.40 \$0.0 \$2.50 \$0.0 \$1.00 \$75 \$325 \$75 \$250	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer	1 6	MBH MBH MBH each b-capacity	\$0.5 \$0.5 \$2.6 \$1.6 \$27 n _i	\$0.60 \$0.40 \$0.40 \$0.60 \$2.50 \$0.60 \$1.00 \$75 \$325 \$74 \$250 \$00 \$5.00	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater	1 1 6 6	MBH MBH MBH each each b-capacity MBH	\$0.5 \$0.5 \$2.6 \$1.6 \$27 n ₁ \$4.6 \$2.5	\$0.60 \$0.40 \$0.40 \$0.50 \$2.50 \$0.60 \$1.00 \$75 \$325 \$250 \$0.60 \$5.00 \$3.00	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater Ozone Laundry		MBH MBH MBH each b-capacity MBH	\$0.5 \$0.3 \$2.0 \$1.0 \$2.7 n ₁ \$4.0 \$2.5	\$0.60 \$0.60 \$0.40 \$0.0 \$2.50 \$0.0 \$1.00 \$75 \$325 \$74 \$250 \$75 \$5.00 \$75 \$3.00 \$75 \$250 \$75 \$250 \$75 \$250	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater		MBH MBH MBH each each b-capacity MBH	\$0.5 \$0.5 \$2.6 \$1.6 \$27 n ₁ \$4.6 \$2.5	\$0.60 \$0.60 \$0.40 \$0.0 \$2.50 \$0.0 \$1.00 \$75 \$325 \$74 \$250 \$75 \$3.00 \$75 \$3.00 \$7	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater Ozone Laundry Pipe Insulation - Boiler Small	1	MBH MBH MBH each b-capacity MBH b-capacity	\$0.5 \$0.5 \$2.6 \$1.6 \$2.7 \$4.6 \$2.5 \$2.5 \$1.6	\$0.60 \$0.60 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$1.00 \$1.00 \$2.50 \$0.40 \$1.00 \$1.00 \$5.00 \$5.00 \$0.40 \$0.	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater Ozone Laundry Pipe Insulation - Boiler Small Pipe Insulation - Boiler Medium		MBH MBH MBH each each b-capacity MBH b-capacity	\$0.5 \$0.5 \$2.6 \$1.6 \$27 n, \$4.6 \$2.5 \$2.5 \$1.6	\$0.60 \$0.60 \$0.40 \$0.40 \$0.50 \$2.50 \$0.0 \$1.00 \$1.00 \$3.25 \$2.50 \$0.0 \$5.00 \$0.0 \$3.00 \$0.0 \$2.5 \$0.0 \$1.50 \$0.0 \$1.88 \$0.0 \$2.25	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater Ozone Laundry Pipe Insulation - Boiler Small Pipe Insulation - Boiler Medium Pipe Insulation - Boiler Large		MBH MBH MBH each b-capacity MBH b-capacity ft	\$0.5 \$0.3 \$2.0 \$1.0 \$2.5 n, \$4.0 \$2.5 \$2.5 \$1.0 \$1.2	\$0.60 \$0.60 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$0.50 \$1.00 \$1.00 \$2.50 \$0.60 \$3.00 \$0.60 \$0.	
	Boiler Tune Up Condensing Unit Heater Direct Fired Heaters Furnace >95% AFUE Furnace >95% AFUE (In Unit) High Speed Washer Infrared Heater Ozone Laundry Pipe Insulation - Boiler Small Pipe Insulation - Boiler Medium Pipe Insulation - Boiler Large Pipe Insulation - HW Small		MBH MBH MBH each b-capacity MBH b-capacity ft ft	\$0.5 \$0.6 \$2.6 \$1.6 \$2.5 n ₁ \$4.6 \$2.5 \$2.5 \$1.6 \$1.2 \$1.5	\$0.60 \$0.60 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$0.40 \$0.50 \$1.00 \$1.00 \$2.50 \$0.60 \$3.00 \$0.60 \$0.60 \$1.50 \$1.88 \$0.60 \$1.88 \$0.60 \$1.25 \$1.50	

