



national fuel

November 15, 2011

Hon. Jaclyn A. Brillig
Secretary
NYS Public Service Commission
Three Empire State Plaza
Albany, NY 12223

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

Dear Secretary Brillig:

Enclosed is the Fifteenth Quarterly Program Status Report for National Fuel Gas Distribution Corporation's Conservation Incentive Program. This Report is submitted in compliance with the timetable provided in the implementation plan filed with the Commission on January 21, 2011.

If questions you have questions relating to this report, please contact the undersigned at (716) 857-7805, Robert Eck at (716) 857-7711 or Michael Reville at (716) 857-7313.

Respectfully submitted,

Eric H. Meinel
Gen. Manager, Rates & Regulatory Affairs

Attachments

cc: John Favreau, PSC (*via email*)
David A. Munro, NYSERDA (*via email*)

CONSERVATION INCENTIVE PROGRAM
Quarterly Program Status Report
Program Results through September 30, 2011
Case 07-G-0141
Submitted to the New York State Department of Public Service
November 15, 2011

National Fuel Gas Distribution Corporation
6363 Main Street
Williamsville, NY 14221

TABLE OF CONTENTS

I.	Introduction	1
A.	Case History	1
B.	Report Overview	2
II.	Program Goal	2
III.	CIP General Description	3
IV.	M&V Plans	4
A.	General Description of M&V Plans	4
B.	Status of Data Development for M&V Plan	7
1.	Customer Impact Data from Company Developed Databases	7
2.	M&V Information Consistent with the Requirements Being Developed Through the Statewide Energy Efficiency Initiative	8
3.	M&V Information Consistent with the Energy Smart SM Evaluation	9
4.	Sensitivity Analysis on Key Variables	9
V.	Summary of Programs	10
A.	Low Income Usage Reduction Program (“LIURP”)	10
1.	Description	10
2.	Goals	10
3.	Program Information	10
a.	Eligibility	10
b.	Administrative Tasks Related to Start-Up	10
c.	Ongoing Administrative Tasks	11
d.	Process	12
4.	Reporting	15
a.	Internal	15
b.	External	16
5.	M&V Analysis	16
B.	Rebate Program – Residential	17
1.	Description	17
2.	Goals	17
3.	Program Information	17
4.	Reporting	19
a.	Internal	19
b.	External	20
5.	M&V Analysis	20
C.	Rebate Program – Small Non-Residential	22

1.	Description	22
2.	Goals	22
3.	Program Information	22
a.	Administrative Tasks Related to Start-Up	22
b.	Ongoing Administrative Tasks	23
4.	Process	23
5.	Reporting	24
a.	Internal	24
b.	External	26
6.	M&V Analysis	26
D.	General Customer Outreach and Energy Efficiency Education	27
1.	Description	27
2.	Goal	27
3.	Program Information	28
4.	Reporting	30
5.	M&V Analysis	31
VI.	Conclusions	32

Appendices

CONSERVATION INCENTIVE PROGRAM
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I. Introduction

A. Case History

On September 20, 2007 the Commission issued its Order Adopting Conservation Incentive Program (“CIP Order”)¹ for National Fuel Gas Distribution Corporation (“Distribution” or “Company”). The CIP Order required, among other things, that the Company submit its timetable for the implementation of the 2007-08 Conservation Incentive Program (“CIP”) by October 1, 2007, (CIP Order, Page 13, Ordering paragraph 2). Distribution submitted a timetable on October 1, 2007. Included in the timetable was an entry for the submission of an initial report to the New York State Department of Public Service including a program description and measurement and verification (“M&V”) plan by November 30, 2007, (“initial report”), as well as quarterly status reports beginning May 30, 2008.

On October 19, 2009 the Commission issued its Order Approving the Continuation of National Fuel Gas Distribution Corporation’s Conservation Incentive Program With Modifications (“2009 CIP Order”).² The 2009 CIP Order, among other things, modified certain aspects of the Company’s CIP.

On November 22, 2010 the Commission issued its Order Approving the Continuation of National Fuel Gas Distribution Corporation’s Conservation Incentive Program with Modifications (“2010 CIP Order”).³ The Company filed a reporting

¹ Case 07-G-0141 - Proceeding on the Motion of the Commission as to the Rates, Rules, and Regulations of National Fuel Gas Distribution Corporation for Gas Service, Order Adopting Conservation Incentive Program, issued and effective September 20, 2007.

² Case 07-G-0141 - Proceeding on the Motion of the Commission as to the Rates, Rules, and Regulations of National Fuel Gas Distribution Corporation for Gas Service, Order Approving The Continuation of National Fuel Gas Distribution Corporation’s Conservation Incentive Program With Modifications, issued and effective October 19, 2009.

³ Case 07-G-0141 - Proceeding on the Motion of the Commission as to the Rates, Rules, and Regulations of National Fuel Gas Distribution Corporation for Gas Service, Order Approving the

timeline in its CIP implementation plan submitted to the Commission on January 21, 2011. The report is filed consistent with that timeline.

B. Report Overview

This report summarizes the status of the Company's CIP as of September 30, 2011. Included in this report is an update of the status of the M&V plan. As explained in the initial report and this November 2011 quarterly report, the Company anticipates that the M&V plan will be modified to incorporate suggestions from Staff and other parties. Also, it is anticipated that additional modifications will be made to incorporate insights being developed in the currently ongoing Commission investigation into development of a statewide energy efficiency initiative.⁴

A number of the Company's CIP initiatives are being administered by New York State Energy Research and Development Authority ("NYSERDA") through that authority's existing programs.

II. Program Goal

Distribution has developed the CIP to foster more efficient use of natural gas on its system. The CIP Order recognized that "The CIP calls for the more efficient use of natural gas resources and it is consistent with the State's policy to encourage energy conservation." (CIP Order, p. 2). Distribution designed its CIP in conjunction with its proposed revenue decoupling mechanism ("RDM"). The Company's RDM is consistent with the guidelines established by the Commission for implementation of RDMs.⁵

A major challenge in the design of energy efficiency programs for Western New York is to promote the efficient use of energy in such a manner that it can be used as a strength when encouraging economic development in the region, among other things.

Further, the benefits of natural gas, both on an economic and environmental basis, should encourage the expansion of access to natural gas supplies to homes and businesses in Western New York.

Continuation of National Fuel Gas Distribution Corporation's Conservation Incentive Program with Modifications, issued and effective November 22, 2010.

⁴ Case 07-M-0548 - Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Order Instituting Processing, issued and effective May 16, 2007.

⁵ Cases 03-E-0640 and 06-G-0746, RDM Proceeding, Order Requiring Proposals for Revenue Decoupling Mechanisms (issued and effective April 20, 2007).

III. CIP General Description

The CIP proposed by Distribution and approved by the Commission has three major components: (1) appliance rebates, (2) Low Income Usage Reduction Program (“LIURP”), and (3) general energy efficiency outreach initiative. Each of these programs and their subcomponents will be further described in detail later in this report. Included in those descriptions will be a planned M&V plan for each initiative.

The information to be provided for each program will be organized as follows:

- 1) Program Name
- 2) Program Description
- 3) General Program Goals
- 4) Program Information
- 5) Program Reporting
 - a. Internal
 - b. External
- 6) M&V Analysis
 - a. General Description of Method Utilized for Determining Cost and Benefit
Data Summary including:
 - i. Cost Measurement
 - ii. Calculation of Usage Savings over Life of Efficiency Measure
 - iii. Natural Gas Supply (“NGS”) Costs
 - iv. Discount Rate Utilized for Discounting Future Benefits
 - v. Cost Escalator utilized for NGS Costs
 - vi. Western New York Benefit Variables
 - vii. Societal Benefit Variables
 - b. Savings Calculation Approach
 - i. Account Specific
 - ii. Sampling
 - iii. Base Line
 - c. Net Impact Evaluation
 - i. Free Ridership
 - ii. Spillover
 - iii. Snapback
 - d. Avoided Emissions Calculation

It should be recognized that Distribution envisions the CIP as an evolutionary program. That is, as knowledge is gained as to the effectiveness of various components of the program, it is likely that modifications will be made to individual components so that the overall benefits of the CIP are maximized. It is anticipated that future quarterly reports will identify successes and potential improvements in program design. Those quarterly reports may also include recommended changes to effectively meet the overall goal of the CIP.

IV. M&V Plans

A. General Description of M&V Plans

This report provides a preliminary estimate of the cost and benefits of the Company's CIP to date. This report reflects fifteen quarters of operation of the Company's CIP. This report also will present a pre and post equipment installation consumption analysis for residential customer rebates, currently inclusive of installations through June 2010.

The M&V plan includes a number of cost benefit analyses including: (1) Total Resource Cost Test ("TRC"), (2) Total Resource Cost Test – Western New York ("TRC-WNY"), and (3) Societal Test. The program results are provided (1) in total, (2) in summary of various program "portfolios," and (3) on an individual program basis. The table below summarizes program results to date in total and for the various program portfolios. Individual program results will be summarized in the individual program sections presented later in this report. Appendix E provides the detailed M&V program results.

	Total	Residential	Non-Residential	Outreach
Base				
TRC	1.76	1.61	1.81	4.46
TRC-WNY	2.64	2.39	2.69	7.02
Societal Test	2.82	2.55	2.87	7.47
Adjusted				
TRC	1.70	1.55	1.76	4.01
TRC-WNY	2.54	2.31	2.62	6.36
Societal Test	2.71	2.46	2.79	6.76

The measurement of the cost and benefits of energy efficiency programs proceeds along a continuum of complexity. The TRC is perhaps the simplest to understand and implement while the Societal Test can be the most complex. Various additional measurements are added to the TRC leading up to a complete Societal Test. The three cost benefit analyses will be presented for each component of the CIP program.

The TRC utilized in this report will measure the cost expended under the program by the Company and customers for each initiative to the overall savings in customer costs. The NGS costs exclude the delivery and minimum charge rates billed to customers since in the long run these costs are not avoided.

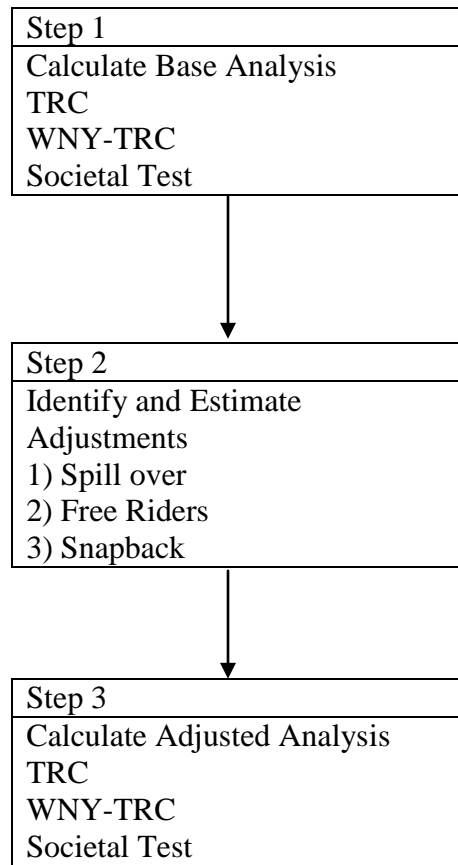
The TRC-WNY attempts to quantify the specific regional benefits derived from the specific CIP initiatives. For example, the LIURP will reduce the consumption of natural gas by low-income customers. That will be achieved by improving the energy efficiency of low-income customer homes. The cost of that program will largely consist

of the efforts of local contractors in installing energy efficiency applications. The payments for energy efficiency improvements to local contractors effectively utilizes energy dollars that otherwise would have left the service territory with payments to local contractors that will largely stay in the service territory. The overall net savings of customers will also have a beneficial ripple effect on the WNY economy. The calculation of WNY expenditure multipliers and WNY income multipliers will be explained in Appendix F. The TRC-WNY is an attempt to quantify these benefits.

The Societal Test takes the TRC-WNY one step further by measuring the environmental benefits of the individual CIP initiatives and other societal costs and benefits that may result from these energy efficiency initiatives. The Company developed an estimate of the societal benefits associated with reduced CO² emissions. The societal benefit of \$15 per ton CO² reduction was provided by the Commission in Appendix 3, page 2 of its June 23, 2008 Order in Case 07-M-0548.

The Company employed three general steps in its M&V analysis. The first step was the determination of a base analysis. The base analysis would utilize specific and discrete program results associated with changes in energy efficiency behavior of participating customers.

Figure 1 – Summary of the General Steps Employed in the M&V Analysis



The Company employed a deemed savings approach for determining savings under the program to date. A TRC test has also been calculated for the residential rebate program and LIURP based on a customer pre and post equipment installation consumption analysis. A summary of this information will be presented in the residential rebate section of this report.

Deemed savings apply stipulated values of savings for installed or promoted energy efficiency initiatives. Deemed savings calculations apply accepted savings amounts for an application or initiative to determine the amount of actual energy savings. A more detailed description of the deemed savings approach utilized in this preliminary estimate of cost and benefits will be provided in the description of individual programs. This report reflects deemed savings estimates based on information included in the October 15, 2010 Technical Market Manual.⁶ This is the third report filed by the Company that utilizes such deemed savings estimates. Past reports utilized the deemed savings estimates utilized in the Company's last base rate case where the CIP was first approved by the Commission. The pre and post equipment installation analysis identified changes in annual weather normalized consumption for residential customers installing energy efficient appliances under the CIP rebate initiative and LIURP. Appendix I provides a summary of the pre and post equipment installation consumption analysis.

The Company utilized a projection of the average natural gas supply costs for the upcoming year of approximately \$9.00 per Mcf. As has been demonstrated during the recent past, the market prices of natural gas can be extremely volatile. Long range projections of natural gas prices can be dramatically off base. The \$9.00 per Mcf price of natural gas utilized in this study is equal to the trend of natural gas prices experienced by customers from October 2003 through October 2011. The price trend has been updated through October 2011 and is presented on the graph included in the last page of Appendix E. As can be seen from this graph, recent declines in prices have dropped the historical trend to approximately \$9.00 per Mcf. In previous quarterly reports the Company has utilized a \$12.00, \$11.00 and \$10.00 per Mcf price variable included in the base analysis of Appendix E. The Company has updated the price variable to \$9.00 per Mcf since this price reduction has occurred consistently over the recent past. Lines 246 through 257 of Appendix E provide a sensitivity analysis for the price variable. The Company will continue to monitor price changes and update the price variable if circumstances warrant in future reports. The potential volatility of key variables utilized in the M&V analysis highlights the importance of sensitivity analysis to gauge the robustness of program results over a reasonable range of values for key variables in the analysis.

Step 2 would identify and estimate adjustments to the base analysis. These adjustments would include estimates of: (1) spillover, (2) free ridership, and (3) snapback. Spillover results when there are additional customer behavioral changes that produce a positive increase in energy efficiency on the part of the customer. For

⁶ New York Standard Approach for Estimating Savings from Energy Efficiency Programs, Residential, Multi-Family and Commercial/Industrial Measures, October 15, 2010. Prepared for New York Department of Public Service by TecMarket Works ("Standard Technical Manual").

example, under the residential rebate program, the Company will inform customers of NYSERDA's whole house energy audit initiative. To the extent that customers receiving a rebate under the Company's CIP become aware of NYSERDA's whole house energy audits, and such audits result in increased savings, this would be considered a spillover benefit of the Company's CIP. Free riders are customers that would have implemented the program measure or practice in the absence of the CIP. Snapback occurs when customers actually increase their energy consumption due to reductions in the cost of energy. For example, increases in consumption can result when prices decline due to energy saving initiatives. In the pre and post equipment installation consumption analysis the snapback adjustment is set to zero because any snapback effect would be included in post equipment installation consumption.

The third step will add the results of the base analysis from Step 1 to the estimated adjustments in Step 2, to provide the final analysis of program results.

The Company believes that the measurement and evaluation analysis will evolve as more information is developed over the years. The Company will not only attempt to identify unique measurement issues associated with its programs, it will also strive to include pertinent information and best practices identified in other energy efficiency initiatives, including: (1) the New York Energy Efficiency Proceeding (Case 07-M-0548), (2) the National Action Plan for Energy Efficiency ("NAPEE"), (3) the North American Energy Standards Board ("NAESB"), (4) the National Association of Regulatory Commissioners ("NARUC"), and (5) other state initiatives.

B. Status of Data Development for M&V Plan

The Company has developed a preliminary report based on the program results to date. The Company has developed preliminary M&V results using four broad categories of data: (1) customer specific impact data from Company developed data bases, (2) M&V information that it believes is consistent with the requirements being developed through the statewide energy efficiency initiative (Case 07-M-0548), (3) M&V information consistent with that utilized in the New York Energy \$martSM Program, Evaluation and Status Report, Year Ending December 31, 2007, Final Report, March 2008 ("Energy \$martSM evaluation"), and (4) a sensitivity analysis on key variables. A brief description of each of these four broad categories of information follows.

1. Customer Impact Data from Company Developed Databases

The Company has developed a "before and after" consumption analyses for individual residential customers that are participating in the Company's rebate programs. A summary of the results for the rebate program is provided in the residential rebate section of this report. In this report the Company has also continued to provide deemed savings values as well as annual customer participation and cost information experienced to date to develop a preliminary estimate of the costs and benefits of the program.

The Company is also tracking the changes in consumption for the Company’s service classifications subject to the RDM approved by the Commission in the Company’s last base rate case. This information is summarized in the table below.⁷

Summary of Revenue Decoupling Usage per Account Information (Mcf/Account)		
	SC 1	SC 3 *
Case 07-G-0141 Imputed RDM Usage per Account	106.910	414.31
Consumption at Start of CIP Program 12 ME 12/2007	107.837	404.17
Consumption 12 ME 9/2011	103.500	407.94
* SC 3 actual data adjusted for actual TC 1.1 and TC 2.0 migrations included in latest RDM filing.		

2. M&V Information Consistent with the Requirements Being Developed Through the Statewide Energy Efficiency Initiative

On June 23, 2008, the Commission issued its Order Establishing Energy Efficiency Portfolio Standard and Approving Programs (“EEPS Program Order”), in Case 07-M-0548. On August 7, 2008, Staff issued Evaluation Guidelines for incorporation into gas energy efficiency programs as required by the EEPS Program Order. TecMarket Works has prepared for staff the New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs dated March 25, 2009. On January 4, 2010 the Commission issued its Order Approving Certain Commercial and Industrial; Residential; and Low-Income Residential Customer Energy Efficiency Programs With Modifications. Included in that January 4, 2010 Order was reference to an updated New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs, Single Family Residential Measures, dated March 16, 2009. On October 18, 2010 the Commission issued its Order Approving Consolidation and Revision of Technical Manuals in Case 07-M-0548 (“October 2010 Technical Manual Order”). The October 2010 Technical Manual Order, among other things, approved effective January 1, 2011, the “New York Standard Approach for Estimating Energy Savings – Residential, Multi-family and Commercial/Industrial Measures.” The Company has incorporated the updated Technical Manual deemed savings and appliance life values in this report.

The table below provides estimated deemed savings from the updated October 2010 Standard Technical Manual for the Company’s residential rebate programs. The table provides summaries of deemed savings from the October 2010 Technical Manual,

⁷ The information presented in this table is normalized for adjustments to service classification consumption for the “best rate” requirement in the Company’s tariff. The “best rate” requirement is a statutory requirement that certain accounts (i.e., religious and veteran organizations) be placed in the service classification that would provide them with the lowest (“best”) annual bill. In order to effectuate this provision, the Company annually reviews the bills for qualifying accounts and adjusts their service classifications as needed. In the Company’s last rate case, a rate design change was effectuated such that this year’s “best rate” review resulted in a significant migration of accounts. The table above eliminates the effect of this migration in order to provide a more consistent “before and after” analysis of consumption changes.

deemed savings based on the savings estimates included in the Company’s last base rate case (“NFGDC Deemed” savings estimates), savings calculated through the Company’s pre-post consumption analysis, and pre and post consumption results using the Princeton Scorekeeping Method⁸ (“PRISM”). Also included in the table are the estimated appliance lives presented in the Company’s last base rate case and appliance measure life estimates included in the latest TecMarket Standard Technical Manual.

Summary of Residential Rebate Savings Estimates						
	Heating Systems			Thermostats	Hot Water Systems	
	Forced Air Furnace	Water Boilers	Steam Boilers		Tank	Tankless
NFGDC Deemed (Dth) ⁹	23.30	19.80	19.00	2.50	5.60	11.70
NFGDC Appliance Life (Years)	17	17	17	17	14	14
October 2010 Technical Manual (Dth) ¹⁰	18.22	21.37	19.04	7.83	3.01	7.04
Tec Market Manual Appliance Life (Years)	20	25	25	11	---	20
NFG Pre Post Analysis (Dth)	14.30			5.90	4.30	7.70
PRISM	13.20			NA		

3. M&V Information Consistent with the Energy \$martSM Evaluation

The Energy \$martSM evaluation includes an analysis of macroeconomic impacts. Consistent with the Energy \$martSM evaluation, the Company has utilized IMPLAN Pro® Version 2.0 to develop macroeconomic multipliers for its service territory. The development of these multipliers is provided in Appendix F. Also included in this evaluation is a measurement of environmental benefits. As mentioned previously the Company utilized Commission provided CO² cost per ton information and AGA lbs CO² per Mmbtu of natural gas in determining societal cost savings from the CIP.