Path	3.6.2.3 MULTI-FAMIL								
	Pipe Insulation - Steam	ı - Medi	um		ft			\$4.25	\$6.00
	24000					I I m i A		td Per Unit	
	Meas Pipe Insulation - Steam				ft	Unit		Incentive \$5.75	Incentive \$8.00
	Pipe Insulation - Steam				ft			\$3.73 \$10.00	-
	Pipe Insulation - Steam		_		eac	·h		\$5.00	-
	Pipe Insulation - Steam				eac			\$7.00 \$7.00	-
	Pipe Insulation - Steam				eac			\$14.00	
	Pipe Insulation - Steam			.0	eac			\$13.00	-
	Pipe Insulation - Steam				eac			\$20.00	
	Pipe Insulation - Steam			e	eac			\$28.00	
	Steam Boiler ≥82% AFI				MB	BH		\$2.00	
	Steam Boiler Averaging		ols		eac			\$100	•
	Steam Traps - Dry Clea				eac	h		\$100	\$200
	Steam Traps - HVAC Re				eac	h		\$100	•
	Steam Traps - HVAC Re	•	•		eac	h		\$30.00	\$30.00
	Steam Traps - Test				eac	h		\$10.00	\$15.00
	Participation								
argets				PY7	P	Y8	PY9	PY10	
	Energy Assessment & Di	rect Ins	tall	750	7	'50	700	750	
	Rebates - Standard & P1	ΓΑ		69		69	69	69	
	Rebates - Custom			4		4	2	4	
	Gas Optimization			0		0	0	0	
	Total			823	8	323	771	823	
	Annual Savings								
				PY7	,		PY8	PY9	PY10
	Energy Assessment & Di	rect Ins	tall	19,0		1	9,099	17,799	19,099
	Rebates - Standard & PT			15,3			5,315	15,315	15,315
	Rebates - Custom				744	<u> </u>	3,744	1,872	3,744
	Gas Optimization			1 3,,	0		0	0	0
	Total			38,1		3	8,158	34,986	38,158
	Program Budget				_		,	. ,	,
	Budget Category	PY:	7	PY8			PY9	PY10	
	Incentives	\$15,		\$15,3			12,784	\$15,384	4
	Third-Party Incentives	\$43,		\$43,7			40,779	\$43,75	
	Implementation	\$62,		\$62,7			50,000	\$62,700	
	TOTAL	\$121,	838	\$121,8	38	\$1	03,563	\$121,83	8
	Cost-Effectiveness								<u> </u>
	Ratepayer Impact 1	Jtility	Total	Resource	e Pa	rticip	ant		
		ost Test	Co	st Test		Test			
	0.57	3.19		1.72	1	5.35	ı		

Path	3.6.2.3 M	ULTI-FAN	IILY ASSI	ESSMENT	S & REB	ATES/GR	RANTS	
	Levelized	Cost per	Therm Sa	ved				
	PY7	PY8	PY9	PY10				
	\$0.27	\$0.27	\$0.25	\$0.27				

3.6.3 Proposed Program Details - Business Programs

North Shore Gas anticipates offering two paths – Assessments and Rebates/Grants – for Business and local government customers. These paths are designed to work together to offer customers a comprehensive program. Each path is described in detail below for business and small business customers.

Business Programs at a Glance

Program	Business						
Market Offering	Small Bu	usiness	C8	ίl	Local Gov't		
Market Offering	Existing	NC	Existing	NC	Existing	NC	
Path							
Assessments							
- High level (w/DI if appro)	x		х		x		
- Gas Optimization			х		x		
- RCx			х		х		
- Engineering Studies			х		х		
Rebates/Grants							
- Staffing			х		х		
- Standard Rebate	х	х	х	х	х	Х	
- Partner Trade Ally	х	х					
- Custom Rebate	х	х	х	х	х	х	

Path	3.6.3.1 SMALL BUSINESS ASSESSMENTS & REBATES
Description	Small business owners are often time-constrained, unaware of energy efficiency opportunities, and lack dedicated staff who concentrate on the facility's energy use. As such, they are a hard-to-reach target audience. While many business owners are also the property owner, some lease their space and consequently have little motivation to make major improvements to their tenant's premises.
	Direct Install. Customers receive direct installation of low cost energy and water saving measures including low flow showerheads, kitchen and bathroom faucet aerators, pipe insulation and, if applicable, pre-rinse sprayers (at no cost). A high-level assessment of the business will be completed while at the site to identify additional energy efficiency improvements the small business owner/tenant can pursue.
	Prescriptive Rebates. Pre-qualified, standardized rebates are available for the most common efficiency upgrades, such as heating systems, steam traps, and pipe insulation. Incentives are based on the size and efficiency of the equipment installed.
	Partner Trade Ally (PTA). A network of trade allies promotes measures and assist in engaging customers to participate in site assessments to identify additional savings opportunities. Customers will be eligible for enhanced rebate levels.
	Upstream Prescriptive Rebates . North Shore Gas anticipates offering upstream commercial kitchen equipment incentives. North Shore Gas will continue to explore and develop upstream and mid-stream rebates where effective.
	Custom Incentives. Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a \$/first year therm savings basis. Staff will work with customers to identify and quantify savings opportunities for complex projects.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	It is the intent of North Shore Gas to cooperate with ComEd to offer this path. Measures that could benefit both gas and electric energy use may be offered jointly, where possible, and be made transparent to the customer. In addition, the utilities will collaborate in raising awareness of and educating customers on the benefits of energy efficiency.
Delivery Strategy	The path utilizes a mix of staff and a list of qualified contractors to perform direct installation of low cost measures, the high-level assessments, and deeper retrofits on a shared cost basis. The trade allies will continue to promote high efficiency equipment whenever possible.
	Direct Install . North Shore Gas will engage staff and/or vendors to conduct a high-level assessment of the facility to identify energy improvement opportunities that the building owner or business can implement.
	Prescriptive/Partner Trade Ally (PTA) Rebates are based on approximately 50% of incremental costs. Proposed incentives are provided in the table of eligible measures. Prescriptive incentives will be offered along with an option to use a group of registered trade ally partners who will offer upgrades at a higher incentive. North Shore Gas will develop a network of partner trade allies based upon qualified contractors that apply to participate.
	Upstream Prescriptive Rebates will be determined with commercial kitchen suppliers and other potential partners.
	Custom Rebates are based on the lesser of a buy down to a 1-year payback, 50% project cost, or a \$/therm saved during the first year.
	North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge.