4. Sensitivity Analysis on Key Variables

As mentioned previously, the potential volatility of key variables utilized in the M&V analysis highlights the importance of sensitivity analysis to gauge the robustness of program results over a reasonable range of values for key variables in the analysis. Pages 13 through 19 of Appendix E provide a sensitivity analysis for key variables included in the M&V analysis.

⁸ Appendix I provides greater detail on the PRISM method.

⁹ Based on deemed savings provided in the Company’s last base rate case.

¹⁰ Based on TecMarket’s Standard Technical Manual formulas and formula variable values for the Company’s service territory.

V. Summary of Programs

A. Low Income Usage Reduction Program (“LIURP”)

1. Description

LIURP is a weatherization program for low-income customers. Participants receive a heating system check, an energy audit, installation of weatherization, infiltration reduction, natural gas usage reduction measures and consumer education. The program design is consistent with, and is being administered as part of, NYSERDA’s EmPower New YorkSM (“EmPower) program, and contractors will follow procedures and guidelines developed for that program. Households receiving gas efficiency services paid for by Distribution will be evaluated for electric reduction measures to be paid for by NYSERDA with System Benefits Charge (“SBC”) funds.

2. Goals

Conserve energy, reduce residential energy bills, and improve the health, safety, and comfort levels for participating households. Also reduce the incidence and risk of pay delinquencies and the costs associated with uncollectible accounts, late payment collections, and termination of service expenses. Measures installed will be cost effective and pay for themselves through energy savings in a specified time frame.

3. Program Information

a. Eligibility

Customers meeting the following criteria will be eligible to participate in the Company’s LIURP:

- Preferred status to participants in Low Income Customer Affordability Assistance Program (“LICAAP”).
- Income less than or equal to 60% New York State median income (HEAP eligible).
- Active account and residency in the premises for at least one year prior to weatherization.
- High consumption - minimum of 132 Mcf (start with 180 – 200+ Mcf or thousand cubic feet) per year.
- Owners and tenants eligible.
- Must be a single-family dwelling or two units if each has its own meter and both meet eligibility requirements.

b. Administrative Tasks Related to Start-Up

- NYSERDA negotiated and modified existing EmPower contracts, including budgets and statements of work with current Program Implementer,

Honeywell International (“Honeywell”), and current Quality Assurance (“QA”) Contractor, CSG Services, to include activities related to LIURP.

- NYSERDA modified current EmPower Contractor and Vendor Agreements for use in LIURP. NYSERDA procured contracts from area contractors and vendors, is monitoring contractor eligibility and has established a payment system for participating contractors.
- NYSERDA has modified the online tracking system, CRIS, the EmPower software tool, EmPCalc, and the online Contractor Portal to accommodate changes required for the inclusion of LIURP in the EmPower system.
- NYSERDA has modified current EmPower forms and integrated Distribution forms to accommodate LIURP.

c. Ongoing Administrative Tasks

- NYSERDA will reassess and enhance program procedures on an ongoing basis, ensuring that practices are consistent with standards of the Building Performance Institute (“BPI”) and best practices as followed by contractors participating in EmPower. Forms, guidelines, software, and other materials will be modified as needed. NYSERDA program staff will consult with Counsel and Contract Management as needed to ensure that the program is implemented correctly.
- NYSERDA will monitor program progress and expenditure levels to ensure that program objectives are met within budget allocations. NYSERDA will conduct weekly meetings with the Program Implementer, and maintain daily contact as needed, to ensure that the program is progressing as required.
- NYSERDA will conduct weekly and monthly meetings with the QA Contractor, and maintain daily contact as needed, to ensure that QA procedures are being followed in accordance with the contract, and that QA issues are being resolved.
- NYSERDA and NYSERDA Program Implementer will meet with contractors on a regular basis, both on-site and by teleconference, to ensure that contractors understand and are following program procedures, and to elicit feedback regarding the program.
- NYSERDA will conduct an annual review of pricing to ensure that fees are appropriate, and provide financial support to the New York State Weatherization Directors Association for their bulk purchase bidding procedure. NYSERDA will ensure that appliance pricing is consistent with this bid.
- NYSERDA will conduct periodic reviews of the database to ensure quality of data entry.
- NYSERDA will develop and process incentives for contractors who participate in the program and become BPI accredited. These incentives will consist of 75% reimbursement of BPI contractor fees for training, accreditation and quality assurance.

- NYSERDA will collaborate with the Weatherization Assistance Program to ensure consistency between programs and to maximize opportunities for collaboration, thereby allowing for enhanced work scopes.
- NYSERDA will modify energy efficiency and financial management workshops currently provided in Distribution service territory to include information related to Distribution's low income programs.
- At Distribution's request, NYSERDA shall permit Company personnel to monitor and participate in these administrative tasks.
- NYSERDA will use its best efforts to accommodate an interface platform with Distribution's customer information systems to assure the proper transfer of customer information necessary to perform the obligations hereunder.

d. Process

- Distribution generated referrals from:
 - LICAAP
 - HEAP status/consumption report
 - CAC/Outside Agencies/Other
- Distribution screens for:
 - 12-month consumption history. Must be more than 132 Mcf (Ideally, 180-200+ Mcf initially).
- NYSERDA Program Implementer Screen for eligibility:
 - NYSERDA Program Implementer is sending a cover letter from Distribution with a LIURP/EmPower application to each potential participant. A second application will be sent if the first is not returned within a reasonable time frame.
 - Upon receipt of completed application NYSERDA Program Implementer will examine potential for natural gas energy efficiency services funded through Distribution, and determine eligibility for electric reduction services funded through the SBC and available to low-income electricity customers of National Grid and New York State Electric & Gas Corporation.
 - If the customer is a tenant, NYSERDA Program Implementer will send a letter (on Distribution letterhead) to landlord outlining requirements and soliciting landlord participation. Upon receipt of satisfactory landlord agreement, the customer may be accepted for energy services.
 - If the customer resides in a multi-family home (three units or greater), the customer will be ineligible for gas efficiency measures.
- If not eligible, NYSERDA Program Implementer will:
 - Send a "no further services" letter to the customer (printed on Distribution letterhead).

- If referral was from Distribution or an outside agency, inform referring office/agency reason(s) why customer not eligible.
- Do nothing else with account.
- If above criteria met for eligibility, NYSERDA Program Implementer performs the following:
 - Assigns the customer to a participating contractor. Assignments will be made on the basis of current backlog, contractor availability, and past performance.
 - Sends a letter, on Distribution letterhead, to the customer informing them of their acceptance and providing contact information for the assigned contractor.
- When the customer is eligible for weatherization, NYSERDA Program Implementer will:
 - Enter relevant customer data into the EmPower database, including county designations and other information required by Distribution.
 - Enter weatherization-approved status.
 - System to accept periodic information verifying that the customer is still eligible and that service has not been shut off for non-payment, no pending close orders, no active shut off notices, and account is still active. Until automated, Honeywell will need to accept e-mail notifying an account is no longer eligible.
- Once work is in progress:
 - Distribution has access to the EmPower database. Distribution has access to screens/reports to identify, among other things, placed jobs that have yet to be picked up by contractors and the status of any placed jobs. Distribution has the ability to retrieve customer energy services record and to obtain an electronic report of jobs with information required by Distribution, such as first name, last name, address, city, state, postal code, contractor, home phone number, account number, meter number, mailing address, mailing city, mailing zip, and sent to contractor date.
 - NYSERDA Program Implementer is administering customer interactions/document procurements (letters sent to Distribution's customers on Distribution letterhead), including:
 - Customer Acceptance Letter
 - CIP/EmPower Audit Forms
 - Landlord/Tenant Agreements
 - Distribution LIURP Eligibility Affidavit/Information Waiver
 - Distribution Work Proposal Agreement
 - Customer Agreement
 - Distribution Safety Check List
 - Certificate of Completion NYSERDA Program Implementer

- Contractor duties:
 - Within two weeks of receiving job, contractor calls customer to set up initial appointment.
 - Contractor goes to property and performs a comprehensive home assessment, including:
 - Heating system inspection and combustion efficiency test.
 - Blower door test for air leakage.
 - Inspection and measurement for insulation.
 - Health and safety checks, such as ambient CO testing and gas leak checks.
 - Energy education.
 - Instrumented audit and documentation on EmPower forms.
 - Discussion of work scope with appropriate household member.
 - If household is eligible for SBC-funded measures, installation of minor electric reduction measures, such as compact fluorescent light bulbs and evaluation of electric appliances.
 - If furnace problems are identified, contractor follows appropriate emergency and referral procedures outlined in Section 5 of the EmPower Guidelines and Procedures Manual.
 - If issues or problems are identified which preclude successful installation of measures, such as severe structural damage or serious code violations related to the work, contractor will notify the EmPower Program Implementer and further work will be cancelled until conditions are corrected.
 - NYSERDA Program Implementer will send letter (on Distribution letterhead) to customers explaining why work was cancelled and offering a timeline by which work may be resumed if conditions are corrected.
 - Contractor develops work scopes and proceeds with work according to EmPower Guidelines and Procedures Manual.
 - If customer does not respond to contractor calls or letters, contractor advises NYSERDA Program Implementer. (Contractor may be reimbursed for services rendered such as customer education, etc. despite the weatherization job not being completed. Reason why job may not have been completed could include customer not getting back to contractor, etc.).
 - Once a job is completed, contractor sends all completed forms and invoice to the Program Implementer for processing.
 - Jobs to be completed within 60 days from referral.

- Invoice processing:
 - Invoices submitted must follow Invoicing Requirements listed on Section 15.3 of the EmPower Guidelines and Procedures Manual.
 - Honeywell reviews all forms and verifies invoice for accuracy. (Use a standard invoice for all contractors).

- If any discrepancies found with invoice, NYSERDA Program Implementer contacts contractor.
 - If any forms not returned or incomplete, NYSERDA Program Implementer contacts the contractor.
 - Honeywell provides the third-party QA Contractor with information for QA inspections.
 - If the invoice is ok, NYSERDA Program Implementer recommends approval of the invoice, enters the final approved costs into the CRIS database, and locks the costs in place.
 - NYSERDA approves and processes contractor and vendor invoices, arranges payment, and resolves payment issues.
 - NYSERDA tracks program expenditures and maintains payment records. Accounts payable forms and invoices maintained for six years.
- Job completion processing:
 - NYSERDA Program Implementer maintains a file of the following household data:
 - Customer application.
 - Energy usage.
 - Audit forms and work scope write-up.
 - Certificate of Completion.
 - Required permissions.
 - NYSERDA QA Contractor (currently CSG Services) will perform independent third-party QA field inspections on approximately 20% of completed jobs and phone QA interviews on an additional 15% of completed jobs. QA will be completed within one month of completion of work.

4. Reporting

a. Internal

As of September 30, 2011, a total of 35,007 customers have been referred to the contractor for LIURP services. Of these, 27,511 have been sent a letter/application, and 7,386 applications have been returned. This has resulted in 3,959 customers referred for services, 550 applications on hold and 2,959 customers deemed ineligible. Of the 3,331 currently active program participants, 2,619 jobs have been completed, with 362 jobs in process and another 350 energy audits in process. The 2,619 completed jobs consisted of insulation measures for 1,985 customers, air sealing measures for 2,080 customers, heating system repairs/replacements for 1,211 customers and low flow showerheads for 621 customers. The total cost of all the measures to date is \$8,627,445, with an average cost per measure of \$3,294.

Refer to Appendix A of this report for more detailed program summary information.

b. External

As of September 30, 2011, the Company estimates that the 2,619 completed conservation measure jobs will result in 106,042 Mcf of annual energy savings, which equates to \$1,286,680 annually in energy bill savings.

The Company has developed an analysis of the changes in LIURP customer consumption characteristics after the installation of energy efficiency applications at the customer’s household. Appendix I provides a summary of this analysis.

5. M&V Analysis

Appendix E, pages 7 through 9, Column K, provide the preliminary M&V results for the LIURP program.

The Table below summarizes a number of results included in Appendix E.

LIURP M&V Summary Based on Deemed Savings Analysis	
TRC Base Analysis	1.23
Base Societal Test w/WNY Benefits	1.92
TRC Adjusted	1.23
Adjusted Societal Test w/WNY Benefits	1.92

The Mcf saved per participant, Row 20, on Appendix E, is the deemed LIURP program savings based on average participant program savings as reported in Appendix A. Previous reports¹¹ based deemed savings on savings assumptions assumed when the CIP program was initially established in the Company’s last base rate case. In developing the adjusted analysis no free ridership is assumed since it is unlikely that low-income customers would have sufficient resources to make the energy efficiency improvements without the CIP initiatives. The “Snapback” assumption included in previous quarterly reports was removed in this report consistent with the October 2010 Technical Manual.

Appendix E, pages 10 through 12, Column U, provides the M&V results based on pre and post installation energy efficiency improvement savings for residential customers receiving LIURP services.

LIURP M&V Summary Based on Pre and Post Savings Analysis	
TRC Base Analysis	0.72
Base Societal Test w/WNY Benefits	1.12
TRC Adjusted	0.72
Adjusted Societal Test w/WNY Benefits	1.12

While the pre and post cost benefit analysis provides results that are less than those presented under the deemed savings analysis, the overall benefits of the residential

¹¹ Reports through December 31, 2010.

rebate programs still exceeds the costs. As explained in Appendix I, the pre and post analysis utilized twenty-eight months of data. When analyzing the pre-post savings results for the LIURP program consideration must also be given to the relatively slower startup time needed for this program. The slower start-up for the LIURP program resulted in fewer accounts receiving services in the early months compared to the later months. Also after analysis of early month results, the Company and NYSERDA were able to develop improvements in services provided to customers. As can be seen from the graph at Appendix I, Attachment 2, page 6 it appears that the average savings generated by LIURP customers has improved in the more recent months that service was provided. The Company will update this study as more data becomes available.

B. Rebate Program - Residential

1. Description

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

2. Goals

The goal of this program is to encourage the installation of high efficiency appliances by customers. The installation of high efficiency appliances was identified by Staff in its fast track¹² proposal as offering one of the greatest potentials for cost effective natural gas energy efficiency initiatives.

3. Program Information

Rebates were available for qualifying natural gas equipment, beginning with installations made on or after November 1, 2007. Available for existing homes only, not new construction.

For residential customers in Distribution's New York service area, rebates were available on the purchase of the following items during Year 1 and 2 of the CIP (11/1/07 – 11/30/09):

¹² Case 07-M-0548, Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard; New York State Department of Public Service, Staff Preliminary Proposal for Energy Efficiency Program Design and Delivery; August 28, 2007, p 101.

	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	90% AFUE ¹³	\$300
Hot Water Boiler	85% AFUE	\$400
Steam Boiler	81% AFUE	\$200
Programmable Thermostat	Energy Star –Rated	\$ 25
Water Heating		
Storage Tank Heater	0.61 EF ¹⁴	\$150
Tankless Heater	0.78 EF	\$350

For Year 3 of the CIP (12/1/09 – 11/30/10), rebates were available on the purchase of the following items:

	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	90% AFUE	\$300
Hot Air Furnace with ECM	90% AFUE	\$400
Hot Water Boiler	85% AFUE	\$400
Steam Boiler	81% AFUE	\$200
Programmable Thermostat	Energy Star –Rated	\$ 25
Water Heating		
Indirect Water Heater	N/A	\$300

For Year 4 of the CIP, beginning 12/1/10, rebates are available on the purchase of the following items:

	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	90% AFUE	\$250
Hot Air Furnace with ECM	90% AFUE	\$350
Hot Water Boiler	85% AFUE	\$350
Steam Boiler	81% AFUE	\$200
Programmable Thermostat	Energy Star –Rated	\$ 25
Water Heating		
Indirect Water Heater	N/A	\$250

¹³ Annual Fuel Utilization Efficiency (“AFUE”) is the most widely used measure of a furnace’s heating efficiency. It measures the amount of heat actually delivered to a house compared to the amount of fuel that must supply the furnace.

¹⁴ Energy Factor (“EF”) is the efficiency of a storage water heater is indicated by its EF. An overall efficiency measure based on the use of 64 gallons of hot water per day, the EF takes into consideration both the transfer of heat to the water from the fuel used, and the standby loss of heat from the water.

Rebates were processed beginning on December 1, 2007. The following documentation was needed in order to complete the application for a rebate:

Purchased Item	Required Documentation
Programmable thermostat	Receipt; make and model number, UPC (bar code) label from the package (only Energy Star-rated models qualify).
Furnaces, Boilers and Water Heaters	<p>Paid invoice or receipt(s) indicating the retailer/contractor name, business address, phone and Federal ID (tax) number. Itemized description of each product, including:</p> <ol style="list-style-type: none"> 1. Manufacturer, and complete model number. 2. EF for natural gas water heaters. 3. AFUE (efficiency) rating for natural gas furnace or boiler. <p>Product installation date.</p>

The Company contracted with Energy Federation Inc. (“EFI”) to administer the rebate processing. EFI has more than 15 years experience in administering energy efficiency programs for utilities nationwide.

4. Reporting

a. Internal

As of September 30, 2011, a total of 64,583 rebates were processed by EFI, for a total rebate amount of \$12,032,580. This represents approximately 403% of the estimated total annual budget of \$2,980,677 for this program, in the first forty-four months since becoming effective. As of September 30, 2011, EFI was paid \$770,642 to administer this program per Distribution’s contract with them. This represents approximately 266% of the estimated total annual administration budget of \$289,050 for this program. The table below illustrates a summary of the rebate activity to date versus the estimated annual projections by major rebate and program administration category:

	Estimated Annual		Actual Cumulative	
	Rebates	Rebate \$	Rebates	Rebate \$
Space Heating	3,853	\$1,258,534	31,841	\$10,165,300
Water Heating	5,783	\$1,312,388	5,303	\$ 1,181,850
Thermostat	16,390	\$ 409,755	27,439	\$ 685,430
Total Rebate	26,025	\$2,980,677	64,583	\$12,032,580
General Admin.				\$ 133,600
Processing				\$ 385,720
Inspections			2,875	\$ 251,322
Total Admin.		\$ 289,050		\$ 770,642
Total Program		\$3,269,727		\$12,803,222

Refer to Appendix B of this report for more detailed program summary information.

Customer response to this program has been outstanding. Program inquiries to EFI have been very steady since the program began. Typical daily call levels have been in the range 40-50 calls per day, with peak levels reaching 75-80 calls per day during the first few months of the program introduction. The program administrator, EFI, who handles a large majority of the utility rebate programs in the northeast U.S., stated that this was by far the largest initial response to a residential rebate program that they have ever seen. According to Tim Brown, Chief Operating Officer of EFI, “this one certainly took off like no other program we’ve started up.”

EFI also coordinates the process of conducting two additional quality control aspects of the program. First, they work with Conservation Services Group (“CSG”) to conduct random monthly on-site inspections of equipment installations to verify that the equipment receiving a rebate was actually installed. As of September 30, 2011, 2,875 of these inspections have been completed, which represents approximately a 5% sample of the total rebate population of 64,583 rebates, and no fraudulent claims have been discovered. Second, EFI has conducted a phone survey to a random sample of 1,843 customers (approximately 4% of the 41,633 customers receiving a rebate through September 2011), to gain their insight into issues such as program awareness source, impact of the rebate on the purchase decision and satisfaction with the rebate process. Regarding program awareness, the top three sources of program information to rebate customers were contractors (66%), Company bill inserts (13%) and friends/word of mouth (11%). A total of 86% of rebate participants indicated the rebate was important in influencing them to make their equipment upgrade decision. Finally, 96% of rebate customers were satisfied with the overall rebate program process. A more detailed summary of the results of these surveys is included in Appendix H of this quarterly report.

b. External

The Company has developed an analysis of the changes in customer consumption characteristics after the installation of high efficiency appliances. Appendix I provides a summary of this analysis.

5. M&V Analysis

Appendix E, pages 1 through 6, Columns B through I, provide the preliminary M&V results for each of the residential rebate programs. Appendix E, pages 7 through 9, Column J, provide the preliminary M&V results for the total of the residential rebate programs.

The Table below summarizes a number of results included in Appendix E.

Residential Rebates M&V Summary Based on a Deemed Savings Analysis									
	Total Res	Heating Systems				T Stats	Hot Water		
		Furnace		Boiler			Indirect	Tank	Tank less
		Air	ECM	HW	Steam				
TRC Base Analysis	1.69	1.81	0.85	1.18	2.31	8.90	0.45	0.78	0.91
Base Societal Test w/WNY Benefits	2.68	2.87	1.34	1.87	3.66	14.21	0.71	1.26	1.47
TRC Adjusted	1.63	1.74	0.83	1.15	2.24	8.35	0.44	0.74	0.86
Adjusted Societal Test w/WNY Benefits	2.59	2.77	1.30	1.82	3.55	13.33	0.69	1.19	1.38

The Mcf saved per participant, Row 20, on Appendix E, are the deemed rebate program savings calculated based on the October 2010 Standard Technical Manual.

In developing the adjusted analysis a 10% free ridership value is assumed. The October 2010 Standard Technical Manual recommends a free ridership value of 10%. Sensitivity analysis for the free ridership variable is provided in the free ridership section of Appendix E. The “Snapback” assumption included in previous quarterly reports was removed from this report consistent with the October 2010 Standard Technical Manual.

The Company has also performed a cost benefit analysis for residential appliance rebates based on a “before-and-after” analysis of the total natural gas consumption of residential customers receiving rebates. Appendix I provides a summary of the procedures used by the Company in determining pre and post efficient appliance installation consumption.

Appendix E, pages 10 through 12, provides the M&V results based on pre and post appliance installation savings for residential customers receiving rebates.

Residential Rebates M&V Summary Based on a Pre and Post Appliance Installation Savings Analysis					
	Total Res	Heating Systems	T Stats	HW Tank	HW Tankless
TRC Base Analysis	1.66	1.27	9.37	0.94	0.84
Base Societal Test w/WNY Benefits	2.64	2.02	14.95	1.50	1.35
TRC Adjusted	1.59	1.22	8.79	0.89	0.79
Adjusted Societal Test w/WNY Benefits	2.54	1.95	14.02	1.43	1.27

While the pre and post cost benefit analysis provides results that are somewhat less than those presented under the deemed savings analysis, the overall benefits of the

residential rebate programs still exceeds the costs. As explained in Appendix I, the pre and post analysis utilized twenty-nine months of data. The Company will update this study as more data becomes available.

C. Rebate Program – Small Non-Residential

1. Description

The small non-residential program is also an equipment replacement program, modeled after a Vermont Gas Systems program, which was cited by the ACEEE, as one of the nation's exemplary natural gas energy efficiency programs. Distribution's proposed program will offer equipment replacement customized rebate incentives to customers using less than 12,000 Mcf, to encourage them to install high efficiency space heating, water heating and process heating equipment. However, customers will also be eligible to receive rebates for non-equipment replacement changes made to heating, water heating and process heating equipment, such as adding insulation to a process heating oven, or updating controls to a space heating boiler. These custom incentives are set on a case-by-case basis, based upon the incremental installed cost of the new equipment and the estimated resulting gas energy savings. A technical engineering analysis must first be performed to confirm energy savings. The rebate amount will be up to 50% of the incremental cost, with a cap of \$25,000. The Company has contracted with NYSERDA to administer the day-to-day project management of this program.

2. Goals

The goal of the small non-residential rebate program is to provide cost effective incentives to small non-residential customers to utilize natural gas efficiently in their business operations.

3. Program Information

a. Administrative Tasks Related to Start-Up

- NYSERDA has modified existing Energy Efficiency Technical Assistance ("TA") contracts, including statements of work to include activities related to NRCIP.
- NYSERDA has modified the on-line tracking system, Buildings Portal, to accommodate changes required for the tracking of Distribution energy projects.
- NYSERDA has modified current Enhanced Commercial/Industrial Performance Program opportunity notices and Tier II forms to accommodate Distribution energy projects.

b. Ongoing Administrative Tasks

- NYSERDA will monitor program progress and expenditure levels to ensure that program objectives are met within budget allocations.
- NYSERDA will discuss by teleconference as needed with NYSERDA's TA Contractors, to ensure that contractors understand and are following program procedures, and to elicit feedback regarding the program.
- NYSERDA will conduct periodic reviews of the database to ensure quality of data entry and will provide Distribution with project data obtained on the application.
- NYSERDA will promote Distribution programs in any upcoming energy efficiency workshops /seminars/conferences provided in Distribution service territory.
- At Distribution's request, NYSERDA shall permit Distribution personnel to monitor and participate in these administrative tasks.

4. Process

- NYSERDA Application In-Take and Review:
 - Upon receipt of a completed Application (includes application and Technical Engineering Study) NYSERDA assigns the gas energy project and sends a copy of the Application to a NYSERDA TA Contractor.
 - NYSERDA will enter data into the Buildings Portal Database to track the energy project.
- NYSERDA's TA Contractor will perform the following:
 - Will review the Application for completeness and eligibility and will review the engineering study for technical merit.
 - Will contact customer and/or contractor to conduct a pre-installation site visit to verify existing conditions.
 - Will provide NYSERDA with written correspondence on the Application summarizing the gas energy project and provide NYSERDA with a recommendation of the potential gas energy savings and financial incentive.
 - Will provide NYSERDA with a scope of work and budget to complete all phases related to the gas project.
- NYSERDA offers Purchase Order:
 - NYSERDA will review the TA Contractor's recommendation and, if approved, will request Distribution to send correspondence via an approval memorandum to the customer. In the alternative, NYSERDA may itself send such correspondence on letterhead supplied to NYSERDA by Distribution.

- NYSERDA will develop a Purchase Order to contractually secure the financial incentives available for the gas energy project and offer a Purchase Order to the customer for their approval and signature.
 - NYSERDA will review the scope of work and budget and modify the existing TA Contractor's contract.
 - NYSERDA will update the data of the project in the Buildings Portal database.
- Customer completes Construction:
 - NYSERDA's TA Contractor will conduct a post-installation site inspection of the energy project to verify that the energy project is completed and the same equipment and efficiency ratings that was specified in the Application was installed.
 - NYSERDA's TA Contractor will provide NYSERDA with correspondence in writing with a recommendation of the potential gas energy savings and financial incentives and notify any changes to the project.
 - NYSERDA will request Distribution to provide the customer with correspondence in writing indicating the amount of financial incentive that the customer can invoice. In the alternative, NYSERDA may send such correspondence on letterhead supplied to NYSERDA by Distribution.
 - NYSERDA will update the data of the project in the Buildings Portal database.
- Invoice Processing:
 - NYSERDA will review all invoices for accuracy, and if acceptable NYSERDA will process the invoice for payment following NYSERDA prompt payment policy.

5. Reporting

a. Internal

As of September 30, 2011, a total of 1,133 rebates were processed by EFI and NYSERDA, for a total rebate amount of \$1,327,548. This represents approximately 101% of the estimated total annual budget of \$1,319,860 for this program, since commencement of rebate processing on December 1, 2007, (for equipment purchases and installations completed on or after November 1, 2007). As of September 30, 2011, EFI and NYSERDA were paid a total of \$120,618 to administer this program per Distribution's contract with them. This represents approximately 94% of the estimated total annual administration budget of \$127,993 for this program. The table below illustrates a summary of the rebate activity to date versus the estimated annual projections by major rebate and program administration category:

	Estimated Annual		Actual Cumulative	
	Rebates	Rebate \$	Rebates	Rebate \$
Space Heating	N/A	N/A	638	\$1,210,125
Water Heating	N/A	N/A	66	\$ 35,713
Cooking	N/A	N/A	7	\$ 7,250
Process Heating	N/A	N/A	2	\$ 50,000
Thermostat	N/A	N/A	420	\$ 24,460
Total Rebate	N/A	\$1,319,860	1,133	\$1,327,548
General Admin.				\$0
Processing				\$ 116,360
Inspections			87	\$ 4,258
Total Admin.		\$ 127,993		\$ 120,618
Total Program		\$1,447,853		\$1,448,166

Refer to Appendix C of this report for more detailed program summary information.

Customer response to this program was very slow at the outset, but has been improving as a result of a series of direct mailings, print advertising and contractor meetings the Company has conducted over the past few years. Program inquiries to NYSERDA have grown since the increased advertising and marketing campaigns began. Typical daily call levels have been in the range of 10-15 calls, with peak levels reaching 20-30 calls per day in some instances.

However, even with the increased call activity, the results to date have been less than expected. We feel this is due primarily to two factors. First, the majority of customers calling NYSERDA were very small businesses, typically with usage of less than 1,000 Mcf. Due to their small size, they were relatively unsophisticated when it came to knowledge of their existing energy equipment and their overall energy usage. They did not have any in-house energy expertise and many did not have any outside source (contractor, engineer, consultant, etc.) to rely upon. Second, even if they did have some level of energy expertise, either in-house or outside, they were typically too busy to spend any time analyzing their project as called for in the design of the customized rebate program. They were looking for something VERY easy to understand and apply for, such as our fixed rebate design in the residential market. This is the main reason NYSERDA ended up referring most of the rebates for the small non-residential program to EFI so the customer could take advantage of the simpler, albeit likely lower value, rebate through that source. These customers simply did not want to take the time or effort to complete even a simple analysis of their project to achieve the higher potential rebate level.

Over the first three years of the program, we have seen greater activity on the customized rebate design front. Even though only 51 rebates have been processed through this method as of September 30, 2011, NYSERDA currently has several applications in progress, with a few projects already approved for payment or pending, several of which are for substantial amounts of money. We feel this trend will continue

as more customers become aware of the program, as well as becoming more comfortable with completing the simple technical analysis required.

Due to the issues cited above, the Company implemented a modification to this program design for Year 2 of the program, effective December 1, 2008, that created a two-tiered approach –

1. A new, simpler, fixed rebate component for the smallest of the non-residential customers, similar to the residential program design, although at slightly higher rebate levels
2. The existing, more complex, customized rebate design for those customers willing and able to do the analysis required to likely achieve a greater rebate level through this approach than via the fixed rebate design.

The Company reviewed this concept with all the participants of the Collaborative Session held at the Commission's office in Albany on March 25, 2009. Since the new fixed rebate became effective on December 1, 2008, the Company is encouraged by the growing response we have seen from our small non-residential customers. Through September 30, 2011, 689 customers have taken advantage of this simpler rebate option available to them.

Finally, now that the program introduction phase has passed, the Company plans on working with NYSERDA to finalize a phone survey which will be conducted to a random sample of customers receiving a rebate, to gain their insight into issues such as program awareness source, satisfaction with the rebate process and impact of the rebate on the purchase decision.

b. External

At this point, the Company does not have sufficient data for most rebate participants to accurately compare pre- versus post-installation consumption. As more data is available, we expect to conduct these analyses to estimate the energy efficiency savings realized for each rebate participant, as well as aggregate those results into the TRC test to evaluate the overall program effectiveness, and include them in future quarterly reports.

6. M&V Analysis

Appendix E, pages 7 through 9, Column M, provide the preliminary M&V results for the non-residential rebate program.

The Table below summarizes a number of results included in Appendix E.

Non-Residential M&V Summary	
TRC Base Analysis	1.81
Base Societal Test w/WNY Benefits	2.87
TRC Adjusted	1.76
Adjusted Societal Test w/WNY Benefits	2.79

The Mcf saved per participant, Row 20, on Appendix E, is the deemed non-residential program savings for the participants provided CIP rebates to date.

In developing the adjusted analysis a 10% free ridership is assumed. Sensitivity analysis for the free ridership variable is provided in the free ridership section of Appendix E. No level of snapback was assumed for non-residential customers.

D. General Customer Outreach and Energy Efficiency Education

1. Description

The Company developed a communications plan to introduce the CIP to its customers, to help them become fully aware of its benefits and to encourage customers to take advantage of the rebate program.

The CIP is a well-established program in Distribution's service territory that continues to generate robust levels of customer participation, acceptance and satisfaction. It also is producing data showing that it is effectively promoting conservation and efficiency, consistent with state objectives and program design.

Currently in Year 3 of the CIP, Distribution is transitioning the program from an introductory phase to "one that maintains a solid awareness of the program."

2. Goals

The goal of the communications plan is to educate customers on the need for and the benefit of employing energy efficiency measures. The CIP rebate and low-income programs are cornerstones for improving energy efficiency in homes and businesses throughout our Company's service territory.

The design, delivery and focus of outreach and education all continue to be directed at program maintenance and customer awareness of energy efficiency, while maintaining current levels of customer awareness and participation.

3. Program Information

Formal advertising and public relations initiatives associated with the CIP launched December 1, 2007. These initiatives included bill inserts, direct mail, outdoor advertising, transit and bus shelter advertising, online advertising, a dedicated website, print advertisements and grassroots efforts. Tactics executed during this reporting period (July 1- September 30, 2011) included:

Print Advertisements:

- One print advertisement ran in our media market during this period, generating approximately 825,644 total impressions utilizing the major daily and community publications.

Television Advertisement:

- The fall campaign began on September 12 and continues into fourth quarter.
- There were 441 spots scheduled for the first three weeks of the campaign, extending to October 2.
- Each week is projected to obtain an 80-89% reach against adults 25-54, with a projected 508 gross rating points planned.

Radio Advertisement:

- The fall campaign on radio began on September 12 and continues into fourth quarter.
- There were 428 spots scheduled for the first three weeks of the campaign, taking us to October 2.
- Each week is projected to obtain a 35-39% reach against adults 25-54, with a projected 385 gross rating points planned.

Transit Advertising (Bus Shelters and Bus Cards):

- No Transit Advertising from July 1 – September 30.

Outdoor Advertising – Billboards, Bulletins and Posters:

- No Transit Advertising from July 1 – September 30.

Website (NationalFuelForThought.com):

- This program-specific website generated approximately 2,993 visits (with 9,182 page views among those visits) from July 1 to September 30, 2011.

Other Website Outreach:

- The banner advertising campaign started on September 26 and runs deep into the fourth quarter. We will provide measurable analytics in the fourth quarter report.

Handouts and Program Materials:

- Conservation kits and program materials were distributed at community events by employees and to customers throughout our service area through not-for-profit organizations, health/human service agencies, and the offices of local elected officials.

- Approximately 2,000 kits were distributed between July 1, 2011 and September 30, 2011.
 - stores.

Community Outreach:

- Program materials and conservation kits were distributed at the following:
 - Amherst Chamber of Commerce – 140 kits
 - St. Agatha’s McGuire Hall – 150 kits
 - Security Office – Rosina Food Products – 300 kits
 - 23 Shepard Street – 300 kits
 - BEAM Golf Tournament – 150 kits
 - Buffalo State College Small Business Energy Workshop – 50 kits
 - Genesee County Chamber of Commerce – 40 kits
 - Buffalo Reuse – 60 kits
 - Chautauqua County Chamber of Commerce – 40 kits
 - University of Buffalo -- 500 kits
 - Clinton Brown Architecture – 5 kits
 - Niagara USA Chamber – 30 kits
 - WNY Elected Officials Meeting – 60 kits
 - WNY Apollo Alliance HECK Project – 150 kits

- Continued sponsorship with the Buffalo Bisons/Bisons’ Green Team.
 - Bisons’ Green Team encouraged fans to sign up for the Green Team via the HD scoreboard as part of the Message of the Game. Those who joined received two free tickets to an upcoming game.
 - Feature ran in-game at every 2011 Monday-Thursday home game and pre-game for weekend games. Total number of games with feature totaled 23.
 - Season promotion resulted in approximately 100 Green Team members.
 - Sponsorship included one 3’x5’ concourse sign for 2011 season.
 - Bisons’ Green Team logo on Bisons.com with click-through to NationalFuelforThought.com.

- **Media Relations:**

- The Commission held the CIP public hearings on July 6 and 7, 2011, to give the public an opportunity to provide feedback. Media interviews were provided by a Company official to the Buffalo News, YNN News, WIVB-TV (CBS), WKBW-TV (ABC), WNED-AM Radio, WBFO-FM Radio, WBEN-AM Radio. Extensive earned media coverage was received.

4. Reporting

The Company is monitoring the progress and success of the communication activities related to the CIP. A benchmark customer survey was created in October 2007 to measure customer awareness of energy efficiency and current practices and behaviors associated with the efficient use of natural gas. Through the customer survey, the Company is also monitoring the progress and success of the communication activities related to the CIP.

Follow-up surveys during the course of the CIP have been and will continue to be conducted to measure changes in customer behavior and awareness of the conservation messaging being advanced as part of the CIP.

The most recent round of surveying was completed in June 2010. Key findings from the June 2010 survey included:

- Respondents continue to rank Distribution as a leading source for information about energy efficiency and conservation. The Company was also ranked the top source for how well natural gas energy efficiency information is provided.
- General awareness of programs offering rebates to replace appliances is at 74%, the highest awareness rate since the beginning of the survey. Awareness of and participation in Distribution's CIP were slightly higher, compared to the last survey.
- 95% think it is important to conserve energy and they also consider themselves knowledgeable about how to conserve.
- 86% conserve energy in order to save money, which is consistent with prior results.
- 65% believe that natural gas is the most cost-effective type of energy for their personal use.
- As seen in prior studies, existing appliances would only be replaced for new, energy-efficient models only if the appliance stopped working.
- 83% of respondents felt that energy savings could offset the cost of a more efficient furnace over the life of a unit.
- Low-cost conservation tactics continue to be implemented prior to considering equipment upgrades. These tactics include: lowering thermostats, adding weather stripping or caulk, adding insulation, setting hot water tank temperatures to medium and preheating ovens only when necessary.

- Similar to what we have seen in past studies, respondents in the lower income brackets (<\$40k) are the least likely to replace their furnace next year, even though they see value in more energy-efficient models.
- 59 percent of respondents expressed that they were somewhat or very likely to seek additional information on rebates.

At November 30, 2010, approximately \$5.897 million was spent on communications initiatives for Years 1-3 of the CIP. From December 1, 2010 through September 30, 2011, \$539,498.83 was spent for a total CIP Outreach and Education spend of \$6.450 million since the program's inception.

5. M&V Analysis

Appendix E, pages 7 through 9, Column N, provide the preliminary M&V results for the Outreach program.

The Table below summarizes a number of results included in Appendix E.

Outreach M&V Summary	
TRC Base Analysis	4.46
Base Societal Test w/WNY Benefits	7.47
TRC Adjusted	4.01
Adjusted Societal Test w/WNY Benefits	6.76

Gauging the exact customer behavioral changes due to the Company's outreach effort is perhaps the most difficult part of this M&V analysis. The Company's outreach effort is broad-based and cuts across a number of programs and initiatives as demonstrated in the program details above. The first step in the M&V analysis was to assign a portion of the outreach costs to the rebate programs since a significant effort was made to inform customers about the rebate programs. The assignment of outreach costs to the rebate programs was 50% of total outreach costs. Outreach costs associated with the rebate programs were included in the M&V results for the rebate programs. The Mcf saved per participant, Row 20, on Appendix E, is a deemed Mcf savings associated with the general outreach efforts. The sensitivity analysis section of the M&V report provides an analysis of the sensitivity of the adjusted TRC results to the volume savings assumption. The adjusted TRC results range from 6.02 if the volume savings resulting from general outreach are 50% greater than those assumed in the base analysis to 2.01 if the volume savings are 50% less than that assumed in the base analysis. The Company's general energy efficiency initiative included a broad-based energy savings message as well as distribution of thousands of conservation kits; therefore, the isolation of any single activity on the part of individual customers is difficult to obtain. Perhaps the best estimate of outreach results will be to determine total changes in average usage less the impact associated with the rebate and LIURP programs.

In developing the adjusted analysis a 10% free ridership is assumed. Sensitivity analysis for the free ridership variable is provided in the free ridership section of Appendix E. No level of snapback was assumed related to the outreach effort.

VI. Conclusions

All aspects of the Company's CIP began operation on December 1, 2007. This is the Company's fifteenth quarterly report, which has provided an overview of each component of the CIP along with a summary of results to date for each component. This report provided a preliminary analysis of M&V results based on program results to date. Appendix G provides a summary of allowances by program, Company expenditures for each CIP initiative, and NYSERDA expenditures under the Company's program through September 30, 2011. More information regarding M&V variables resulting from the actual operation of the CIP and the ongoing state-wide energy efficiency initiative should be available for inclusion in future quarterly reports. The Company also anticipates including reasonable data reporting modifications that may be suggested by Staff and others involved in making the energy efficiency initiatives included in the CIP available to the Company's customers.