Path	3.6.3.1 SMALL BUSINESS ASSESSMENTS & REBATES					
	Quality control activities will include:					
	 Field inspections to confirm installation and eligibility. Transaction surveys to measure customer satisfaction and identify potential eligible measure and process improvements. Trade ally advisory groups and surveys to ensure the process is easy to work with and helpful to trade allies in selling high efficiency equipment. 					
Target Market	The path is targeted to small business custom approximately less than 150,000 therms per y properties are eligible. Likely business types businesses, and business district establishme stores, etc. Customers must be an active Nor	ear. Both own include strip ments, theaters,	ner-occupied nalls, main stro restaurants, o	and rental eet convenience		
Marketing Strategy	The marketing strategy includes provisions for trade allies to drive activity by marketing services to small business customers as part of the trade allies' normal day-to-day business. North Shore Gas will also look at geographic-focused marketing (i.e., business districts within North Shore Gas territory) and industry targeting to increase awareness of the offering. This will involve working directly with established groups such as the City of Chicago Chamber of Commerce, or business associations (e.g., restaurant association, dry cleaners association).					
Eligible	Eligible measures and their incentives may in	clude the follo	wing:			
Eligible Measures	Measure	Per Unit Incer	ntive			
	Custom Rebate	\$1.00 per the	erm			
			Chil Dan Huit	DTA Day Huit		
	Measure	Unit	Std Per Unit	PTA Per Unit		
				Incentive		
			Incentive \$2.25	Incentive \$3.00		
	Boiler ≥88% AFUE, <300MBh	MBH MBH	\$2.25	\$3.00		
		MBH				
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE	MBH MBH	\$2.25 \$2.50	\$3.00 \$3.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls	MBH MBH MBH	\$2.25 \$2.50 \$0.50	\$3.00 \$3.00 \$0.60		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up	МВН МВН МВН	\$2.25 \$2.50 \$0.50 \$0.30	\$3.00 \$3.00 \$0.60 \$0.40		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters	MBH MBH MBH MBH each MBH	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat	MBH MBH MBH MBH each MBH Ib-capacity	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater	MBH MBH MBH MBH each MBH Ib-capacity MBH	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer	MBH MBH MBH MBH each MBH Ib-capacity MBH each	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry	MBH MBH MBH MBH each MBH Ib-capacity MBH each Ib-capacity	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners	MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$25.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small	MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50 \$1.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$25.00 \$1.50		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners	MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$25.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium	MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50 \$1.25	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$2.00 \$1.50 \$1.88		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium Pipe Insulation - HW Large	MBH MBH MBH MBH each MBH Ib-capacity MBH each Ib-capacity ft ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$1.50 \$1.50 \$1.25	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$25.00 \$1.50 \$1.88 \$2.25		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium Pipe Insulation - HW Large Pipe Insulation - Steam - Small	MBH MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft ft ft ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50 \$1.50 \$1.25	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$2.00 \$1.50 \$1.88 \$2.25 \$6.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium Pipe Insulation - HW Large Pipe Insulation - Steam - Small Pipe Insulation - Steam - Medium Pipe Insulation - Steam - Medium Pipe Insulation - Steam - Medium Pipe Insulation - Steam - Large Pipe Insulation - Steam - X-Large	MBH MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft ft ft ft ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50 \$1.50 \$1.50 \$1.50 \$4.00 \$4.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$2.00 \$1.50 \$1.88 \$2.25 \$6.00 \$9.00 \$12.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium Pipe Insulation - HW Large Pipe Insulation - Steam - Small Pipe Insulation - Steam - Medium Pipe Insulation - Steam - Large Pipe Insulation - Steam - Large Pipe Insulation - Steam - X-Large Pipe Insulation - Steam Med Fitting	MBH MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50 \$1.50 \$1.50 \$4.00 \$4.00 \$5.00 \$4.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$2.00 \$1.50 \$1.88 \$2.25 \$6.00 \$9.00 \$12.00 \$12.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium Pipe Insulation - HW Large Pipe Insulation - Steam - Small Pipe Insulation - Steam - Medium Pipe Insulation - Steam - Large Pipe Insulation - Steam - X-Large Pipe Insulation - Steam Med Fitting Pipe Insulation - Steam Med Fitting	MBH MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$1.50 \$1.00 \$1.25 \$1.50 \$4.00 \$6.00 \$8.00 \$15.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$2.00 \$1.50 \$1.88 \$2.25 \$6.00 \$9.00 \$12.00 \$25.00		
	Boiler ≥88% AFUE, <300MBh Boiler ≥88% AFUE, ≥300MBh TE Boiler Reset Controls Boiler Tune Up Condensing Unit Heater DCV - Kitchen Direct Fired Heaters High Speed Washer - Hotel/Hospital/Laundromat Infrared Heater Modulating Commercial Gas Clothes Dryer Ozone Laundry Pipe Insulation - Dry Cleaners Pipe Insulation - HW Small Pipe Insulation - HW Medium Pipe Insulation - HW Large Pipe Insulation - Steam - Small Pipe Insulation - Steam - Medium Pipe Insulation - Steam - Large Pipe Insulation - Steam - Large Pipe Insulation - Steam - X-Large Pipe Insulation - Steam Med Fitting	MBH MBH MBH MBH MBH each MBH lb-capacity MBH each lb-capacity ft	\$2.25 \$2.50 \$0.50 \$0.30 \$2.00 \$750 \$1.00 \$4.00 \$2.50 \$300 \$20.00 \$1.50 \$1.50 \$1.50 \$4.00 \$4.00 \$5.00 \$4.00	\$3.00 \$3.00 \$0.60 \$0.40 \$2.50 \$975 \$1.00 \$5.00 \$3.00 \$25.00 \$2.00 \$1.50 \$1.88 \$2.25 \$6.00 \$9.00 \$12.00 \$12.00		