Appendix A - Low Income Usage Reduction Program Cumulative Results through 9/30/11

I. PROGRAM INTAKE (Cumulative / Program Years 1, 2, 3 & 4)

Customers Referred (NFG & Other)	35,007		
Customer Letter/Application Sent	27,511 *	79%	of 35007 Referrals
Applications Returned	7,386	27%	of 27511 Applications Sent

II. STATUS of APPLICATION TRIAGE (Cumulative / Program Years 1, 2, 3 & 4)

Applications on Hold (Landlord Authorization):	526	7%	of 7386 Applications Returned
Applications on Hold (Additional Information/Other):	24	0%	of 7386 Applications Returned
Deemed Ineligible (house for sale etc)	<u>2,959</u>	40%	of 7386 Applications Returned
Assigned to Contractors for Service	3,959	54%	of 7386 Applications Returned

III. STATUS OF AUDITS/MEASURES (Cumulative / Program Years 1, 2, 3 & 4)

Audits in Process	350	9%	of 3,959 Households assigned to Contractors for Service
Jobs in Process	362	9%	of 3,959 Households assigned to Contractors for Service
Jobs Completed	<u>2,619</u>	66%	of 3,959 Households assigned to Contractors for Service
Program Participants	3,331		
Jobs Cancelled	643	16%	of 3,959 Households assigned to Contractors for Service

III. PROGRAM RESULTS (Cumulative / Program Years 1, 2, 3 & 4)

Conservation Measure	Jobs	Estimated Annual Energy Savings (Mcf)	Estimated Annual* Savings (\$)	Total Cost of Measures	Average Cost per Measure
Audit Fee/Education	2,677	tbd	tbd	\$890,022	\$332
Insulation	1,985	78,421	\$948,203	\$5,680,614	\$2,862
Air Sealing	2,080	17,532	\$209,375	\$907,508	\$436
Heating System Repair/Replacement	1,211	6,524	\$86,963	\$590,608	\$488
Thermostats	234	2,625	\$30,278	\$24,259	\$104
DHW Improvements	205	275	\$3,686	\$192,909	\$941
Showerheads	621	466	\$5,591	\$11,023	\$18
Pipe Wrapping	544	138	\$1,843	\$9,134	\$17
Other	1,361	61	\$741	\$321,368	\$236
Total	2,619	<u>106,042</u>	<u>\$1,286,680</u>	<u>\$8,627,445</u>	\$3,294

* Therm cost savings are based on the National Fuel Residential Utility Prices for Jan 2008 as posted by the PSC minus the non-bypassable service charge (\$1.35 per therm).

Appendix B - Residential CIP Rebate Program Cumulative Results through 9/30/11

Equipment	Quantity	Rebate Amount	Total Rebate	Processing Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	2168	\$400.00	\$867,200.00			
Boiler - Hot Water	<u>220</u>	\$350.00	<u>\$77,000.00</u>			
Subtotal	2388		\$944,200.00	\$7.50	\$17,910.00	\$962,110.00
Boiler - Steam	89	\$200.00	\$17,800.00	\$7.50	\$667.50	\$18,467.50
Furnace >= 90% with ECM	4360	\$400.00	\$1,744,000.00			
Furnace >= 90% with ECM	<u>1284</u>	\$350.00	<u>\$452,300.00</u>			
Subtotal	5644		\$2,196,300.00	\$7.50	\$42,330.00	\$2,238,630.00
Furnace >= 90%	21546	\$300.00	\$6,463,800.00			
Furnace >= 90%	<u>2174</u>	\$250.00	<u>\$543,200.00</u>			
Subtotal	23720		\$7,007,000.00	\$7.50	\$177,892.50	\$7,184,892.50
Subtotal	31841		\$10,165,300.00		\$238,800.00	\$10,404,100.00
II. Water Heating						
Indirect Water Heater	236	\$300.00	\$70,800.00			
Indirect Water Heater	<u>56</u>	\$250.00	<u>\$14,000.00</u>			
Subtotal	292		\$84,800.00	\$6.50	\$1,898.00	\$86,698.00
Water Heater - Storage Tank	3286	\$150.00	\$492,900.00	\$6.50	\$21,359.00	\$514,259.00
Water Heater - Tankless	<u>1725</u>	\$350.00	<u>\$604,150.00</u>	\$6.50	<u>\$11,212.50</u>	<u>\$615,362.50</u>
Subtotal	5303		\$1,181,850.00		\$34,469.50	\$1,216,319.50
III. Programmable Thermostat	27439	\$24.98 *	\$685,429.95	\$4.10 *	\$112,450.50 **	\$797,880.45
Total all Equipment	<u><u>64,583</u></u>		<u><u>\$12,032,579.95</u></u>		<u><u>\$385,720.00</u></u>	<u><u>\$12,418,299.95</u></u>
Program Administration	14 months (11/07 - 12/08)			\$2,000.00	\$28,000.00	
	33 months (1/09 - 9/11)			\$3,200.00	<u>\$105,600.00</u>	
					\$133,600.00	
Inspections	2476			\$87.00	\$215,412.00	
	<u>399</u>			\$90.00	<u>\$35,910.00</u>	
	2875				\$251,322.00	
PROGRAM TOTAL						\$12,803,221.95

* Average thermostat rebate amount. Rebate amount cannot exceed actual purchase price.

** Thermostat "Total Fee" and "Processing Fee" reflects no fee charged after initial thermostat, on multiple thermostat installations.

Appendix C - Small Non-Residential CIP Rebate Program Cumulative Results through 9/30/11

I. FIXED Rebates

A. Through Residential CIP, Installed before 12/1/08 - Administered by EFI

Equipment	Quantity	Individual Rebate Amount	Total Rebate	Processing Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	19	\$400.00	\$7,600.00	\$7.50	\$142.50	\$7,742.50
Boiler - Steam	0	\$200.00	\$0.00	\$7.50	\$0.00	\$0.00
Furnace	<u>144</u>	\$300.00	<u>\$43,200.00</u>	\$7.50	<u>\$1,080.00</u>	<u>\$44,280.00</u>
Subtotal	163		\$50,800.00		\$1,222.50	\$52,022.50
II. Water Heating						
Water Heater - Storage Tank	12	\$150.00	\$1,800.00	\$6.50	\$78.00	\$1,878.00
Water Heater - Tankless	<u>8</u>	\$350.00	<u>\$2,800.00</u>	\$6.50	<u>\$52.00</u>	<u>\$2,852.00</u>
Subtotal	20		\$4,600.00		\$130.00	\$4,730.00
III. Programmable Thermostat	210	\$24.88 *	\$5,224.96	\$4.50	\$945.00 **	\$6,169.96
Total all Equipment	<u>393</u>		<u>\$60,624.96</u>		<u>\$2,297.50</u>	<u>\$62,922.46</u>
Inspections	27			\$87.00	\$2,349.00	
PROGRAM SUBTOTAL						\$65,271.46

* Average thermostat rebate amount. Rebate amount cannot exceed actual purchase price.

** Thermostat "Total Fee" reflects no fee charged after initial thermostat, on multiple thermostat installations.

Appendix C - Small Non-Residential CIP Rebate Program Cumulative Results through 9/30/11

I. FIXED Rebates (continued)

B. Through Small Non-Residential CIP, Installed after 12/1/08 - Administered by NYSERDA

Equipment	Quantity	Individual Rebate Amount	Total Rebate	Processing Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	102	\$2,269.61 *	\$231,500.00	9.00%	\$20,835.00	\$252,335.00
Boiler - Steam	5	\$2,010.40 *	\$10,052.00	9.00%	\$904.68	\$10,956.68
Unit Heater	41	\$1,573.17 *	\$64,500.00	9.00%	\$5,805.00	\$70,305.00
Furnace	<u>282</u>	\$972.13 *	<u>\$274,140.00</u>	9.00%	<u>\$24,672.60</u>	<u>\$298,812.60</u>
Subtotal	430		\$580,192.00		\$52,217.28	\$632,409.28
II. Water Heating						
Water Heater - Storage Tank	19	\$150.00	\$3,000.00	9.00%	\$270.00	\$3,270.00
Water Heater - Tankless	<u>23</u>	\$350.00	<u>\$9,800.00</u>	9.00%	\$882.00	<u>\$10,682.00</u>
Subtotal	42		\$12,800.00		\$1,152.00	\$13,952.00
III. Cooking						
	7	\$1,035.71 *	\$7,250.00	9.00%	\$652.50	\$7,902.50
IV. Programmable Thermostat						
	210	\$91.60 *	\$19,235.00	9.00%	\$1,731.15 **	\$20,966.15
Total all Equipment	<u>689</u>		<u>\$619,477.00</u>		<u>\$55,752.93</u>	<u>\$675,229.93</u>
Inspections	9			N/A	\$1,909.00	
PROGRAM SUBTOTAL						\$677,138.93

* Average rebate amount. Rebate amount cannot exceed actual purchase price.

** Thermostat "Total Fee" reflects no fee charged after initial thermostat, on multiple thermostat installations.

Appendix C - Small Non-Residential CIP Rebate Program Cumulative Results through 9/30/11

II. CUSTOMIZED Rebates

Through Small Non-Residential CIP - Administered by NYSERDA

Equipment	Quantity	Average Rebate Amount	Total Rebate	Processing Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	32	\$13,204.80	\$422,553.47	9.00%	\$38,029.81	\$460,583.28
Boiler - Steam	0	\$0.00	\$0.00	9.00%	\$0.00	\$0.00
Unit Heater	2	\$16,975.00	\$21,375.00	9.00%	\$1,923.75	\$23,298.75
Furnace	0	\$0.00	\$0.00	9.00%	\$0.00	\$0.00
Other	<u>11</u>	\$12,291.34 *	<u>\$135,204.77</u>	9.00%	<u>\$12,168.43</u>	<u>\$147,373.20</u>
Subtotal	45	\$12,869.63	\$579,133.24		\$52,121.99	\$631,255.23
II. Water Heating						
Water Heater - Storage Tank	4	\$4,578.25	\$18,313.00	9.00%	\$1,648.17	\$19,961.17
Water Heater - Tankless	<u>0</u>		<u>\$0.00</u>	9.00%	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal	4	\$4,578.25	\$18,313.00		\$1,648.17	\$19,961.17
III. Process Heating						
	2		\$50,000.00	9.00%	\$4,500.00	\$54,500.00
IV. Programmable Thermostat						
	0		\$0.00	9.00%	\$0.00	\$0.00
Total all Equipment	<u>51</u>		<u>\$647,446.24</u>		<u>\$58,270.16</u>	<u>\$705,716.40</u>
Inspections	51			N/A	\$0.00	
PROGRAM SUBTOTAL						\$705,716.40

Appendix C - Small Non-Residential CIP Rebate Program Cumulative Results through 9/30/11

III. TOTAL Rebates

Through Residential and Small Non-Residential CIP - Administered by EFI & NYSERDA

Equipment	Quantity	Average Rebate Amount	Total Rebate	Total Processing Fee	Total
I. Space Heating					
Boiler - Hot Water	153	\$4,324.53	\$661,653.47	\$59,007.31	\$720,660.78
Boiler - Steam	5	\$0.00	\$10,052.00	\$904.68	\$10,956.68
Unit Heater	43	\$1,997.09	\$85,875.00	\$7,728.75	\$93,603.75
Furnace	426	\$744.93	\$317,340.00	\$25,752.60	\$343,092.60
Other	<u>11</u>	\$12,291.34	<u>\$135,204.77</u>	<u>\$12,168.43</u>	<u>\$147,373.20</u>
Subtotal	638	\$1,896.75	\$1,210,125.24	\$105,561.77	\$1,315,687.01
II. Water Heating					
Water Heater - Storage Tank	35	\$660.37	\$23,113.00	\$1,996.17	\$25,109.17
Water Heater - Tankless	<u>31</u>	\$406.45	<u>\$12,600.00</u>	<u>\$934.00</u>	<u>\$13,534.00</u>
Subtotal	66	\$541.11	\$35,713.00	\$2,930.17	\$38,643.17
III. Cooking	7	\$1,035.71	\$7,250.00	\$652.50	\$7,902.50
IV. Process Heating	2	\$0.00	\$50,000.00	\$4,500.00	\$54,500.00
V. Programmable Thermostat	420	\$58.24	\$24,459.96	\$2,676.15	\$27,136.11
Total all Equipment	<u>1,133</u>		<u>\$1,327,548.20</u>	<u>\$116,320.59</u>	<u>\$1,443,868.79</u>
Inspections	87			\$4,258.00	
PROGRAM TOTAL					\$1,448,126.79

APPENDIX D

Don't wait! Install your new appliance by November 30, 2011 to be eligible for the rebate!

It's called the Conservation Incentive Program.



Save up to \$350 when you replace equipment in your home with qualifying, energy-efficient natural gas models.

Rebates are available for the following items, provided they are installed by November 30, 2011.

Equipment	Minimum Required Efficiency	Your Rebate
Space Heating		
Hot Air Furnace	90% AFUE*	\$250
Hot Air Furnace w/ ECM†	90% AFUE	\$350
Hot Water Boiler	85% AFUE	\$350
Steam Boiler	81% AFUE	\$200
Programmable Thermostat**	Energy Star®-rated	\$25
Water Heating		
Indirect Water Heater	N/A	\$250

* AFUE – Annual Fuel Utilization Efficiency is the most widely used measure of a furnace's heating efficiency. It measures the amount of heat actually delivered to a house compared to the amount of fuel that must supply the furnace.

† ECM – Electronically Commutated Motors.

** All equipment must be installed by a contractor.

Rebates for residential customers in National Fuel's Western New York service area are available through **National Fuel's Conservation Incentive Program (CIP)**.

Residential Customer Rebate

Our residential program offers rebates to customers who replace space and water heating equipment with qualifying, energy-efficient models. Plus, the savings are even greater when you replace your home's electric appliances with natural gas models. When switching to this clean, efficient, secure, abundant resource, a household can save money year after year.

Current CIP Year 4 rebates are available provided the qualifying equipment is installed by November 30, 2011. Terms and conditions apply. You can download a rebate application from our website. Please call 1-800-365-3234 or visit NationalFuelForThought.com to learn more.

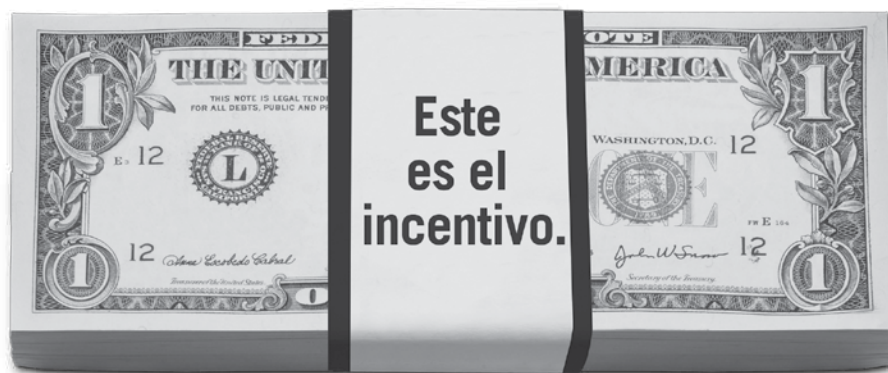


National Fuel[®]
fuel for thought

NationalFuelForThought.com

¡No espere! Instale su nuevo electrodoméstico antes del 30 de noviembre de 2011 para ser elegible para la bonificación.

Se llama Programa de Incentivos para la Conservación.



Ahorre hasta \$350 al reemplazar los equipos de su casa por los modelos de gas natural de bajo consumo de energía que reúnen los requisitos.

Las bonificaciones están disponibles para los siguientes equipos, siempre que se instalen antes del 30 de noviembre de 2011.

Equipo	Eficiencia mínima requerida	Su reembolso
Calefacción de ambientes		
Horno de aire caliente	90% AFUE*	\$250
Horno de aire caliente con ECM†	90% AFUE	\$350
Caldera de agua caliente	85% AFUE	\$350
Caldera de vapor	81% AFUE	\$200
Termostato programable**	Calificación Energy Star®	\$25
Calefacción de agua		
Calentador de agua indirecto	N/A	\$250

* AFUE – Annual Fuel Utilization Efficiency (Eficiencia en el consumo de combustible anual) es la medida más comúnmente utilizada para calcular la eficiencia de calefacción de los calefactores. Mide la cantidad de calor que realmente se entrega a la casa, comparado con la cantidad de combustible que debe proporcionarse al calefactor.

† ECM – Motores conmutados electrónicamente.

** Todos los equipos deben ser instalados por un contratista.

Las bonificaciones para clientes residenciales del área de servicio de National Fuel en Western Nueva York se encuentran disponibles a través del **Programa de Incentivo de Conservación de National Fuel (National Fuel's Conservation Incentive Program, CIP)**.

Bonificaciones para clientes residenciales

Nuestro programa para clientes residenciales ofrece bonificaciones para aquellos clientes que reemplacen sus equipos de calefacción de agua y de ambientes con modelos de bajo consumo de energía que reúnen los requisitos. Además, el ahorro es aún mayor cuando se reemplazan los electrodomésticos de su hogar con los modelos de gas natural. Cuando se pasa a este recurso limpio, eficiente, seguro y abundante, una familia puede ahorrar dinero año tras año.

Las bonificaciones actuales para el cuarto año del CIP se encuentran disponibles siempre que los equipos que reúnen los requisitos se hayan instalado antes del 30 de noviembre de 2011. Se aplican términos y condiciones. Puede descargar una solicitud de bonificación de nuestro sitio web. Para obtener más información, llame al 1-800-365-3234 o visite NationalFuelForThought.com.



National Fuel®

fuel for thought

NationalFuelForThought.com



It's called the
Conservation Incentive Program.
And there are incentives in it for you.



National Fuel[®]

NationalFuelForThought.com

Don't Wait!

Install your new appliance by
November 30, 2011 to be
eligible for the rebate!



National Fuel

NationalFuelForThought.com



National Fuel 66242

It's called National Fuel's Conservation Incentive Program, and here's the incentive.

Residential and non-residential customers can get cash rebates by upgrading to qualifying energy efficient natural gas equipment.

Learn more at [National Fuel for Thought dot com](http://NationalFuelforThought.com).

FUEL-66243

Option 2:

Winter's almost here. And that means it's time to get your rebates from National Fuel's Conservation Incentive Program. Residential customers in our Western New York service area can save up to \$350 by upgrading to qualifying, energy-efficient natural gas equipment. Non-residential customers can also receive fixed or customized rebates by upgrading to new, qualifying natural gas models. Don't wait! Install your new appliance by November 30, 2011 to be eligible for a rebate. Visit nationalfuelforthought.com to learn more.

Managing your bills made easier.

Let National Fuel help you manage your bills easier throughout the winter heating season with our payment options, assistance programs and special services.

Direct Payment Plan

Have your monthly payment deducted automatically from your checking or savings account on the due date. That means no more check writing, check charges, postage costs or waiting in line.

Budget Plan

Level and predictable monthly natural gas bills can make budgeting easier. When you enroll in the Budget Plan, we analyze your yearly gas usage to develop your monthly payment amount so you can pay a steady amount each month. We'll review it every three months to keep you on track.

Special Protections

We offer special protections for customers to ensure their heat stays on during the winter. In order to qualify, all of the residents in your household must be age 62 or older, 18 or younger, blind or disabled.

Neighbor For Neighbor Heat Fund

You may qualify for a cash grant to pay past-due bills if you are age 60 or older, or if you or a member of your household has a handicap, disability or certified medical emergency.

Low Income Customer Affordability Assistance Program (LICAAP)

If you meet the eligibility requirements, you can receive discounts of up to 70 percent off the regular residential rate determined by household income and size. You can also receive matching debt forgiveness for timely bill payments up to 24 months.

To learn more about National Fuel's payment options, assistance programs and special services, visit www.nationalfuelgas.com and click "For Home."

HEAP opens on November 16th.

The **Home Energy Assistance Program (HEAP)** opens this year on November 16, 2011. Customers are encouraged to apply for assistance as soon as it opens as funds are very limited and will be distributed on a first-come, first-served basis.

Please visit heaphelps.com for additional information.

Important Contact Information

Billing Questions and Customer Service

If you have a question, problem or request, please call us Monday through Friday, 7 a.m. to 6 p.m.

Buffalo area: **716-686-6123**

All other areas: **1-800-365-3234**

Or visit www.nationalfuelgas.com for more information.

Customers with hearing or speech difficulties are able to communicate with us on electronic display (TTY or teletypewriter) and can have a relay call placed to us by calling **7-1-1**.

Customer Assistance Centers

If you'd like to talk with one of our representatives in person, our Customer Assistance Centers are staffed with helpful people who can assist you. Please check the locations listed below to find the office closest to you.

Open Monday through Friday, 8:15 a.m. to 4:30 p.m.

Buffalo: 409 Main Street
Buffalo, NY 14203

Cheektowaga: AppleTree Business Park
2875 Union Road, Suite 44
Cheektowaga, NY 14227

Jamestown: 1384 Peck Settlement Road
Jamestown, NY 14701



National Fuel
www.nationalfuelgas.com



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NY Fall Newsletter 10-11

For more information, including translation services, call **1-800-365-3234**.
Este folleto también es disponible en español. Para más información, llame al **1-800-365-3234**.

Fuel for Thought

Fall 2011 New York Customer Newsletter

Rebates still available with the Conservation Incentive Program

Don't Wait! Install your new appliance by November 30, 2011, to be eligible for the rebate!

Residential Customers

Is it time to replace your hot water heater, furnace, boiler or programmable thermostat? Choose a high-efficiency model and you'll get a rebate from **National Fuel's Conservation Incentive Program (CIP)**. Plus, you'll lower your heating bills for years to come. When you combine the rebates with the projected annual fuel savings from using more efficient equipment, you'll be amazed at how much you'll save.