Path 3.6.3.1 SMALL BUSINESS ASSESSMENTS & REBATES Std Per Unit PTA Per Unit Measure Unit Incentive Incentive Pipe Insulation - Steam Med Valve \$17.00 each \$24.00 Pipe Insulation - Steam Large Valve each \$27.00 \$40.50 Pipe Insulation - Steam X-Large Valve each \$37.00 \$55.50 Pre Rinse Sprayer each \$28.00 \$75.00 Steam Boiler ≥82% AFUE MBH \$2.00 \$2.25 Steam Traps - Dry Cleaner/Industrial each \$100 \$200 Steam Traps - HVAC Repair/Rep - Audit \$100 \$200 each Steam Traps - HVAC Repair/Rep - No Audit \$30.00 \$30.00 each \$10.00 \$15.00 Steam Traps - Test each Thermostat - Programmable each \$25.00 \$50.00 Water Heater - Storage 88% TE ≥75MBh each \$200 \$275 Water Heater 88% TE - Central Plant (Lodging) **MBH** \$1.00 \$2.00 Water Heater ≥88% TE - Laundromat MBH \$1.00 \$2.00 \$1,000 Double Rack Oven each **Energy Star Convection Oven** each \$25 **Energy Star Conveyer Oven** \$500 each **Energy Star Fryer** each \$500 **Energy Star Steamer** each \$200 Heat Recovery Grease Trap Filter each \$500 Infrared Charbroiler each \$500 Infrared Rotisserie Oven each \$500 Infrared Salamander Broiler each \$300 Infrared Upright Broiler each \$1,000 Participation **Targets** PY7 PY8 PY9 **PY10** Direct Install 15 15 15 15 Rebates - Standard/Custom 104 104 102 104 **Total** 119 119 119 117 **Annual Savings** PY7 PY8 PY9 **PY10** Direct Install 7,274 7,274 7,274 7,274 Rebates - Standard/Custom 70,105 70,105 66,241 70,105 Total 77,379 77,379 73,515 77,379 **Program Budget Budget Category** PY7 PY8 PY9 **PY10** Incentives \$41,324 \$41,324 \$38,174 \$41,324 Third-Party Incentives \$6,652 \$6,652 \$6,652 \$6,652 Implementation \$27,607 \$27,607 \$25,690 \$27,607

Business Program 49

\$75,583

\$70,516

\$75,583

\$75,583

TOTAL

Cost-Effectiveness Ratepayer Impact Utility Total Resource Participant Measure Test Cost Test Cost Test Test 1.28 7.58 2.56 2.34
Measure Test Cost Test Cost Test Test
1.28 7.58 2.56 2.34
Levelized Cost per Therm Saved
PY7 PY8 PY9 PY10
\$0.08 \$0.08 \$0.08

Path	3.6.3.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS
Description	The Business Assessments and Rebates/Grants path is designed as a one-stop-shop that allows all business customers to access all offerings based on their needs.
	Direct Install. Health care facility customers will receive direct installation of laminar flow restrictors as well as a high-level assessment that identifies other energy saving opportunities. The intent is to establish an ongoing relationship with a customer by introducing them to quick saving measures and start to discuss major retrofits and other services available.
	Rebates. Rebates will be available for business customers of any size.
	Prescriptive Rebates. Pre-qualified, standardized rebates are available for the most common efficiency upgrades, such as heating systems, steam traps, and pipe insulation. The incentives are based on the size and efficiency of the equipment installed.
	Upstream Prescriptive Rebates. North Shore Gas anticipates offering upstream commercial kitchen equipment incentives. North Shore Gas will continue to explore and develop upstream and mid-stream rebates where effective.
	Custom. Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a \$/first year therm savings basis. Staff will work with customers to identify and quantify savings opportunities for complex projects. New construction incentives are designed to push building efficiency beyond what is required through compliance with building codes, through an integrated, comprehensive, whole-building analysis early in the design phase.
	Gas Optimization Studies. Studies that focus on identifying low-cost or no-cost "actionable" measures for building heating, central steam plant and/or process heating energy optimization. The studies will incorporate limited monitoring and testing as necessary.
	Engineering Studies. Incentives to offset the costs of energy audits or implementation studies. Based on the findings of such studies, customers can select improvements that qualify for prescriptive or custom rebates. Customers will be able to take advantage of cost sharing for implementation studies, investment-grade audits, and process evaluations needed for large custom, capital-intensive projects.
	Staffing Grants. Assist customers to overcome internal operational hurdles to identify, plan, and implement on-site energy efficiency projects.
	Retro-Commissioning. Studies that identify measures and actions to reduce energy usage.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	It is the intent of North Shore Gas to cooperate with ComEd to offer this path. Measures that could benefit both gas and electric energy use may be offered jointly, where possible, and be made transparent to the customer. In addition, the utilities will collaborate in raising awareness of and educating customers on the benefits of energy efficiency.
Dolivory	The path will be offered through a combination of Franklin Energy and vendors.
Delivery Strategy	Direct Install. North Shore Gas will engage staff and/or vendors to conduct a high level assessment of the facility to identify energy improvement opportunities that the building owner or business can implement.
	Rebates. Procediative Rebates are based on approximately 50% of incremental costs. Actual
	Prescriptive Rebates are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures.
	Upstream Prescriptive Rebates will be determined with commercial kitchen suppliers and other potential partners.