For more information about this program, visit NationalFuelForThought.com, where you can download a rebate application and learn more about how to use less energy. Applications for Year 4 must be postmarked by March 31, 2012, to receive a rebate and eligible equipment must be installed before Nov. 30, 2011.

Receive these rebates when you replace existing equipment between Dec. 1, 2010 – Nov. 30, 2011, with qualifying fuel-efficient models:

Equipment	Minimum Required Efficiency	Your Rebate
Space Heating		
Hot Air Furnace	90% AFUE*	\$250
Hot Air Furnace w/ ECM**	90% AFUE	\$350
Hot Water Boiler	85% AFUE	\$350
Steam Boiler	81% AFUE	\$200
Programmable Thermostat	Energy Star®-rated	\$25
Water Heating		
Indirect Water Heater	N/A	\$250

* Annual Fuel Utilization Efficiency

** Electronically Commutated Motors

For residential AND non-residential customers: Rebate offers listed are available for qualifying equipment purchased and installed between Dec. 1, 2010 – Nov. 30, 2011. All appliances must be installed by a contractor. In order to get a rebate on an Energy Star®-rated programmable thermostat, a contractor must install the thermostat at the time of a furnace or boiler replacement. Non-residential customers applying for a rebate AND all contractors must be able to supply one of the following in order for the rebate application to be considered complete: Federal ID number, a Certificate of Insurance or a Business Certificate showing their company's name and address. Rebates are available for equipment upgrades only regardless of income or annual energy usage. New-builds are not eligible for rebates.



National Fuel

Things to think about:

- Conservation Incentive Program
- Natural Gas Safety
- Manage Your Bills
- Online Services — Win \$150 in credits!

www.nationalfuelgas.com

Small, Non-Residential Customers

Two rebate options for non-residential customers

If you're a small, non-residential National Fuel customer using less than 12,000 Mcf (thousand cubic feet) of natural gas per year, you can get thousands of dollars in rebates just for upgrading to more energy-efficient equipment.

Fixed Rebates are a fast and easy way to save on pre-qualified natural gas appliances, such as furnaces, boilers, water heaters and ovens. Or choose a Customized Rebate, which offers as much as \$15/Mcf multiplied by the gas usage savings (up to \$25,000 per project) for qualifying energy efficient furnaces, boilers, water heaters and process heating equipment.

Whichever option you choose, you'll also get ongoing savings by reducing the amount of fuel used to run your business. For details about rebates (including downloadable application forms), visit NationalFuelForThought.com.

Looking to do more? Try our Online Energy Analysis Tool.

Find out how much energy the appliances in your home or business are really using — and discover ways to save energy and money — with our customized online energy audit. Visit NationalFuelForThought.com and click on "Online Energy Analysis" to learn more.

Safety Is Our Top Priority. Make It Yours, Too.

Natural gas is clean burning and one of the safest energy sources available. So that we can continue to provide you with safe, reliable natural gas service at the lowest possible price, consider these safety tips below:

Gas Safety Inside and Outside the Home

Natural gas appliances, equipment and connectors should always be installed and used according to manufacturer's instructions. Sometimes they're even subject to manufacturer recalls. Improper use of these products, or continued use of recalled products may be dangerous for you, your family or your neighbors. We recommend periodic checks with the Consumer Product Safety Commission (**1-800-638-CPSC** or www.recalls.gov) or product manufacturers to determine if any of natural gas equipment has been recalled.

Replacing Appliance Connectors

Natural gas connectors are corrugated metal tubes used to connect gas appliances to gas supply pipes. Some older, uncoated brass connectors can crack or come apart, causing a gas leak that could result in a dangerous situation. If you have an uncoated brass connector, you should have it replaced immediately with a new connector made of either plastic-coated brass or stainless steel. After gas appliances are disconnected, remove the gas connectors and never use them again. The natural gas line should then be plugged or capped.

Only a qualified, licensed plumber, heating contractor or appliance repairperson should check your connector and replace it if needed. Do not try to do this yourself!

Do not move your appliance to check the connector. Moving the appliance, even slightly, could cause the complete failure of one of these connectors.

House Lines

All natural gas pipes and lines running from the gas meter to your appliances belong to the property owner. As the owner, you should conduct regular inspections to ensure safe operation. Owners are also responsible for maintaining and repairing their pipes and lines as needed.



Improper Piping

At National Fuel, we do not recommend that you install your own natural gas lines. Only a qualified heating contractor or plumber should install gas lines. If you need work done, ask the contractor to install rigid steel pipe or flexible stainless steel piping.

Since 1990, corrugated stainless steel tubing (CSST) has been installed in many homes and businesses, often coated with a yellow or black exterior. If lightning strikes a structure with CSST, it's possible for natural gas leaks or fires to occur. A qualified plumber should conduct an inspection to determine if CSST is present in the structure. If there is CSST, a licensed electrician can install a bonding device, which will reduce chances for natural gas leaks or fires to occur.

What to Do in Case of Flooding

If there's flooding in your home, be safe and call National Fuel, especially if you smell natural gas. Our emergency number is **1-800-444-3130**. Water can damage your natural gas appliances. If any gas appliance burner or its controls have been under water, DO NOT try to relight the appliance. Call a qualified contractor to inspect your equipment before you use it again.

Be Aware of Carbon Monoxide Poisoning

Learning to identify the symptoms of carbon monoxide poisoning is an important step toward protecting your family. Symptoms include:

- Fatigue
- Dizziness
- Coughing
- Paleness
- Headache
- Nausea
- Irregular breathing
- Cherry red lips and ears.

If you, or anyone in your house, experience these symptoms, immediately open your windows and doors to ventilate your home. Then move outside and call **9-1-1** or your fire department.

Natural Gas Pipeline Safety: What You Need To Know.

At National Fuel, our highest priority is safe and reliable delivery of natural gas. That's why we'd like you to know the facts about natural gas pipeline safety.

Interstate Pipeline Markers Show What's Below

The U.S. relies on natural gas for nearly one-fourth of its energy needs. Produced almost entirely in the U.S., this clean and efficient energy source is the most popular heating fuel. More than 2.2 million miles of pipelines efficiently deliver natural gas every day to American homes safely and reliably. Running underground, this interstate pipeline infrastructure is generally identified with pipeline markers and runs along streets, private property, easements and cross country. In the case of residential streets, natural gas utility pipelines are not extensively marked but rest assured there is infrastructure underground that safely transports natural gas to neighborhood homes.



**Know what's below.
Call before you dig.**

Interstate pipeline markers indicate the location, product carried and the pipeline operator's contact information. The area on each side of the pipeline is known as a right-of-way. To ensure continued safety, the pipeline's owners have the right to restrict certain activities on private property within a right-of-way. Pipeline markers serve a critical role by showing people who might be digging at the location of a pipeline corridor — because even minor damage to a pipeline could cause a leak or failure. We'll always respect the property, but for the sake of safety, please ensure that the right-of-way provides access to underground pipes.

Be Safe — Call Before You Dig, Drill or Blast

A damaged natural gas pipeline or service line to a house may create an explosion hazard, severe property damage and loss of vital service. If you are planning a project that involves digging, trenching, drilling, grading or excavating:

- In New York, call **8-1-1** before you dig at least three full business days before the start of your project.
- We'll send a professional to conduct a FREE site survey and mark the underground lines on your property.
- Once your underground lines have been marked, you will know the approximate location of your utility lines.
- Respect the marks and dig with care using hand tools near underground lines.
- Have an emergency plan.

8-1-1 is the national number you should call before you begin any digging project. Whether you are planning to do it yourself or hire a professional, smart digging means calling **8-1-1** before each job. In the unlikely event of a pipeline failure or leak, you may:

- Smell a rotten egg odor;
- Hear a hissing sound;
- See dirt, grass or leaves blowing from underground;
- See water bubbling in a puddle or creek; and/or
- Notice a strange patch of dead grass.

Call **1-800-444-3130** with the exact location of what you've observed. Don't assume that someone else has, or will, call to report the situation. We're available 24 hours a day, seven days a week to answer calls about leaks or other gas emergencies.

Go Green. Go Paperless. WIN \$150 in credits! Paying your bill online has never been easier.

Receiving your bills by mail wastes precious time, money, paper and postage. Once enrolled in National Fuel's Online Services, you can easily:

- Stop getting paper bills.
- Stop writing checks and save on stamps.
- Receive 24-hour access to your account.
- Stabilize your monthly bill.

And you could win a \$150 credit on your National Fuel bill if you sign up for the Direct Payment Plan or turn off your paper bill between Nov. 1, 2011 and Dec. 31, 2011. You'll automatically be entered into a drawing to win one of FIVE grand prizes of a \$150 credit to your National Fuel gas bill. To sign up or learn more, visit our website at www.nationalfuelgas.com and click on "Pay bill online/paperless billing."

OFFICIAL RULES: Drawing is open to customers of National Fuel Gas Distribution Corporation who are U.S. residents and 18 years of age or older. You will be automatically entered into the drawing when you visit www.nationalfuelgas.com and sign up for the Direct Payment Plan or by selecting the option to turn off your paper bills. Alternatively, you may enter the drawing by returning an application for the Direct Payment Plan or a postcard including your name, address and telephone number to ONLINE SERVICES, c/o National Fuel Corporate Communications Dept., 6363 Main Street, Williamsville, NY 14221. Submissions must be received by December 31, 2011. National Fuel is not responsible for any entry that is misdirected, lost, not received or illegible. Only one entry per person (includes persons enrolling in the Direct Payment Plan and turning off their paper bill). Drawing will be held on or around January 9, 2012. NO PURCHASE OR ENROLLMENT IN ONLINE PROGRAMS NECESSARY. PURCHASE OR ENROLLMENT WILL NOT IMPROVE CHANCES OF WINNING. All entrants will be eligible to win one of five grand prizes of a \$150 credit to their National Fuel gas bill. Estimated odds of winning are one in 10,000. Winner will be notified by e-mail, mail or by phone. This drawing is not open to National Fuel employees, their immediate families, employees of National Fuel's advertising agencies, or their immediate families. All entries become the property of National Fuel. Winner agrees that National Fuel shall have no liability in connection with acceptance or use of the prize offered in this sweepstakes. To have your name and address excluded from any list of names and addresses used by National Fuel to mail any sweepstakes contests, mail a sweepstakes removal request to National Fuel Notification System, c/o Corporate Communications Dept., 6363 Main Street, Williamsville, NY 14221. You may use the Notification System to prohibit the mailing of all sweepstakes contests by National Fuel to you.



National Fuel[®]

fuel for thought

NationalFuelForThought.com

	A	B	C	D	E	F	G
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6		11/10/2011					
7	Quarter	Year	Month				
8		15	Sep-11	46			
9		Total Residential					
10		Residential Appliance Rebates					
11		Appliance Rebates - Hot Air Furnace Residential	Appliance Rebates - Hot Water Boiler Residential	Appliance Rebates - Steam Boiler Residential	Appliance Rebates - Hot Air Furnace Residential ECM Motors	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Indirect Heater Residential
12	Base Analysis						
13	I. Customer and Volume Information						
14	Number of Customers Eligible	351,219	93,658	23,415	351,219	468,292	468,292
15	Participation Rate	6.71%	2.53%	0.38%	1.61%	5.81%	0.06%
16	Total Number of Participants	23,576	2,369	89	5,644	27,229	292
17	Total Annual Mcf Saved	429,480	48,919	1,638	102,816	205,812	1,618
18	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
19	Total DTH Saved	444,511	50,631	1,695	106,414	213,016	1,674
20	Mcf Saved per Participant Base	18.22	20.65	18.40	18.22	7.56	5.54
21	Multiple Factor for Sensitivity Analysis	0%	0%	0%	0%	0%	0%
22	Mcf Saved per Participant	18.22	20.65	18.40	18.22	7.56	5.54
23	DTH Saved per Participant	18.85	21.37	19.04	18.85	7.82	5.73
24	Estimated Peak Day Impact Mcf	3,922	447	15	939	1,880	15
25	Estimated Peak Day Impact DTH	4,059	462	15	972	1,945	15
26	Total Average Annual Accounts	482,775	482,775	482,775	482,775	482,775	482,775
27	Impact on Total Average Annual Usage Per Account Per Mcf	0.89	0.10	0.00	0.21	0.43	0.00
28	II. Program Cost Information						
29	Company Direct Costs	\$ 7,140,613	\$ 954,368	\$ 18,468	\$ 2,238,630	\$ 791,710	\$ 86,698
30	Company Admin Costs	\$ 222,460	\$ 29,733	\$ 575	\$ 69,743	\$ 24,665	\$ 2,701
31	Company Advertising Costs	\$ 1,683,078	\$ 224,949	\$ 4,353	\$ 527,656	\$ 186,610	\$ 20,435
32	Total Initial Program Costs - Company	\$ 9,046,150	\$ 1,209,049	\$ 23,396	\$ 2,836,029	\$ 1,002,986	\$ 109,834
33	Total Initial Program Costs - Participant	\$ 16,503,200	\$ 3,790,400	\$ 62,300	\$ 9,030,400	\$ 680,725	\$ 321,200
34	Total Initial Program Costs	\$ 25,549,350	\$ 4,999,449	\$ 85,696	\$ 11,866,429	\$ 1,683,711	\$ 431,034
35	Per Participant Initial Program Costs - Company	\$ 302.88	\$ 402.86	\$ 207.50	\$ 396.64	\$ 29.08	\$ 296.91
36	Per Participant Initial Program Costs - Participant	\$ 700.00	\$ 1,600.00	\$ 700.00	\$ 1,600.00	\$ 25.00	\$ 1,100.00
37	Total Initial Program Costs per Annual Participant	\$ 1,002.88	\$ 2,002.86	\$ 907.50	\$ 1,996.64	\$ 54.08	\$ 1,396.91
38	Annual Ongoing Costs - Company per Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	Annual Ongoing Costs - Participant per Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
40	Total Annual Ongoing Costs per Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	Annual Ongoing Costs - Company	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
42	Annual Ongoing Costs - Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Total Annual Ongoing Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44	III. Discount Assumptions						
45	Anticipated Life of Program Measure (Years)	20	25	25	17	11	25
46	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
47	PVIFA	11.9504	13.4139	13.4139	10.8646	8.0925	13.4139
48	IV. Incremental Savings						
49	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00
50	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70
51	Annual NGS Savings per Participant	\$ 163.95	\$ 185.85	\$ 165.60	\$ 163.95	\$ 68.03	\$ 49.85
52	Total NGS Savings	\$ 3,865,316	\$ 440,273	\$ 14,738	\$ 925,341	\$ 1,852,309	\$ 14,558
53	V. Direct Cost Benefit Summary						
54	Present Value of Participant Savings	\$ 1,959.28	\$ 2,492.95	\$ 2,221.35	\$ 1,781.27	\$ 550.51	\$ 668.75
55	Present Value of Total Savings	\$ 46,192,004	\$ 5,905,790	\$ 197,700	\$ 10,053,470	\$ 14,989,880	\$ 195,274
56	Present Value of Total Initial Program Costs per Annual Participant	\$ 1,003	\$ 2,003	\$ 908	\$ 1,997	\$ 54	\$ 1,397
57	Present Value of Total Initial Program Costs	\$ 25,549,350	\$ 4,999,449	\$ 85,696	\$ 11,866,429	\$ 1,683,711	\$ 431,034
58	TRC	1.81	1.18	2.31	0.85	8.90	0.45
59	VI. TRC-WNY						
60	WNY Incremental Expenditures	\$ 23,866,273	\$ 4,774,500	\$ 81,343	\$ 11,338,773	\$ 1,497,101	\$ 410,599
61	WNY Expenditure Multiplier	0.46	0.46	0.46	0.46	0.49	0.46
62	WNY Expenditure Benefits	\$ 10,978,485	\$ 2,196,270	\$ 37,418	\$ 5,215,835	\$ 733,579	\$ 188,876
63	Advertising	\$ 1,683,078	\$ 224,949	\$ 4,353	\$ 527,656	\$ 186,610	\$ 20,435
64	Advertising Multiplier	0.87	0.87	0.87	0.87	0.87	0.87
65	Advertising Benefits	\$ 1,464,278	\$ 195,706	\$ 3,787	\$ 459,061	\$ 162,351	\$ 17,779
66	WNY Expenditure & Adv Benefits	\$ 12,442,763	\$ 2,391,976	\$ 41,205	\$ 5,674,896	\$ 895,930	\$ 206,654
67	Customer Net Savings	\$ 20,642,654	\$ 906,341	\$ 112,004	\$ (1,812,959)	\$ 13,306,169	\$ (235,760)
68	WNY Income Multiplier	0.49	0.49	0.49	0.49	0.49	0.49
69	WNY Customer Net Savings Benefits	\$ 10,114,900	\$ 444,107	\$ 54,882	\$ (888,350)	\$ 6,520,023	\$ (115,522)
70	Total WNY Benefits	\$ 22,557,663	\$ 2,836,083	\$ 96,087	\$ 4,786,546	\$ 7,415,953	\$ 91,132
71	TRC-WNY	2.69	1.75	3.43	1.25	13.31	0.66
72	VII. Societal Test						
73	Environmental						
74	Total	\$ 4,661,351	\$ 595,968	\$ 19,950	\$ 1,014,521	\$ 1,512,666	\$ 19,706
75	Other						
76	Total	\$ 4,661,351	\$ 595,968	\$ 19,950	\$ 1,014,521	\$ 1,512,666	\$ 19,706
77	Total Incremental Societal Benefits	\$ 4,661,351	\$ 595,968	\$ 19,950	\$ 1,014,521	\$ 1,512,666	\$ 19,706
78	Total Benefits W/ TRC WNY	\$ 73,411,018	\$ 9,337,841	\$ 313,737	\$ 15,854,536	\$ 23,918,499	\$ 306,111
79	Societal Test	2.87	1.87	3.66	1.34	14.21	0.71

	A	B	C	D	E	F	G
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2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6	11/10/2011						
7	Quarter	Year	Month				
8		Sep-11	46				
9		Total Residential					
10	Residential Appliance Rebates						
11		Appliance Rebates - Hot Air Furnace Residential	Appliance Rebates - Hot Water Boiler Residential	Appliance Rebates - Steam Boiler Residential	Appliance Rebates - Hot Air Furnace Residential ECM Motors	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Indirect Heater Residential
80	Adjustment Detail						
81	I. Spillover						
82	Total Spillover Impact (Mcf)	-	-	-	-	-	-
83	Total Participants	23,576	2,369	89	5,644	27,229	292
84	Adjustment to Per Participant Volume Due to Spillover	-	-	-	-	-	-
85	II. Free Riders						
86	Mcf Saved per Participant	18.22	20.65	18.40	18.22	7.56	5.54
87	Free Ridership %	10%	10%	10%	10%	10%	10%
88	Adjustment to Per Participant Volume Due to Free Riders	1.82	2.06	1.84	1.82	0.76	0.55
89	III. Snapback						
90	Total Snapback Impact (Mcf)	-	-	-	-	-	-
91	Total Participants	23,576	2,369	89	5,644	27,229	292
92	Adjustment to Per Participant Volume Due to Snapback	-	-	-	-	-	-
93	IV. Total Volume Adjustment						
94	Total Volume Adjustments	(1.82)	(2.06)	(1.84)	(1.82)	(0.76)	(0.55)
95	Adjustment Impact						
96	I. Customer and Volume Information						
97	Number of Customers Eligible	351,219	93,658	23,415	351,219	468,292	468,292
98	Participation Rate	6.71%	2.53%	0.38%	1.61%	5.81%	0.06%
99	Annual Number of Participants	23,576	2,369	89	5,644	27,229	292
100	Total Mcf Adjusted	(42,948)	(4,892)	(164)	(10,282)	(20,581)	(162)
101	DTH Conversion	1,035	1,035	1,035	1,035	1,035	1,035
102	Total DTH Adjusted	(44,451)	(5,063)	(169)	(10,641)	(21,302)	(167)
103	Mcf Adjusted per Participant	(1.82)	(2.06)	(1.84)	(1.82)	(0.76)	(0.55)
104	DTH Adjusted per Participant	(1.89)	(2.14)	(1.90)	(1.89)	(0.78)	(0.57)
105	II. Program Cost Information						
106	Company Direct Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
107	Company Admin Costs						
108	Company Advertising Costs						
109	Total Initial Program Costs - Company	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	Total Initial Program Costs - Participant	\$ (1,650,320)	\$ (379,040)	\$ (6,230)	\$ (903,040)	\$ (68,073)	\$ (32,120)
111	Total Initial Program Costs	\$ (1,650,320)	\$ (379,040)	\$ (6,230)	\$ (903,040)	\$ (68,073)	\$ (32,120)
112	Per Participant Initial Program Costs - Company	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
113	Per Participant Initial Program Costs - Participant	\$ (70.00)	\$ (160.00)	\$ (70.00)	\$ (160.00)	\$ (2.50)	\$ (110.00)
114	Total Initial Program Costs per Annual Participant	\$ (70.00)	\$ (160.00)	\$ (70.00)	\$ (160.00)	\$ (2.50)	\$ (110.00)
115	Annual Ongoing Costs - Company per Participant						
116	Annual Ongoing Costs - Participant per Participant						
117	Total Annual Ongoing Costs per Participant						
118	Annual Ongoing Costs - Company						
119	Annual Ongoing Costs - Participant						
120	Total Annual Ongoing Costs						
121	III. Discount Assumptions						
122	Anticipated Life of Program Measure (Years)	-	-	-	-	-	-
123	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
124	PVIFA	-	-	-	-	-	-
125	IV. Incremental Savings						
126	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00
127	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70
128	Annual NGS Savings per Participant	\$ (16.40)	\$ (18.58)	\$ (16.56)	\$ (16.40)	\$ (6.80)	\$ (4.99)
129	Total NGS Savings	\$ (386,532)	\$ (44,027)	\$ (1,474)	\$ (92,534)	\$ (185,231)	\$ (1,456)

	A	B	C	D	E	F	G
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130	Adjusted Analysis						
131	I. Customer and Volume Information						
132	Number of Customers Eligible	351,219	93,658	23,415	351,219	468,292	468,292
133	Participation Rate	6.71%	2.53%	0.38%	1.61%	5.81%	0.06%
134	Total Number of Participants	23,576	2,369	89	5,644	27,229	292
135	Total Mcf Saved	386,532	44,027	1,474	92,534	185,231	1,456
136	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
137	Total DTH Saved	400,060	45,568	1,525	95,773	191,714	1,507
138	Mcf Saved per Participant	16.40	18.58	16.56	16.40	6.80	4.99
139	DTH Saved per Participant	16.97	19.24	17.14	16.97	7.04	5.16
140							
141	Estimated Peak Day Impact Mcf	3,529.97	402.08	13.46	845.06	1,691.61	13.29
142	Estimated Peak Day Impact Dth	3,653.52	416.15	13.93	874.64	1,750.81	13.76
143	Total Average Annual Accounts	482,775	482,775	482,775	482,775	482,775	482,775
144	Impact on Total Average Annual Usage Per Account	0.80	0.09	0.00	0.19	0.38	0.00
145	II. Program Cost Information						
146	Company Direct Costs	\$ 7,140,613	\$ 954,368	\$ 18,468	\$ 2,238,630	\$ 791,710	\$ 86,698
147	Company Admin Costs	\$ 222,460	\$ 29,733	\$ 575	\$ 69,743	\$ 24,665	\$ 2,701
148	Company Advertising Costs	\$ 1,683,078	\$ 224,949	\$ 4,353	\$ 527,656	\$ 186,610	\$ 20,435
149	Total Initial Program Costs - Company	\$ 9,046,150	\$ 1,209,049	\$ 23,396	\$ 2,836,029	\$ 1,002,986	\$ 109,834
150	Total Initial Program Costs - Participant	\$ 14,852,880	\$ 3,411,360	\$ 56,070	\$ 8,127,360	\$ 612,653	\$ 289,080
151	Total Initial Program Costs	\$ 23,899,030	\$ 4,620,409	\$ 79,466	\$ 10,963,389	\$ 1,615,638	\$ 398,914
152	Per Participant Initial Program Costs - Company	\$ 383.70	\$ 510.36	\$ 262.87	\$ 502.49	\$ 36.84	\$ 376.14
153	Per Participant Initial Program Costs - Participant	\$ 630.00	\$ 1,440.00	\$ 630.00	\$ 1,440.00	\$ 22.50	\$ 990.00
154	Total Initial Program Costs per Annual Participant	\$ 1,013.70	\$ 1,950.36	\$ 892.87	\$ 1,942.49	\$ 59.34	\$ 1,366.14
155	Annual Ongoing Costs - Company per Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
156	Annual Ongoing Costs - Participant per Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
157	Total Annual Ongoing Costs per Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
158	Annual Ongoing Costs - Company	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
159	Annual Ongoing Costs - Participant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
160	Total Annual Ongoing Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
161	III. Discount Assumptions						
162	Anticipated Life of Program Measure (Years)	20	25	25	17	11	25
163	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
164	PVIFA	11.95	13.41	13.41	10.86	8.09	13.41
165	IV. Incremental Savings						
166	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00
167	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70
168	Annual NGS Savings per Participant	\$ 147.56	\$ 167.26	\$ 149.04	\$ 147.56	\$ 61.22	\$ 44.87
169	Total NGS Savings	\$ 3,478,784	\$ 396,246	\$ 13,265	\$ 832,807	\$ 1,667,078	\$ 13,102
170	V. Direct Cost Benefit Summary						
171	Present Value of Participant Savings	\$ 1,763.35	\$ 2,243.65	\$ 1,999.21	\$ 1,603.14	\$ 495.46	\$ 601.87
172	Present Value of Total Savings	\$ 41,572,804	\$ 5,315,211	\$ 177,930	\$ 9,048,123	\$ 13,490,892	\$ 175,747
173	Present Value of Total Initial Program Costs per Annual Participant	\$ 1,014	\$ 1,950	\$ 893	\$ 1,942	\$ 59	\$ 1,366
174	Present Value of Total Initial Program Costs	\$ 23,899,030	\$ 4,620,409	\$ 79,466	\$ 10,963,389	\$ 1,615,638	\$ 398,914
175	TRC	1.74	1.15	2.24	0.83	8.35	0.44
176	VI. TRC-WNY						
177	WNY Incremental Expenditures	\$ 22,215,953	\$ 4,395,460	\$ 75,113	\$ 10,435,733	\$ 1,429,028	\$ 378,479
178	WNY Expenditure Multiplier	0.46	0.46	0.46	0.46	0.49	0.46
179	WNY Expenditure Benefits	\$ 10,219,338	\$ 2,021,912	\$ 34,552	\$ 4,800,437	\$ 700,224	\$ 174,100
180	Advertising	\$ 1,683,078	\$ 224,949	\$ 4,353	\$ 527,656	\$ 186,610	\$ 20,435
181	Advertising Multiplier	0.87	0.87	0.87	0.87	0.87	0.87
182	Advertising Benefits	\$ 1,464,278	\$ 195,706	\$ 3,787	\$ 459,061	\$ 162,351	\$ 17,779
183	WNY Expenditure & Adv Benefits	\$ 11,683,616	\$ 2,217,617	\$ 38,339	\$ 5,259,498	\$ 862,575	\$ 191,879
184	Customer Net Savings	\$ 17,673,773	\$ 694,802	\$ 98,464	\$ (1,915,266)	\$ 11,875,254	\$ (223,167)
185	WNY Income Multiplier	0.49	0.49	0.49	0.49	0.49	0.49
186	WNY Customer Net Savings Benefits	\$ 8,660,149	\$ 340,453	\$ 48,247	\$ (938,481)	\$ 5,818,874	\$ (109,352)
187	Total WNY Benefits	\$ 20,343,765	\$ 2,558,070	\$ 86,586	\$ 4,321,017	\$ 6,681,449	\$ 82,527
188	TRC-WNY	2.59	1.70	3.33	1.22	12.49	0.65
189	VII. Societal Test						
190	Environmental						
191	Total	\$ 4,195,216	\$ 536,371	\$ 17,955	\$ 913,069	\$ 1,361,400	\$ 17,735
192	Other						
193	Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Total Incremental Societal Benefits	\$ 4,195,216	\$ 536,371	\$ 17,955	\$ 913,069	\$ 1,361,400	\$ 17,735
195	Total Benefits W/TRC-WNY	\$ 66,111,784	\$ 8,409,652	\$ 282,472	\$ 14,282,209	\$ 21,533,740	\$ 276,009
196	Societal Test	2.77	1.82	3.55	1.30	13.33	0.69

	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		11/10/2011	
7	Quarter		
8		15	
9			
10		Resic	
11		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
12	Base Analysis		
13	I. Customer and Volume Information		
14	Number of Customers Eligible	468,292	23,415
15	Participation Rate	0.70%	7.33%
16	Total Number of Participants	3,274	1,717
17	Total Annual Mcf Saved	9,516	11,686
18	DTH Conversion	1.035	1.035
19	Total DTH Saved	9,849	12,095
20	Mcf Saved per Participant Base	2.91	6.81
21	Multiple Factor for Sensitivity Analysis	0%	0%
22	Mcf Saved per Participant	2.91	6.81
23	DTH Saved per Participant	3.01	7.04
24	Estimated Peak Day Impact Mcf	87	107
25	Estimated Peak Day Impact DTH	90	110
26	Total Average Annual Accounts	482,775	482,775
27	Impact on Total Average Annual Usage Per Account Per Mcf	0.02	0.02
28	II. Program Cost Information		
29	Company Direct Costs	\$ 512,381	\$ 612,511
30	Company Admin Costs	\$ 15,963	\$ 19,082
31	Company Advertising Costs	\$ 120,771	\$ 144,372
32	Total Initial Program Costs - Company	\$ 649,115	\$ 775,965
33	Total Initial Program Costs - Participant	\$ 654,800	\$ 600,950
34	Total Initial Program Costs	\$ 1,303,915	\$ 1,376,915
35	Per Participant Initial Program Costs - Company	\$ 156.50	\$ 356.73
36	Per Participant Initial Program Costs - Participant	\$ 200.00	\$ 350.00
37	Total Initial Program Costs per Annual Participant	\$ 356.50	\$ 706.73
38	Annual Ongoing Costs - Company per Participant	\$ -	\$ -
39	Annual Ongoing Costs - Participant per Participant	\$ -	\$ -
40	Total Annual Ongoing Costs per Participant	\$ -	\$ -
41	Annual Ongoing Costs - Company	\$ -	\$ -
42	Annual Ongoing Costs - Participant	\$ -	\$ -
43	Total Annual Ongoing Costs	\$ -	\$ -
44	III. Discount Assumptions		
45	Anticipated Life of Program Measure (Years)	20	20
46	Discount Rate	5.50%	5.50%
47	PVIFA	11.9504	11.9504
48	IV. Incremental Savings		
49	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00
50	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70
51	Annual NGS Savings per Participant	\$ 26.16	\$ 61.25
52	Total NGS Savings	\$ 85,644	\$ 105,172
53	V. Direct Cost Benefit Summary		
54	Present Value of Participant Savings	\$ 312.61	\$ 732.00
55	Present Value of Total Savings	\$ 1,023,475	\$ 1,256,846
56	Present Value of Total Initial Program Costs per Annual Participant	\$ 357	\$ 707
57	Present Value of Total Initial Program Costs	\$ 1,303,915	\$ 1,376,915
58	TRC	0.78	0.91
59	VI. TRC-WNY		
60	WNY Incremental Expenditures	\$ 1,183,144	\$ 1,232,543
61	WNY Expenditure Multiplier	0.46	0.46
62	WNY Expenditure Benefits	\$ 544,246	\$ 566,970
63	Advertising	\$ 120,771	\$ 144,372
64	Advertising Multiplier	0.87	0.87
65	Advertising Benefits	\$ 105,071	\$ 125,603
66	WNY Expenditure & Adv Benefits	\$ 649,317	\$ 692,573
67	Customer Net Savings	\$ (280,440)	\$ (120,068)
68	WNY Income Multiplier	0.49	0.49
69	WNY Customer Net Savings Benefits	\$ (137,415)	\$ (58,833)
70	Total WNY Benefits	\$ 511,901	\$ 633,740
71	TRC-WNY	1.18	1.37
72	VII. Societal Test		
73	Environmental		
74	Total	\$ 103,281	\$ 126,832
75	Other		
76	Total		
77	Total Incremental Societal Benefits	\$ 103,281	\$ 126,832
78	Total Benefits W/ TRC WNY	\$ 1,638,658	\$ 2,017,418
79	Societal Test	1.26	1.47

	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		11/10/2011	
7	Quarter		
8		15	
9			
10		Resic	
11		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
80	Adjustment Detail		
81	I. Spillover		
82	Total Spillover Impact (Mcf)	-	-
83	Total Participants	3,274	1,717
84	Adjustment to Per Participant Volume Due to Spillover	-	-
85	II. Free Riders		
86	Mcf Saved per Participant	2.91	6.81
87	Free Ridership %	10%	10%
88	Adjustment to Per Participant Volume Due to Free Riders	0.29	0.68
89	III. Snapback		
90	Total Snapback Impact (Mcf)	-	-
91	Total Participants	3,274	1,717
92	Adjustment to Per Participant Volume Due to Snapback	-	-
93	IV. Total Volume Adjustment		
94	Total Volume Adjustments	(0.29)	(0.68)
95	Adjustment Impact		
96	I. Customer and Volume Information		
97	Number of Customers Eligible	468,292	23,415
98	Participation Rate	0.70%	7.33%
99	Annual Number of Participants	3,274	1,717
100	Total Mcf Adjusted	(952)	(1,169)
101	DTH Conversion	1.035	1.035
102	Total DTH Adjusted	(985)	(1,209)
103	Mcf Adjusted per Participant	(0.29)	(0.68)
104	DTH Adjusted per Participant	(0.30)	(0.70)
105	II. Program Cost Information		
106	Company Direct Costs	\$ -	\$ -
107	Company Admin Costs		
108	Company Advertising Costs		
109	Total Initial Program Costs - Company	\$ -	\$ -
110	Total Initial Program Costs - Participant	\$ (65,480)	\$ (60,095)
111	Total Initial Program Costs	\$ (65,480)	\$ (60,095)
112	Per Participant Initial Program Costs - Company	\$ -	\$ -
113	Per Participant Initial Program Costs - Participant	\$ (20.00)	\$ (35.00)
114	Total Initial Program Costs per Annual Participant	\$ (20.00)	\$ (35.00)
115	Annual Ongoing Costs - Company per Participant		
116	Annual Ongoing Costs - Participant per Participant		
117	Total Annual Ongoing Costs per Participant		
118	Annual Ongoing Costs - Company		
119	Annual Ongoing Costs - Participant		
120	Total Annual Ongoing Costs		
121	III. Discount Assumptions		
122	Anticipated Life of Program Measure (Years)	-	-
123	Discount Rate	5.50%	5.50%
124	PVIFA	-	-
125	IV. Incremental Savings		
126	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00
127	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70
128	Annual NGS Savings per Participant	\$ (2.62)	\$ (6.13)
129	Total NGS Savings	\$ (8,564)	\$ (10,517)

	A	H	I
1	National Fuel Gas Distribution Corporation		
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5			
6		11/10/2011	
7	Quarter		
8		15	
9			
10		Resic	
11		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
130	Adjusted Analysis		
131	I. Customer and Volume Information		
132	Number of Customers Eligible	468,292	23,415
133	Participation Rate	0.70%	7.33%
134	Total Number of Participants	3,274	1,717
135	Total Mcf Saved	8,564	10,517
136	DTH Conversion	1.035	1.035
137	Total DTH Saved	8,864	10,885
138	Mcf Saved per Participant	2.62	6.13
139	DTH Saved per Participant	2.71	6.34
140			
141	Estimated Peak Day Impact Mcf	78.21	96.05
142	Estimated Peak Day Impact Dth	80.95	99.41
143	Total Average Annual Accounts	482,775	482,775
144	Impact on Total Average Annual Usage Per Account	0.02	0.02
145	II. Program Cost Information		
146	Company Direct Costs	\$ 512,381	\$ 612,511
147	Company Admin Costs	\$ 15,963	\$ 19,082
148	Company Advertising Costs	\$ 120,771	\$ 144,372
149	Total Initial Program Costs - Company	\$ 649,115	\$ 775,965
150	Total Initial Program Costs - Participant	\$ 589,320	\$ 540,855
151	Total Initial Program Costs	\$ 1,238,435	\$ 1,316,820
152	Per Participant Initial Program Costs - Company	\$ 198.26	\$ 451.93
153	Per Participant Initial Program Costs - Participant	\$ 180.00	\$ 315.00
154	Total Initial Program Costs per Annual Participant	\$ 378.26	\$ 766.93
155	Annual Ongoing Costs - Company per Participant	\$ -	\$ -
156	Annual Ongoing Costs - Participant per Participant	\$ -	\$ -
157	Total Annual Ongoing Costs per Participant	\$ -	\$ -
158	Annual Ongoing Costs - Company	\$ -	\$ -
159	Annual Ongoing Costs - Participant	\$ -	\$ -
160	Total Annual Ongoing Costs	\$ -	\$ -
161	III. Discount Assumptions		
162	Anticipated Life of Program Measure (Years)	20	20
163	Discount Rate	5.50%	5.50%
164	PVIFA	11.95	11.95
165	IV. Incremental Savings		
166	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00
167	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70
168	Annual NGS Savings per Participant	\$ 23.54	\$ 55.13
169	Total NGS Savings	\$ 77,079	\$ 94,655
170	V. Direct Cost Benefit Summary		
171	Present Value of Participant Savings	\$ 281.35	\$ 658.80
172	Present Value of Total Savings	\$ 921,127	\$ 1,131,162
173	Present Value of Total Initial Program Costs per Annual Participant	\$ 378	\$ 767
174	Present Value of Total Initial Program Costs	\$ 1,238,435	\$ 1,316,820
175	TRC	0.74	0.86
176	VI. TRC-WNY		
177	WNY Incremental Expenditures	\$ 1,117,664	\$ 1,172,448
178	WNY Expenditure Multiplier	0.46	0.46
179	WNY Expenditure Benefits	\$ 514,125	\$ 539,326
180	Advertising	\$ 120,771	\$ 144,372
181	Advertising Multiplier	0.87	0.87
182	Advertising Benefits	\$ 105,071	\$ 125,603
183	WNY Expenditure & Adv Benefits	\$ 619,196	\$ 664,929
184	Customer Net Savings	\$ (317,307)	\$ (185,658)
185	WNY Income Multiplier	0.49	0.49
186	WNY Customer Net Savings Benefits	\$ (155,481)	\$ (90,972)
187	Total WNY Benefits	\$ 463,715	\$ 573,957
188	TRC-WNY	1.12	1.29
189	VII. Societal Test		
190	Environmental		
191	Total	\$ 92,953	\$ 114,148
192	Other		
193	Total	\$ -	\$ -
194	Total Incremental Societal Benefits	\$ 92,953	\$ 114,148
195	Total Benefits W/TRC-WNY	\$ 1,477,796	\$ 1,819,267
196	Societal Test	1.19	1.38