Path	3.6.3.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS
	Custom Rebates are based on the lesser of a buy down to a 1 year payback, 50% of project costs, or a \$/therm saved during the first year.
	North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge.
	Gas Optimization Studies. North Shore Gas will engage staff and/or vendors to conduct studies that focus on identifying low-cost or no-cost "actionable" measures for building heating, central steam plant and/or process heating energy optimization. The studies will incorporate limited monitoring and testing as necessary. Customers may receive a study value up to \$15,000 at no charge provided they agree to implement the lesser of \$10,000 or all quick-payback measures identified.
	Engineering Studies. Incentives to offset the costs of energy audits or implementation studies. Based on the findings of such studies, customers can select improvements that qualify for prescriptive or custom rebates.
	Staffing. North Shore Gas will engage staff and/or vendors to provide staffing support, including:
	Embedded Energy Advisor. A dedicated engineer/advisor will work on-site for a fixed number of hours per week and work closely with customer staff to help explore, plan, and implement energy-saving projects. Assistance will include quantifying savings, prioritizing projects, overseeing contractors, and project documentation for rebate applications.
	Strategic Energy Management. Large-account customers will be able to leverage building and energy modeling software to remotely analyze and manage energy use in innovative ways.
	Staffing Grants. Grants of up to \$50,000 to assist in funding new full- or part-time employees, better leverage existing staff, or select a consultant to manage, engineer, or supervise the implementation of natural gas efficiency projects that otherwise would not be implemented due to limited staff time.
	Retro-Commissioning (RCx): Four options are available to serve C&I customers of all sizes.
	 Standard RCx. Facilities ≥400,000 sq. ft. receive a fully- funded study valued at up to \$100,000, with a commitment to spend a minimum amount on identified measures.
	 RCxpress. Facilities 150,000 < 400,000 sq. ft. receive a fully-funded study valued at up to \$25,000, with a commitment to spend a minimum amount on identified measures.
	 Monitoring-based Commissioning (MBCx): Facilities ≥400,000 sq. ft. receive an incentive upon integration of MBCx software, along with an additional incentive based on verified energy savings. RCx Building Tune-Up: Small facilities receive a fully-funded study and implementation of selected improvements at no cost.
	Quality Control Field inspections will be performed on a minimum of 2.5% of installations with
	incentives less than \$10,000 and on all projects with incentives greater than \$10,000.
Target Market	The path is targeted to all C&I customers. Both owner-occupied and leased commercial and industrial buildings under this customer classification are eligible.
Marketing Strategy	The path will market to both end use customers and trade allies. Trade ally support and engagement is a key element to the success of energy efficiency programs. Franklin Energy will establish and educate trade ally working groups who will ultimately champion the path. The path will rely on wholesale and retail trade allies to

Path	3.6.3.2 BUSINESS ASSESSMENTS AND R	EBATES/GRAN	TS
	assist in marketing.		
	Franklin Energy will evaluate the possible us	e of direct mail.	email. case studies.
	technical fact sheets, brochures, training ses		
	collateral materials, and various public relation	ons activities to ra	aise awareness. No
	Shore Gas will also pursue opportunities to c		mote the path with
	ComEd, especially for new construction projection	ects.	
	Eligible measures and their incentives may in	nclude the follow	ing:
Eligible Measures		Per Unit	
lleasures	Measure	Incentive	
	Custom Rebate	\$1.00 per the	rm
	Gas Optimization	\$1.25 per the	rm
	Measure	Unit	Per Unit Incentive
	Boiler ≥88% AFUE, <300MBh	MBH	\$2.25
	Boiler ≥88% AFUE, ≥300MBh TE	MBH	\$2.50
	Boiler Reset Controls	MBH	\$1
	Boiler Tune Up	MBH	\$0.30
	Condensing Unit Heater	MBH	\$2.00
	DCV - Kitchen	each	\$750
	Direct Fired Heaters	МВН	\$1.00
	High Speed Washer - Hotel/Motel/Hospital	lb-capacity	\$4.00
	Infrared Heater	MBH	\$2.50
	Modulating Commercial Gas Clothes Dryer	each	\$300
	Ozone Laundry	lb-capacity	\$20.00
	Pipe Insulation - HW Small	ft	\$1.00
	Pipe Insulation - HW Medium	ft	\$1.25
	Pipe Insulation - HW Large	ft	\$1.50
	Pipe Insulation - Steam - Small	ft	\$4.00
	Pipe Insulation - Steam - Medium	ft	\$6.00
	Pipe Insulation - Steam - Large	ft	\$8.00
	Pipe Insulation - Steam - X-Large	ft	\$15.00
	Pipe Insulation - Steam Med Fitting	each	\$9.00
	Pipe Insulation - Steam Large Fitting	each	\$15.00
	Pipe Insulation - Steam X-Large Fitting	each	\$25.00
	Pipe Insulation - Steam Med Valve	each	\$17.00
	Pipe Insulation - Steam Large Valve	each	\$27.00
	Pipe Insulation - Steam X-Large Valve	each	\$37.00
	Pre Rinse Sprayer	each	\$28.00
	Steam Boiler ≥82% AFUE	МВН	\$2.00
	Steam Traps - Dry Cleaner/Industrial	each	\$100
	Steam Traps - HVAC Repair/Rep - Audit	each	\$100
	Steam Traps - HVAC Repair/Rep - No Audit	each	\$30.00
	Steam Traps - Test	each	\$10.00
	Thermostat - Programmable	each	\$25.00
	Water Heater - Storage 88% TE ≥75MBh	each	\$200
	Double Rack Oven	each	\$1,000
	Energy Star Convection Oven	each	\$25.00

		3.6.3.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS							
		Measure					Unit	Per l	Jnit Incentive
	Energy Star Conveyer	Oven				eac	h		\$500
	Energy Star Fryer					eac	h		\$500
	Energy Star Steamer					eac	h		\$200
	Heat Recovery Grease	e Trap Fil	lter			eac	h		\$500
	Infrared Charbroiler					eac	h		\$500
	Infrared Rotisserie Ov	/en				eac	h		\$500
	Infrared Salamander	Broiler				eac	h		\$300
	Infrared Upright Broil	er				eac	h		\$1,000
	Participation								
argets				PY7	PY8	3	PY9	PY10	
	DirectInstall			2		2	2	2	
	Rebates - Standard/Cu	stom		648	64	18	643	648	
	Gas Optimization			7		7	5	7	
	Retrocommissioning			2		2	2	2	
	Total			659	65	9	652	659	
	Annual Savings			PY7		PY8		PY9	PY10
	DirectInstall			5,887	7	5,8		5,887	5,887
	Rebates - Standard/Cu	stom		521,483		521,4		455,588	521,483
	Gas Optimization			252,042		252,042		180,030	252,042
	Retrocommissioning		-	40,188		40,188		40,188	40,188
	Total			819,600	_	319,6		681,693	819,600
	Program Budget								
	Budget Category	PY	7	PY8		P'	Y9	PY10	
		¢cco	910	\$669,9	10	\$53	1,921	\$669,9	10
	Incentives	\$669	,510						
	Incentives Third-Party Incentives	_		\$236,7		\$20	0,703	\$236,7	03
		_	,703	\$236,70 \$216,40	03 06		0,703 3,518	\$216,4	06
	Third-Party Incentives	\$236	,703 ,406	\$236,7	03 06	\$18	•		06
	Third-Party Incentives Implementation	\$236 \$216	,703 ,406	\$236,70 \$216,40	03 06	\$18	3,518	\$216,4	06
	Third-Party Incentives Implementation TOTAL	\$236 \$216	5,703 5,406 3,019	\$236,70 \$216,40	03 06 019	\$18	3,518 6,142	\$216,4	06
	Third-Party Incentives Implementation TOTAL Cost-Effectiveness Ratepayer Impact	\$236 \$216 \$1,12 3	,703 ,406 3,019 Total	\$236,70 \$216,40 \$1,123,0	03 06)19 Part	\$18: \$91	3,518 6,142	\$216,4	06
	Third-Party Incentives Implementation TOTAL Cost-Effectiveness Ratepayer Impact	\$236 \$216 \$1,12	,703 ,406 3,019 Total Co	\$236,70 \$216,40 \$1,123, 0	03 06 019 Part	\$18 \$91 icipa	3,518 6,142	\$216,4	06
	Third-Party Incentives Implementation TOTAL Cost-Effectiveness Ratepayer Impact Measure Test	\$236 \$216 \$1,12 3 Utility Cost Test 7.05	7,703 ,406 3,019 Total	\$236,70 \$216,40 \$1,123,0 Resource	03 06 019 Part	\$18: \$91 : cicipa	3,518 6,142	\$216,4	06
	Third-Party Incentives Implementation TOTAL Cost-Effectiveness Ratepayer Impact Measure Test 1.27	\$236 \$216 \$1,12 3 Utility Cost Test 7.05	7,703 ,406 3,019 Total	\$236,70 \$216,40 \$1,123,0 Resource sst Test 2.24	03 06 019 Part	\$18: \$91 : cicipa	3,518 6,142	\$216,4	06
	Third-Party Incentives Implementation TOTAL Cost-Effectiveness Ratepayer Impact Measure Test 1.27 Levelized Cost per T	\$236 \$216 \$1,12 Utility Cost Test 7.05	7,703 ,406 3,019 Total Co	\$236,70 \$216,40 \$1,123,0 Resource st Test 2.24	03 06 019 Part	\$18: \$91 : cicipa	3,518 6,142	\$216,4	06