	A	J	K	L	M	N	O
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6		11/10/2011					
7	Quarter						
8		15					
9							
10		Resid					
11							
11		Total Res Rebates	LIURP	Total Res	Total Non Res Rebates	General Outreach	Total Program
12	Base Analysis						
13	I. Customer and Volume Information						
14	Number of Customers Eligible		15,000		34,100	482,775	
15	Participation Rate		17.46%		3.32%	100.00%	
16	Total Number of Participants		2,619		1,133	482,775	
17	Total Annual Mcf Saved	811,483	102,456	913,939	124,374	482,775	1,521,089
18	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
19	Total DTH Saved	839,885	106,042	945,927	128,727	499,672	1,574,327
20	Mcf Saved per Participant Base		39.12		109.77	1.00	
21	Multiple Factor for Sensitivity Analysis		0%		0%	0%	
22	Mcf Saved per Participant		39.12		109.77	1.00	
23	DTH Saved per Participant		40.49		113.62	1.04	
24	Estimated Peak Day Impact Mcf	7,411	936	8,346	1,136	4,409	13,891
25	Estimated Peak Day Impact DTH	7,670	968	8,639	1,176	4,563	14,377
26	Total Average Annual Accounts	482,775	482,775	482,775	34,100	482,775	
27	Impact on Total Average Annual Usage Per Account Per Mcf	1.68	0.21	1.89	3.65	1.00	
28	II. Program Cost Information						
29	Company Direct Costs	\$ 12,355,377	\$ 8,627,445	\$ 20,982,822	\$ 1,327,548		\$ 22,310,371
30	Company Admin Costs	\$ 384,922	\$ 1,463,439	\$ 1,848,361	\$ 120,579		\$ 1,968,940
31	Company Advertising Costs	\$ 2,912,224	\$ -	\$ 2,912,224	\$ 312,910	\$ 3,225,134	\$ 6,450,267
32	Total Initial Program Costs - Company	\$ 15,652,523	\$ 10,090,884	\$ 25,743,407	\$ 1,761,037	\$ 3,225,134	\$ 30,729,578
33	Total Initial Program Costs - Participant	\$ 31,643,975	\$ -	\$ 31,643,975	\$ 4,945,861	\$ -	\$ 36,589,836
34	Total Initial Program Costs	\$ 47,296,498	\$ 10,090,884	\$ 57,387,382	\$ 6,706,898	\$ 3,225,134	\$ 67,319,414
35	Per Participant Initial Program Costs - Company		\$ 3,852.95		\$ 1,554.31	\$ 6.68	
36	Per Participant Initial Program Costs - Participant		\$ -		\$ 4,365.28	\$ -	
37	Total Initial Program Costs per Annual Participant		\$ 3,852.95		\$ 5,919.59	\$ 6.68	
38	Annual Ongoing Costs - Company per Participant		\$ -		\$ -	\$ -	
39	Annual Ongoing Costs - Participant per Participant		\$ -		\$ -	\$ -	
40	Total Annual Ongoing Costs per Participant		\$ -		\$ -	\$ -	
41	Annual Ongoing Costs - Company		\$ -		\$ -	\$ -	
42	Annual Ongoing Costs - Participant		\$ -		\$ -	\$ -	
43	Total Annual Ongoing Costs		\$ -		\$ -	\$ -	
44	III. Discount Assumptions						
45	Anticipated Life of Program Measure (Years)	19.51	25	20	17	3.75	19.3
46	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
47	PVIFA	8.8632	13.4139	12.1070	10.8646	3.3074	11.7221
48	IV. Incremental Savings						
49	Natural Gas Supply Rate (\$/Mcf)		\$ 9.00		\$ 9.00	\$ 9.00	
50	Natural Gas Supply Rate (\$/Dth)		\$ 8.70		\$ 8.70	\$ 8.70	
51	Annual NGS Savings per Participant		\$ 352.08		\$ 987.97	\$ 9.00	
52	Total NGS Savings	\$ 7,303,351	\$ 922,104	\$ 8,225,455	\$ 1,119,367	\$ 4,344,975	\$ 13,689,797
53	V. Direct Cost Benefit Summary						
54	Present Value of Participant Savings		\$ 4,722.81		\$ 10,733.88	\$ 29.77	
55	Present Value of Total Savings	\$ 79,814,438	\$ 12,369,046	\$ 92,183,484	\$ 12,161,487	\$ 14,370,481	\$ 118,715,452
56	Present Value of Total Initial Program Costs per Annual Participant		\$ 3,853		\$ 5,920	\$ 7	
57	Present Value of Total Initial Program Costs	\$ 47,296,498	\$ 10,090,884	\$ 57,387,382	\$ 6,706,898	\$ 3,225,134	\$ 67,319,414
58	TRC	1.69	1.23	1.61	1.81	4.46	1.76
59	VI. TRC-WNY						
60	WNY Incremental Expenditures	\$ 44,384,274	\$ 10,090,884	\$ 54,475,159	\$ 6,393,988	\$ -	\$ 60,869,147
61	WNY Expenditure Multiplier		0.46		0.46	0.46	
62	WNY Expenditure Benefits	\$ 20,461,679	\$ 4,641,807	\$ 25,103,486	\$ 2,941,234	\$ -	\$ 28,044,720
63	Advertising	\$ 2,912,224	\$ -	\$ 2,912,224	\$ 312,910	\$ 3,225,134	\$ 6,450,267
64	Advertising Multiplier		0.87		0.87	0.87	
65	Advertising Benefits	\$ 2,533,635	\$ -	\$ 2,533,635	\$ 272,231	\$ 2,805,866	\$ 5,611,732
66	WNY Expenditure & Adv Benefits	\$ 22,995,314	\$ 4,641,807	\$ 27,637,121	\$ 3,213,466	\$ 2,805,866	\$ 33,656,453
67	Customer Net Savings	\$ 32,517,940	\$ 2,278,162	\$ 34,796,102	\$ 5,454,589	\$ 11,145,347	\$ 51,396,038
68	WNY Income Multiplier		0.49		0.49	0.49	
69	WNY Customer Net Savings Benefits	\$ 15,933,791	\$ 1,116,299	\$ 17,050,090	\$ 2,672,749	\$ 5,461,220	\$ 25,184,059
70	Total WNY Benefits	\$ 38,929,105	\$ 5,758,106	\$ 44,687,211	\$ 5,886,215	\$ 8,267,086	\$ 58,840,512
71	TRC-WNY	2.51	1.80	2.39	2.69	7.02	2.64
72	VII. Societal Test						
73	Environmental						
74	Total	\$ 8,054,275	\$ 1,248,191	\$ 9,302,466	\$ 1,227,246	\$ 1,450,161	\$ 11,979,873
75	Other						
76	Total						
77	Total Incremental Societal Benefits	\$ 8,054,275	\$ 1,248,191	\$ 9,302,466	\$ 1,227,246	\$ 1,450,161	\$ 11,979,873
78	Total Benefits W/ TRC WNY	\$ 126,797,818	\$ 19,375,343	\$ 146,173,160	\$ 19,274,948	\$ 24,087,729	\$ 189,535,837
79	Societal Test	2.68	1.92	2.55	2.87	7.47	2.82

	A	J	K	L	M	N	O
1	National Fuel Gas Distribution Corporation						
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4	Program Measurement and Verification Summary						
5							
6		11/10/2011					
7	Quarter						
8		15					
9							
10		Resid					
11							
		Total Res Rebates	LIURP	Total Res	Total Non Res Rebates	General Outreach	Total Program
80	Adjustment Detail						
81	I. Spillover						
82	Total Spillover Impact (Mcf)		-		-	-	
83	Total Participants		2,619		1,133	482,775	
84	Adjustment to Per Participant Volume Due to Spillover		-		-	-	
85	II. Free Riders						
86	Mcf Saved per Participant		39.12		109.77	1.00	
87	Free Ridership %		0%		10%	10%	
88	Adjustment to Per Participant Volume Due to Free Riders		-		10.98	0.10	
89	III. Snapback						
90	Total Snapback Impact (Mcf)		-		-	-	
91	Total Participants		2,619		1,133	482,775	
92	Adjustment to Per Participant Volume Due to Snapback		-		-	-	
93	IV. Total Volume Adjustment						
94	Total Volume Adjustments		-		(10.98)	(0.10)	
95	Adjustment Impact						
96	I. Customer and Volume Information						
97	Number of Customers Eligible		15,000		34,100	482,775	
98	Participation Rate		17.46%		3.32%	100.00%	
99	Annual Number of Participants		2,619		1,133	482,775	
100	Total Mcf Adjusted		-		(12,437)	(48,278)	
101	DTH Conversion		1.035		1.035	1.035	
102	Total DTH Adjusted		-		(12,873)	(49,967)	
103	Mcf Adjusted per Participant		-		(10.98)	(0.10)	
104	DTH Adjusted per Participant		-		(11.36)	(0.10)	
105	II. Program Cost Information						
106	Company Direct Costs		\$ -		\$ -	\$ -	
107	Company Admin Costs		-		-	-	
108	Company Advertising Costs		-		-	-	
109	Total Initial Program Costs - Company		\$ -	\$ -	\$ -	\$ -	\$ -
110	Total Initial Program Costs - Participant		\$ -		\$ (494,586)	\$ -	
111	Total Initial Program Costs		\$ -		\$ (494,586)	\$ -	
112	Per Participant Initial Program Costs - Company		\$ -		\$ -	\$ -	
113	Per Participant Initial Program Costs - Participant		\$ -		\$ (436.53)	\$ -	
114	Total Initial Program Costs per Annual Participant		\$ -		\$ (436.53)	\$ -	
115	Annual Ongoing Costs - Company per Participant		-		-	-	
116	Annual Ongoing Costs - Participant per Participant		-		-	-	
117	Total Annual Ongoing Costs per Participant		-		-	-	
118	Annual Ongoing Costs - Company		-		-	-	
119	Annual Ongoing Costs - Participant		-		-	-	
120	Total Annual Ongoing Costs		-		-	-	
121	III. Discount Assumptions						
122	Anticipated Life of Program Measure (Years)		-		-	-	
123	Discount Rate		5.50%		5.50%	5.50%	
124	PVIFA		-		-	-	
125	IV. Incremental Savings						
126	Natural Gas Supply Rate (\$/Mcf)		\$ 9.00		\$ 9.00	\$ 9.00	
127	Natural Gas Supply Rate (\$/Dth)		\$ 8.70		\$ 8.70	\$ 8.70	
128	Annual NGS Savings per Participant		\$ -		\$ (98.80)	\$ (0.90)	
129	Total NGS Savings		\$ -		\$ (111,937)	\$ (434,498)	

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1	National Fuel Gas Distribution Corporation						
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5							
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7	Quarter						
8		15					
9							
10		Resid					
11							
		Total Res Rebates	LIURP	Total Res	Total Non Res Rebates	General Outreach	Total Program
130	Adjusted Analysis						
131	I. Customer and Volume Information						
132	Number of Customers Eligible		15,000		34,100	482,775	
133	Participation Rate		17.46%		3.32%	100.00%	
134	Total Number of Participants		2,619		1,133	482,775	
135	Total Mcf Saved	730,335	102,456	832,791	111,937	434,498	1,379,225
136	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
137	Total DTH Saved	755,897	106,042	861,939	115,855	449,705	1,427,498
138	Mcf Saved per Participant		39.12		98.80	0.90	
139	DTH Saved per Participant		40.49		102.25	0.93	
140							
141	Estimated Peak Day Impact Mcf	6,669.73	935.67	7,605.40	1,022.25	3,968.01	12,595.67
142	Estimated Peak Day Impact Dth	6,903.17	968.42	7,871.59	1,058.03	4,106.89	13,036.51
143	Total Average Annual Accounts	482,775	482,775	482,775	482,775	482,775	
144	Impact on Total Average Annual Usage Per Account	1.51	0.21	1.73		0.90	
145	II. Program Cost Information						
146	Company Direct Costs	\$ 12,355,377	\$ 8,627,445	\$ 20,982,822	\$ 1,327,548	\$ -	\$ 22,310,371
147	Company Admin Costs	\$ 384,922	\$ 1,463,439	\$ 1,848,361	\$ 120,579	\$ -	\$ 1,968,940
148	Company Advertising Costs	\$ 2,912,224	\$ -	\$ 2,912,224	\$ 312,910	\$ 3,225,134	\$ 6,450,267
149	Total Initial Program Costs - Company	\$ 15,652,523	\$ 10,090,884	\$ 25,743,407	\$ 1,761,037	\$ 3,225,134	\$ 30,729,578
150	Total Initial Program Costs - Participant	\$ 28,479,578	\$ -	\$ 28,479,578	\$ 4,451,275	\$ -	\$ 32,930,853
151	Total Initial Program Costs	\$ 44,132,101	\$ 10,090,884	\$ 54,222,985	\$ 6,212,312	\$ 3,225,134	\$ 63,660,430
152	Per Participant Initial Program Costs - Company		\$ 3,852.95		\$ 1,554.31	\$ 6.68	
153	Per Participant Initial Program Costs - Participant		\$ -		\$ 3,928.75	\$ -	
154	Total Initial Program Costs per Annual Participant		\$ 3,852.95		\$ 5,483.06	\$ 6.68	
155	Annual Ongoing Costs - Company per Participant		\$ -		\$ -	\$ -	
156	Annual Ongoing Costs - Participant per Participant		\$ -		\$ -	\$ -	
157	Total Annual Ongoing Costs per Participant		\$ -		\$ -	\$ -	
158	Annual Ongoing Costs - Company		\$ -		\$ -	\$ -	
159	Annual Ongoing Costs - Participant		\$ -		\$ -	\$ -	
160	Total Annual Ongoing Costs		\$ -		\$ -	\$ -	
161	III. Discount Assumptions						
162	Anticipated Life of Program Measure (Years)	19.51	25	21	17	3.75	19
163	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
164	PVIFA	8.86	13.41	12.13	10.86	3.31	11.73
165	IV. Incremental Savings						
166	Natural Gas Supply Rate (\$/Mcf)		\$ 9.00		\$ 9.00	\$ 9.00	
167	Natural Gas Supply Rate (\$/Dth)		\$ 8.70		\$ 8.70	\$ 8.70	
168	Annual NGS Savings per Participant		\$ 352.08		\$ 889.17	\$ 8.10	
169	Total NGS Savings	\$ 6,573,016	\$ 922,104	\$ 7,495,120	\$ 1,007,431	\$ 3,910,478	\$ 12,413,028
170	V. Direct Cost Benefit Summary						
171	Present Value of Participant Savings		\$ 4,722.81		\$ 9,660.49	\$ 26.79	
172	Present Value of Total Savings	\$ 71,832,995	\$ 12,369,046	\$ 84,202,040	\$ 10,945,338	\$ 12,933,433	\$ 108,080,812
173	Present Value of Total Initial Program Costs per Annual Participant		\$ 3,853		\$ 5,483	\$ 7	
174	Present Value of Total Initial Program Costs	\$ 44,132,101	\$ 10,090,884	\$ 54,222,985	\$ 6,212,312	\$ 3,225,134	\$ 63,660,430
175	TRC	1.63	1.23	1.55	1.76	4.01	1.70
176	VI. TRC-WNY						
177	WNY Incremental Expenditures	\$ 41,219,877	\$ 10,090,884	\$ 51,310,761	\$ 5,899,402	\$ -	\$ 57,210,163
178	WNY Expenditure Multiplier		0.46		0.46	0.46	
179	WNY Expenditure Benefits	\$ 19,004,014	\$ 4,641,807	\$ 23,645,821	\$ 2,713,725	\$ -	\$ 26,359,546
180	Advertising	\$ 2,912,224	\$ -	\$ 2,912,224	\$ 312,910	\$ 3,225,134	\$ 6,450,267
181	Advertising Multiplier		0.87		0.87	0.87	
182	Advertising Benefits	\$ 2,533,635	\$ -	\$ 2,533,635	\$ 272,231	\$ 2,805,866	\$ 5,611,732
183	WNY Expenditure & Adv Benefits	\$ 21,537,649	\$ 4,641,807	\$ 26,179,456	\$ 2,985,956	\$ 2,805,866	\$ 31,971,278
184	Customer Net Savings	\$ 27,700,894	\$ 2,278,162	\$ 29,979,055	\$ 4,733,027	\$ 9,708,299	\$ 44,420,381
185	WNY Income Multiplier		0.49		0.49	0.49	
186	WNY Customer Net Savings Benefits	\$ 13,573,438	\$ 1,116,299	\$ 14,689,737	\$ 2,319,183	\$ 4,757,067	\$ 21,765,987
187	Total WNY Benefits	\$ 35,111,087	\$ 5,758,106	\$ 40,869,193	\$ 5,305,139	\$ 7,562,933	\$ 53,737,265
188	TRC-WNY	2.42	1.80	2.31	2.62	6.36	2.54
189	VII. Societal Test						
190	Environmental						
191	Total	\$ 7,248,847	\$ 1,248,191	\$ 8,497,038	\$ 1,104,521	\$ 1,305,145	\$ 10,906,705
192	Other						
193	Total		\$ -		\$ -	\$ -	
194	Total Incremental Societal Benefits	\$ 7,248,847	\$ 1,248,191	\$ 8,497,038	\$ 1,104,521	\$ 1,305,145	\$ 10,906,705
195	Total Benefits W/TRC-WNY	\$ 114,192,929	\$ 19,375,343	\$ 133,568,271	\$ 17,354,999	\$ 21,801,511	\$ 172,724,782
196	Societal Test	2.59	1.92	2.46	2.79	6.76	2.71

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1	National Fuel Gas Distribution Corporation						
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5							
6		11/10/2011					
7	Quarter						
8		15					
9		Pre/Post Analysis					
10		Residential					
11		Appliance Rebates - Heating Systems Residential	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Water Heater Tank Residential	Appliance Rebates - Tankless Water Heater Residential	Total Res Rebates	LIURP
12	Base Analysis						
13	I. Customer and Volume Information						
14	Number of Customers Eligible	468,292	468,292	468,292	468,292		15,000
15	Participation Rate	5.56%	5.81%	0.70%	0.37%		17.46%
16	Total Number of Participants	26,034	27,229	3,274	1,717		2,619
17	Total Annual Mcf Saved	369,422	162,503	14,203	13,387	559,515	60,525
18	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
19	Total DTH Saved	382,352	168,190	14,700	13,856	579,098	62,643
20	Mcf Saved per Participant Base	14.19	5.97	4.34	7.80		23.11
21	Multiple Factor for Sensitivity Analysis	0%	0%	0%	0%		0%
22	Mcf Saved per Participant	14.19	5.97	4.34	7.80		23.11
23	DTH Saved per Participant	14.69	6.18	4.49	8.07		23.92
24	Estimated Peak Day Impact Mcf	3,374	1,484	130	122	5,110	553
25	Estimated Peak Day Impact DTH	3,492	1,536	134	127	5,289	572
26	Total Average Annual Accounts	482,775	482,775	482,775	482,775	482,775	482,775
27	Impact on Total Average Annual Usage Per Account Per Mcf	0.77	0.34	0.03	0.03	1.16	0.13
28	II. Program Cost Information						
29	Company Direct Costs	\$ 8,005,455	\$ 801,077	\$ 512,381	\$ 612,511	\$ 9,931,424	\$ 8,627,445
30	Company Admin Costs	\$ 249,404	\$ 24,957	\$ 15,963	\$ 19,082	\$ 309,406	\$ 1,463,439
31	Company Advertising Costs	\$ 1,886,926	\$ 188,818	\$ 120,771	\$ 144,372	\$ 2,340,886	\$ -
32	Total Initial Program Costs - Company	\$ 10,141,784	\$ 1,014,852	\$ 649,115	\$ 775,965	\$ 12,581,715	\$ 10,090,884
33	Total Initial Program Costs - Participant	\$ 18,223,800	\$ 680,725	\$ 654,800	\$ 600,950	\$ 20,160,275	\$ -
34	Total Initial Program Costs	\$ 28,365,584	\$ 1,695,577	\$ 1,303,915	\$ 1,376,915	\$ 32,741,990	\$ 10,090,884
35	Per Participant Initial Program Costs - Company	\$ 307.50	\$ 29.42	\$ 156.50	\$ 356.73		\$ 3,852.95
36	Per Participant Initial Program Costs - Participant	\$ 700.00	\$ 25.00	\$ 200.00	\$ 350.00		\$ -
37	Total Initial Program Costs per Annual Participant	\$ 1,007.50	\$ 54.42	\$ 356.50	\$ 706.73		\$ 3,852.95
38	Annual Ongoing Costs - Company per Participant	\$ -	\$ -	\$ -	\$ -		\$ -
39	Annual Ongoing Costs - Participant per Participant	\$ -	\$ -	\$ -	\$ -		\$ -
40	Total Annual Ongoing Costs per Participant	\$ -	\$ -	\$ -	\$ -		\$ -
41	Annual Ongoing Costs - Company	\$ -	\$ -	\$ -	\$ -		\$ -
42	Annual Ongoing Costs - Participant	\$ -	\$ -	\$ -	\$ -		\$ -
43	Total Annual Ongoing Costs	\$ -	\$ -	\$ -	\$ -		\$ -
44	III. Discount Assumptions						
45	Anticipated Life of Program Measure (Years)	17	17	14	14	16.8	25
46	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
47	PVIFA	10.8646	10.8646	9.5896	9.5896	10.7677	13.4139
48	IV. Incremental Savings						
49	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00		\$ 9.00
50	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70		\$ 8.70
51	Annual NGS Savings per Participant	\$ 127.71	\$ 53.71	\$ 39.04	\$ 70.17		\$ 207.99
52	Total NGS Savings	\$ 3,324,802	\$ 1,462,524	\$ 127,824	\$ 120,487	\$ 5,035,637	\$ 544,726
53	V. Direct Cost Benefit Summary						
54	Present Value of Participant Savings	\$ 1,387.52	\$ 583.56	\$ 374.40	\$ 672.93		\$ 2,789.96
55	Present Value of Total Savings	\$ 36,122,674	\$ 15,889,751	\$ 1,225,782	\$ 1,155,428	\$ 54,393,636	\$ 7,306,915
56	Present Value of Total Initial Program Costs per Annual Participant	\$ 1,008	\$ 54	\$ 357	\$ 707		\$ 3,853
57	Present Value of Total Initial Program Costs	\$ 28,365,584	\$ 1,695,577	\$ 1,303,915	\$ 1,376,915	\$ 32,741,990	\$ 10,090,884
58	TRC	1.27	9.37	0.94	0.84	1.66	0.72
59	VI. TRC-WNY						
60	WNY Incremental Expenditures	\$ 26,478,659	\$ 1,506,759	\$ 1,183,144	\$ 1,232,543	\$ 30,401,104	\$ 10,090,884
61	WNY Expenditure Multiplier	0.46	0.49	0.46	0.46		0.46
62	WNY Expenditure Benefits	\$ 12,180,183	\$ 738,312	\$ 544,246	\$ 566,970	\$ 14,029,711	\$ 4,641,807
63	Advertising	\$ 1,886,926	\$ 188,818	\$ 120,771	\$ 144,372	\$ 2,340,886	\$ -
64	Advertising Multiplier	0.87	0.87	0.87	0.87		0.87
65	Advertising Benefits	\$ 1,641,625	\$ 164,272	\$ 105,071	\$ 125,603	\$ 2,036,571	\$ -
66	WNY Expenditure & Adv Benefits	\$ 13,821,808	\$ 902,584	\$ 649,317	\$ 692,573	\$ 16,066,282	\$ 4,641,807
67	Customer Net Savings	\$ 7,757,090	\$ 14,194,174	\$ (78,132)	\$ (221,486)	\$ 21,651,646	\$ (2,783,969)
68	WNY Income Multiplier	0.49	0.49	0.49	0.49		0.49
69	WNY Customer Net Savings Benefits	\$ 3,800,974	\$ 6,955,145	\$ (38,285)	\$ (108,528)	\$ 10,609,306	\$ (1,364,145)
70	Total WNY Benefits	\$ 17,622,782	\$ 7,857,729	\$ 611,032	\$ 584,045	\$ 26,675,588	\$ 3,277,662
71	TRC-WNY	1.89	14.01	1.41	1.26	2.48	1.05
72	VII. Societal Test						
73	Environmental						
74	Total	\$ 3,645,229	\$ 1,603,475	\$ 123,697	\$ 116,597	\$ 5,488,998	\$ 737,359
75	Other						
76	Total						
77	Total Incremental Societal Benefits	\$ 3,645,229	\$ 1,603,475	\$ 123,697	\$ 116,597	\$ 5,488,998	\$ 737,359
78	Total Benefits W/ TRC WNY	\$ 57,390,685	\$ 25,350,955	\$ 1,960,511	\$ 1,856,070	\$ 86,558,221	\$ 11,321,936
79	Societal Test	2.02	14.95	1.50	1.35	2.64	1.12