Path	3.6.3.3 LOCAL GOVERNMENT ASSESSMENTS AND REBATES/GRANTS
Description	The Local Government Assessments and Rebates/Grants path is designed as a one- stop-shop that allows all qualifying local government customers to access all offerings based on their needs.
	Direct Install. Customers receive direct installation of low cost energy and water saving measures including low flow showerheads, kitchen and bathroom faucet aerators, pipe insulation and, if applicable, pre-rinse sprayers (at no cost). A high level assessment of the business will be completed while at the site to identify additional energy efficiency improvements the customer can pursue.
	Rebates. Rebates will be available for business customers of any size.
	Prescriptive Rebates. Pre-qualified, standardized rebates are available for the most common efficiency upgrades, such as heating systems, steam traps, and pipe insulation. The incentives are based on the size and efficiency of the equipment installed.
	Upstream Prescriptive Rebates. North Shore Gas anticipates offering upstream commercial kitchen equipment incentives. North Shore Gas will continue to explore and develop upstream and mid-stream rebates where effective.
	Custom. Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a \$/first year therm savings basis. Staff will work with customers to identify and quantify savings opportunities for complex projects. New construction incentives are designed to push building efficiency beyond what is required through compliance with building codes, through an integrated, comprehensive, whole-building analysis early in the design phase.
	Gas Optimization Studies. Studies that focus on identifying low-cost or no-cost "actionable" measures for building heating, central steam plant and/or process heating energy optimization. The studies will incorporate limited monitoring and testing as necessary.
	Engineering Studies. Incentives to offset the costs of energy audits or implementation studies. Based on the findings of such studies, customers can select improvements that qualify for prescriptive or custom rebates. Customers will be able to take advantage of cost sharing for implementation studies, investment-grade audits, and process evaluations needed for large custom, capital-intensive projects.
	Staffing Grants. Assist customers to overcome internal operational hurdles to identify, plan, and implement on-site energy efficiency projects.
	Retro-Commissioning. Studies that identify measures and actions to reduce energy usage.
Duration	January 1, 2018 through December 31, 2021
Utility Collaboration	It is the intent of North Shore Gas to cooperate with ComEd to offer this path. Measures that could benefit both gas and electric energy use may be offered jointly, where possible, and be made transparent to the customer. In addition, the utilities will collaborate in raising awareness of and educating customers on the benefits of energy efficiency.
Delivery	The path will be offered through a combination of Franklin Energy, local experts and vendors.
Strategy	Direct Install. North Shore Gas will engage staff and/or vendors to conduct a high-level assessment of the facility to identify energy improvement opportunities that can be implemented.
	Rebates.
	Prescriptive Rebates. Incentives are provided in the table of eligible measures.
	Upstream Prescriptive Rebates will be determined with commercial kitchen suppliers

Path 3.6.3.3 LOCAL GOVERNMENT ASSESSMENTS AND REBATES/GRANTS and other potential partners. Custom Rebates are based on the lesser of a buy down to a 1 year payback, 50% of project costs, or a \$/therm saved during the first year. North Shore Gas requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. Gas Optimization Studies. North Shore Gas will engage staff and/or vendors to conduct studies that focus on identifying low-cost or no-cost "actionable" measures for building heating, central steam plant and/or process heating energy optimization. The studies will incorporate limited monitoring and testing as necessary. Customers may receive a study value up to \$15,000 at no charge provided they agree to implement the lesser of \$10,000 or all quick-payback measures identified. Engineering Studies. Incentives to offset the costs of energy audits or implementation studies. Based on the findings of such studies, customers can select improvements that qualify for prescriptive or custom rebates. Staffing. North Shore Gas will engage staff and/or vendors to provide staffing support, including: Embedded Energy Advisor. A dedicated engineer/advisor will work on-site for a fixed number of hours per week and work closely with customer staff to help explore, plan, and implement energy-saving projects. Assistance will include quantifying savings, prioritizing projects, overseeing contractors, and project documentation for rebate applications. Strategic Energy Management. Large-account customers will be able to leverage building and energy modeling software to remotely analyze and manage energy use in innovative ways. Staffing Grants. Grants of up to \$50,000 to assist in funding new full- or part-time employees, better leverage existing staff, or select a consultant to manage, engineer, or supervise the implementation of natural gas efficiency projects that otherwise would not be implemented due to limited staff time. Retro-Commissioning (RCx): Four options are available to serve customers of all sizes. Standard RCx. Facilities ≥400,000 sq. ft. receive a fully- funded study valued at up to \$100,000, with a commitment to spend a minimum amount on identified measures. RCxpress. Facilities 150,000 < 400,000 sq. ft. receive a fully-funded study valued at up to \$25,000, with a commitment to spend a minimum amount on identified Monitoring-based Commissioning (MBCx): Facilities ≥400,000 sq. ft. receive an incentive upon integration of MBCx software, along with an additional incentive based on verified energy savings. • RCx Building Tune-Up: Small facilities receive a fully-funded study and implementation of selected improvements at no cost. **Quality Control** Field inspections will be performed on a minimum of 2.5% of installations with incentives less than \$10,000 and on all projects with incentives greater than \$10,000. **Target** The path is targeted to local government, municipal corporations, school districts and Market community college districts. In the event the definition is expanded by the SAG to include public universities and state and federal facilities. North Shore Gas will expand the eligible market as well. Both owner-occupied and leased buildings are eligible.

Path	3.6.3.3 LOCAL GOVERNMEN	T ASSESSMENTS AND REBATES/GRANTS
Marketing Strategy	and engagement is a key elem Franklin Energy will establish a	nd use customers and trade allies. Trade ally support the success of energy efficiency programs. And educate trade ally working groups who will the path will rely on wholesale and retail trade allies to
	technical fact sheets, brochure collateral materials, and variou	ne possible use of direct mail, email, case studies, s, training sessions, point of purchase materials, s public relations activities to raise awareness. North portunities to cooperatively promote the path with astruction projects.
Eligible	Eligible measures and their inc	entives may include the following:
Magazina	Maggura	Day Heit Inconting

Measures

Measure	Per Unit Incentive
Custom Rebate	\$1.50 per therm
Gas Optimization	\$1.25 per therm

Measure	Unit	Per Unit Incentive
Boiler ≥88% AFUE, <300MBh	MBH	\$4.50
Boiler ≥88% AFUE, ≥300MBh TE	MBH	\$5.00
Boiler Reset Controls	MBH	\$1.00
Boiler Tune Up	MBH	\$0.60
Condensing Unit Heater	MBH	\$4.00
DCV - Kitchen	each	\$1,500
Direct Fired Heaters	MBH	\$2.00
High Speed Washer - Hotel/Motel/Hospital	lb-capacity	\$8.00
Infrared Heater	MBH	\$5.00
Modulating Commercial Gas Clothes Dryer	each	\$600
Ozone Laundry	lb-capacity	\$40
Pipe Insulation - HW Small	ft	\$2.00
Pipe Insulation - HW Medium	ft	\$2.50
Pipe Insulation - HW Large	ft	\$3.00
Pipe Insulation - Steam - Small	ft	\$8.00
Pipe Insulation - Steam - Medium	ft	\$12.00
Pipe Insulation - Steam - Large	ft	\$16.00
Pipe Insulation - Steam - X-Large	ft	\$30.00
Pipe Insulation - Steam Med Fitting	each	\$18.00
Pipe Insulation - Steam Large Fitting	each	\$30.00
Pipe Insulation - Steam X-Large Fitting	each	\$50.00
Pipe Insulation - Steam Med Valve	each	\$34.00
Pipe Insulation - Steam Large Valve	each	\$54.00
Pipe Insulation - Steam X-Large Valve	each	\$74.00
Pre Rinse Sprayer	each	\$56.00
Steam Boiler ≥82% AFUE	MBH	\$4.00
Steam Traps - Dry Cleaner/Industrial	each	\$200
Steam Traps - HVAC Repair/Rep - Audit	each	\$200
Steam Traps - HVAC Repair/Rep - No Audit	each	\$60.00
Steam Traps - Test	each	\$20.00

	TAINITIAL A	SSESSI	ИEI	NTS .	AND RE	BATES/G	RANTS
Me	Measure				Jnit	Per Unit I	ncentive
	Thermostat - Programmable				1		\$50.00
Water Heater - Storage	 e 88% TE ≥75ľ	MBh		each	1		\$400
Double Rack Oven				each	1		\$2,000
Energy Star Convection	า Oven			each	1		\$50.00
Energy Star Conveyer 0	Oven			each	1		\$1,000
Energy Star Fryer				each	1		\$1,000
Energy Star Steamer				each			\$400
•	Heat Recovery Grease Trap Filter Infrared Charbroiler						\$1,000
							\$1,000
Infrared Rotisserie Ove				each			\$1,000
Infrared Salamander B				each			\$600
Infrared Upright Broile	:r			each	1		\$2,000
gets Participation							
		PY7	P	8 Y	PY9	PY10	
Direct Install		17		17	17	17	
Rebates - Standard/Cust	tom	691		691	691	691	
Gas Optimization		3		1	1	1	
Retrocommissioning Total	Retrocommissioning			3 712	3 712	712	
Annual Savings		PY7 6,9		P	Y8	PY9	PY10
	DirectInstall				6,963	6,963	6,963
Rebates - Standard/Cust	tom	206,449				206,449	206,449
Gas Optimization		18,0			18,003	18,003	18,003
Retrocommissioning Total		30,143 261,55 7				30,141 261,557	30,141 261,557
		201,3	<i>31</i>		71,337	201,337	201,337
Program Budget Budget Category	PY7	PY8			PY9	PY10	
Incentives	\$161,348						348
Third-Party Incentives	\$73,503			_	\$73,503		
Implementation	\$179,253	3 \$179,253 \$179,253		253 \$179,2			
TOTAL	\$414,104			\$414,1	L 0 4		
Cost Effectiveness							
Cost-Effectiveness		Resource	P	articiț			
Ratepayer Impact U	-						
Ratepayer Impact U	ost Test Co	st Test	_	Tes			
Ratepayer Impact U Measure Test Co 1.14	ost Test Co 4.32			3.46			
Ratepayer Impact Measure Test Co 1.14 Levelized Cost per Th	erm Saved	ost Test 2.75					
Ratepayer Impact Measure Test Co 1.14 Levelized Cost per Th	ost Test Co 4.32 erm Saved PY9 PY	st Test					