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5							
6	11/10/2011						
7	Quarter						
8	15						
9	Pre/Post Analysis						
10	Residential						
11		Appliance Rebates - Heating Systems Residential	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Water Heater Tank Residential	Appliance Rebates - Tankless Water Heater Residential	Total Res Rebates	LIURP
80	Adjustment Detail						
81	I. Spillover						
82	Total Spillover Impact (Mcf)	-	-	-	-	-	-
83	Total Participants	26,034	27,229	3,274	1,717		2,619
84	Adjustment to Per Participant Volume Due to Spillover	-	-	-	-		-
85	II. Free Riders						
86	Mcf Saved per Participant	14.19	5.97	4.34	7.80		23.11
87	Free Ridership %	10%	10%	10%	10%		0%
88	Adjustment to Per Participant Volume Due to Free Riders	1.42	0.60	0.43	0.78		-
89	III. Snapback						
90	Total Snapback Impact (Mcf)	-	-	-	-		-
91	Total Participants	26,034	27,229	3,274	1,717		2,619
92	Adjustment to Per Participant Volume Due to Snapback	-	-	-	-		-
93	IV. Total Volume Adjustment						
94	Total Volume Adjustments	(1.42)	(0.60)	(0.43)	(0.78)		-
95	Adjustment Impact						
96	I. Customer and Volume Information						
97	Number of Customers Eligible	468,292	468,292	468,292	468,292		15,000
98	Participation Rate	5.56%	5.81%	0.70%	0.37%		17.46%
99	Annual Number of Participants	26,034	27,229	3,274	1,717		2,619
100	Total Mcf Adjusted	(36,942)	(16,250)	(1,420)	(1,339)		-
101	DTH Conversion	1,035	1,035	1,035	1,035		1,035
102	Total DTH Adjusted	(38,235)	(16,819)	(1,470)	(1,386)		-
103	Mcf Adjusted per Participant	(1.42)	(0.60)	(0.43)	(0.78)		-
104	DTH Adjusted per Participant	(1.47)	(0.62)	(0.45)	(0.81)		-
105	II. Program Cost Information						
106	Company Direct Costs	\$ -	\$ -	\$ -	\$ -		\$ -
107	Company Admin Costs						
108	Company Advertising Costs						
109	Total Initial Program Costs - Company	\$ -	\$ -	\$ -	\$ -		\$ -
110	Total Initial Program Costs - Participant	\$ (1,822,380)	\$ (68,073)	\$ (65,480)	\$ (60,095)		\$ -
111	Total Initial Program Costs	\$ (1,822,380)	\$ (68,073)	\$ (65,480)	\$ (60,095)		\$ -
112	Per Participant Initial Program Costs - Company	\$ -	\$ -	\$ -	\$ -		\$ -
113	Per Participant Initial Program Costs - Participant	\$ (70.00)	\$ (2.50)	\$ (20.00)	\$ (35.00)		\$ -
114	Total Initial Program Costs per Annual Participant	\$ (70.00)	\$ (2.50)	\$ (20.00)	\$ (35.00)		\$ -
115	Annual Ongoing Costs - Company per Participant						
116	Annual Ongoing Costs - Participant per Participant						
117	Total Annual Ongoing Costs per Participant						
118	Annual Ongoing Costs - Company						
119	Annual Ongoing Costs - Participant						
120	Total Annual Ongoing Costs						
121	III. Discount Assumptions						
122	Anticipated Life of Program Measure (Years)	-	-	-	-		-
123	Discount Rate	5.50%	5.50%	5.50%	5.50%		5.50%
124	PVIFA	-	-	-	-		-
125	IV. Incremental Savings						
126	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00		\$ 9.00
127	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70		\$ 8.70
128	Annual NGS Savings per Participant	\$ (12.77)	\$ (5.37)	\$ (3.90)	\$ (7.02)		\$ -
129	Total NGS Savings	\$ (332,480)	\$ (146,252)	\$ (12,782)	\$ (12,049)		\$ -

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7	Quarter						
8	15						
9	Pre/Post Analysis						
10	Residential						
11		Appliance Rebates - Heating Systems Residential	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Water Heater Tank Residential	Appliance Rebates - Tankless Water Heater Residential	Total Res Rebates	LIURP
130	Adjusted Analysis						
131	I. Customer and Volume Information						
132	Number of Customers Eligible	468,292	468,292	468,292	468,292		15,000
133	Participation Rate	5.56%	5.81%	0.70%	0.37%		17.46%
134	Total Number of Participants	26,034	27,229	3,274	1,717		2,619
135	Total Mcf Saved	332,480	146,252	12,782	12,049	503,564	60,525
136	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
137	Total DTH Saved	344,117	151,371	13,230	12,470	521,188	62,643
138	Mcf Saved per Participant	12.77	5.37	3.90	7.02		23.11
139	DTH Saved per Participant	13.22	5.56	4.04	7.26		23.92
140							
141	Estimated Peak Day Impact Mcf	3,036.35	1,335.64	116.73	110.03	4,598.76	552.74
142	Estimated Peak Day Impact Dth	3,142.62	1,382.39	120.82	113.89	4,759.71	572.09
143	Total Average Annual Accounts	482,775	482,775	482,775	482,775		482,775
144	Impact on Total Average Annual Usage Per Account	0.69	0.30	0.03	0.02		0.13
145	II. Program Cost Information						
146	Company Direct Costs	\$ 8,005,455	\$ 801,077	\$ 512,381	\$ 612,511	\$ 9,931,424	\$ 8,627,445
147	Company Admin Costs	\$ 249,404	\$ 24,957	\$ 15,963	\$ 19,082	\$ 309,406	\$ 1,463,439
148	Company Advertising Costs	\$ 1,886,926	\$ 188,818	\$ 120,771	\$ 144,372	\$ 2,340,886	\$ -
149	Total Initial Program Costs - Company	\$ 10,141,784	\$ 1,014,852	\$ 649,115	\$ 775,965	\$ 12,581,715	\$ 10,090,884
150	Total Initial Program Costs - Participant	\$ 16,401,420	\$ 612,653	\$ 589,320	\$ 540,855	\$ 18,144,248	\$ -
151	Total Initial Program Costs	\$ 26,543,204	\$ 1,627,504	\$ 1,238,435	\$ 1,316,820	\$ 30,725,963	\$ 10,090,884
152	Per Participant Initial Program Costs - Company	\$ 389.56	\$ 37.27	\$ 198.26	\$ 451.93		\$ 3,852.95
153	Per Participant Initial Program Costs - Participant	\$ 630.00	\$ 22.50	\$ 180.00	\$ 315.00		\$ -
154	Total Initial Program Costs per Annual Participant	\$ 1,019.56	\$ 59.77	\$ 378.26	\$ 766.93		\$ 3,852.95
155	Annual Ongoing Costs - Company per Participant	\$ -	\$ -	\$ -	\$ -		\$ -
156	Annual Ongoing Costs - Participant per Participant	\$ -	\$ -	\$ -	\$ -		\$ -
157	Total Annual Ongoing Costs per Participant	\$ -	\$ -	\$ -	\$ -		\$ -
158	Annual Ongoing Costs - Company	\$ -	\$ -	\$ -	\$ -		\$ -
159	Annual Ongoing Costs - Participant	\$ -	\$ -	\$ -	\$ -		\$ -
160	Total Annual Ongoing Costs	\$ -	\$ -	\$ -	\$ -		\$ -
161	III. Discount Assumptions						
162	Anticipated Life of Program Measure (Years)	17	17	14	14	17	25
163	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
164	PVIFA	10.86	10.86	9.59	9.59	10.77	13.41
165	IV. Incremental Savings						
166	Natural Gas Supply Rate (\$/Mcf)	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00		\$ 9.00
167	Natural Gas Supply Rate (\$/Dth)	\$ 8.70	\$ 8.70	\$ 8.70	\$ 8.70		\$ 8.70
168	Annual NGS Savings per Participant	\$ 114.94	\$ 48.34	\$ 35.14	\$ 63.16		\$ 207.99
169	Total NGS Savings	\$ 2,992,322	\$ 1,316,272	\$ 115,041	\$ 108,438	\$ 4,532,073	\$ 544,726
170	V. Direct Cost Benefit Summary						
171	Present Value of Participant Savings	\$ 1,248.77	\$ 525.20	\$ 336.96	\$ 605.64		\$ 2,789.96
172	Present Value of Total Savings	\$ 32,510,406	\$ 14,300,776	\$ 1,103,204	\$ 1,039,885	\$ 48,954,272	\$ 7,306,915
173	Present Value of Total Initial Program Costs per Annual Participant	\$ 1,020	\$ 60	\$ 378	\$ 767		\$ 3,853
174	Present Value of Total Initial Program Costs	\$ 26,543,204	\$ 1,627,504	\$ 1,238,435	\$ 1,316,820	\$ 30,725,963	\$ 10,090,884
175	TRC	1.22	8.79	0.89	0.79	1.59	0.72
176	VI. TRC-WNY						
177	WNY Incremental Expenditures	\$ 24,656,279	\$ 1,438,687	\$ 1,117,664	\$ 1,172,448	\$ 28,385,077	\$ 10,090,884
178	WNY Expenditure Multiplier	0.46	0.49	0.46	0.46		0.46
179	WNY Expenditure Benefits	\$ 11,341,888	\$ 704,956	\$ 514,125	\$ 539,326	\$ 13,100,296	\$ 4,641,807
180	Advertising	\$ 1,886,926	\$ 188,818	\$ 120,771	\$ 144,372	\$ 2,340,886	\$ -
181	Advertising Multiplier	0.87	0.87	0.87	0.87		0.87
182	Advertising Benefits	\$ 1,641,625	\$ 164,272	\$ 105,071	\$ 125,603	\$ 2,036,571	\$ -
183	WNY Expenditure & Adv Benefits	\$ 12,983,513	\$ 869,228	\$ 619,196	\$ 664,929	\$ 15,136,867	\$ 4,641,807
184	Customer Net Savings	\$ 5,967,202	\$ 12,673,272	\$ (135,230)	\$ (276,934)	\$ 18,228,309	\$ (2,783,969)
185	WNY Income Multiplier	0.49	0.49	0.49	0.49		0.49
186	WNY Customer Net Savings Benefits	\$ 2,923,929	\$ 6,209,903	\$ (66,263)	\$ (135,698)	\$ 8,931,872	\$ (1,364,145)
187	Total WNY Benefits	\$ 15,907,442	\$ 7,079,131	\$ 552,933	\$ 529,232	\$ 24,068,738	\$ 3,277,662
188	TRC-WNY	1.82	13.14	1.34	1.19	2.38	1.05
189	VII. Societal Test						
190	Environmental						
191	Total	\$ 3,280,706	\$ 1,443,127	\$ 111,327	\$ 104,937	\$ 4,940,098	\$ 737,359
192	Other						
193	Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Total Incremental Societal Benefits	\$ 3,280,706	\$ 1,443,127	\$ 111,327	\$ 104,937	\$ 4,940,098	\$ 737,359
195	Total Benefits W/TRC-WNY	\$ 51,698,555	\$ 22,823,034	\$ 1,767,464	\$ 1,674,055	\$ 77,963,109	\$ 11,321,936
196	Societal Test	1.95	14.02	1.43	1.27	2.54	1.12

	A	B	C	D	E	F	G
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6	11/10/2011						
7	Quarter	Year	Month				
8		15	Sep-11	46			
9	Total Residential						
10	Residential Appliance Rebates						
11		Appliance Rebates - Hot Air Furnace Residential	Appliance Rebates - Hot Water Boiler Residential	Appliance Rebates - Steam Boiler Residential	Appliance Rebates - Hot Air Furnace Residential ECM Motors	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Indirect Heater Residential
221	Sensitivity Analysis						
222	TRC - Free Ridership Sensitivity						
223		Adjusted Analysis - TRC					
224	0%	1.74	1.15	2.24	0.83	8.35	0.44
225	10%	1.81	1.18	2.31	0.85	8.90	0.45
226	20%	1.74	1.15	2.24	0.83	8.35	0.44
227	30%	1.66	1.11	2.16	0.80	7.75	0.43
228	40%	1.57	1.07	2.07	0.77	7.09	0.41
229	50%	1.46	1.02	1.95	0.73	6.37	0.39
230	60%	1.34	0.95	1.81	0.68	5.58	0.36
231	70%	1.18	0.87	1.64	0.62	4.70	0.33
232	80%	0.99	0.76	1.41	0.54	3.73	0.28
233		0.75	0.60	1.10	0.43	2.63	0.22
234	Societal - Test Free Ridership Sensitivity						
235		Adjusted Analysis - Societal TRC					
236	0%	2.77	1.82	3.55	1.30	13.33	0.69
237	10%	2.87	1.87	3.66	1.34	14.21	0.71
238	20%	2.77	1.82	3.55	1.30	13.33	0.69
239	30%	2.64	1.76	3.43	1.26	12.37	0.67
240	40%	2.50	1.70	3.28	1.22	11.33	0.64
241	50%	2.33	1.61	3.10	1.16	10.19	0.61
242	60%	2.13	1.51	2.89	1.09	8.93	0.58
243	70%	1.89	1.38	2.61	1.00	7.54	0.53
244	80%	1.59	1.21	2.25	0.87	5.99	0.46
245		1.22	0.97	1.77	0.71	4.25	0.38
246	TRC Gas Cost Sensitivity						
247		Adjusted Analysis - TRC					
248	\$ 16.00	1.74	1.15	2.24	0.83	8.35	0.44
249	\$ 15.00	3.09	2.05	3.98	1.47	14.84	0.78
250	\$ 14.00	2.90	1.92	3.73	1.38	13.92	0.73
251	\$ 13.00	2.71	1.79	3.48	1.28	12.99	0.69
252	\$ 12.00	2.51	1.66	3.23	1.19	12.06	0.64
253	\$ 11.00	2.32	1.53	2.99	1.10	11.13	0.59
254	\$ 10.00	2.13	1.41	2.74	1.01	10.21	0.54
255	\$ 9.00	1.93	1.28	2.49	0.92	9.28	0.49
256	\$ 8.00	1.74	1.15	2.24	0.83	8.35	0.44
257	\$ 7.00	1.55	1.02	1.99	0.73	7.42	0.39
258		1.35	0.89	1.74	0.64	6.49	0.34
259	Discount Rate Sensitivity						
260		Adjusted Analysis - TRC					
261	1%	1.74	1.15	2.24	0.83	8.35	0.44
262	2%	2.63	1.89	3.68	1.18	10.70	0.72
263	3%	2.38	1.67	3.26	1.09	10.10	0.64
264	4%	2.17	1.49	2.91	1.00	9.55	0.57
265	5%	1.98	1.34	2.61	0.92	9.04	0.51
266	6%	1.81	1.21	2.35	0.86	8.57	0.46
267	7%	1.67	1.10	2.13	0.80	8.14	0.42
268		1.54	1.00	1.95	0.74	7.74	0.38
269	Volume Savings Sensitivity						
270		Adjusted Analysis - TRC					
271	50%	1.74	1.15	2.24	0.83	8.35	0.44
272	40%	2.61	1.73	3.36	1.24	12.53	0.66
273	30%	2.44	1.61	3.13	1.16	11.69	0.62
274	20%	2.26	1.50	2.91	1.07	10.86	0.57
275	10%	2.09	1.38	2.69	0.99	10.02	0.53
276	0%	1.91	1.27	2.46	0.91	9.19	0.48
277	-10%	1.74	1.15	2.24	0.83	8.35	0.44
278	-20%	1.57	1.04	2.02	0.74	7.52	0.40
279	-30%	1.39	0.92	1.79	0.66	6.68	0.35
280	-40%	1.22	0.81	1.57	0.58	5.85	0.31
281	-50%	1.04	0.69	1.34	0.50	5.01	0.26
		0.87	0.58	1.12	0.41	4.18	0.22

	A	B	C	D	E	F	G
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6	11/10/2011						
7	Quarter	Year	Month				
8		15	Sep-11	46			
9	Total Residential						
10	Residential Appliance Rebates						
11		Appliance Rebates - Hot Air Furnace Residential	Appliance Rebates - Hot Water Boiler Residential	Appliance Rebates - Steam Boiler Residential	Appliance Rebates - Hot Air Furnace Residential ECM Motors	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Indirect Heater Residential
282	Gas Cost/Free Ridership Total Program TRC Sensitivity						
283	Gas Cost	Free Ridership					
284	1.70	0%	10%	20%	30%	40%	50%
285	\$ 16.00	3.13	3.02	2.90	2.73	2.53	2.32
286	\$ 15.00	2.93	2.83	2.71	2.55	2.38	2.18
287	\$ 14.00	2.74	2.64	2.53	2.38	2.22	2.03
288	\$ 13.00	2.54	2.45	2.35	2.21	2.06	1.89
289	\$ 12.00	2.34	2.26	2.17	2.04	1.90	1.74
290	\$ 11.00	2.15	2.08	1.99	1.87	1.74	1.60
291	\$ 10.00	1.95	1.89	1.81	1.70	1.58	1.45
292	\$ 9.00	1.76	1.70	1.63	1.53	1.43	1.31
293	\$ 8.00	1.56	1.51	1.45	1.36	1.27	1.16
294	\$ 7.00	1.37	1.32	1.27	1.19	1.11	1.02
295							
296	Gas Cost/Free Ridership Total Program TRC Sensitivity						
297	Gas Cost	Free Ridership					
298	2.71	0%	10%	20%	30%	40%	50%
299	\$ 16.00	4.85	4.68	4.49	4.23	3.94	3.61
300	\$ 15.00	4.55	4.40	4.22	3.98	3.70	3.40
301	\$ 14.00	4.26	4.12	3.95	3.72	3.47	3.18
302	\$ 13.00	3.97	3.84	3.68	3.47	3.23	2.96
303	\$ 12.00	3.68	3.56	3.41	3.22	3.00	2.75
304	\$ 11.00	3.39	3.28	3.15	2.96	2.76	2.53
305	\$ 10.00	3.10	2.99	2.88	2.71	2.52	2.32
306	\$ 9.00	2.81	2.71	2.61	2.46	2.29	2.10
307	\$ 8.00	2.52	2.43	2.34	2.20	2.05	1.88
308	\$ 7.00	2.23	2.15	2.07	1.95	1.82	1.67

	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		11/10/2011	
7	Quarter		
8		15	
9			
10		Resic	
11		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
221	Sensitivity Analysis		
222	TRC - Free Ridership Sensitivity		
223		0.74	0.86
224	0%	0.78	0.91
225	10%	0.74	0.86
226	20%	0.70	0.80
227	30%	0.65	0.74
228	40%	0.59	0.66
229	50%	0.52	0.58
230	60%	0.45	0.49
231	70%	0.36	0.39
232	80%	0.26	0.28
233			
234	Societal - Test Free Ridership Sensitivity		
235		1.19	1.38
236	0%	1.26	1.47
237	10%	1.19	1.38
238	20%	1.12	1.29
239	30%	1.04	1.19
240	40%	0.96	1.08
241	50%	0.85	0.95
242	60%	0.74	0.82
243	70%	0.61	0.66
244	80%	0.45	0.48
245			
246	TRC Gas Cost Sensitivity		
247		0.74	0.86
248	\$ 16.00	1.32	1.53
249	\$ 15.00	1.24	1.43
250	\$ 14.00	1.16	1.34
251	\$ 13.00	1.07	1.24
252	\$ 12.00	0.99	1.15
253	\$ 11.00	0.91	1.05
254	\$ 10.00	0.83	0.95
255	\$ 9.00	0.74	0.86
256	\$ 8.00	0.66	0.76
257	\$ 7.00	0.58	0.67
258	Discount Rate Sensitivity		
259		0.74	0.86
260	1%	1.12	1.30
261	2%	1.02	1.18
262	3%	0.93	1.07
263	4%	0.85	0.98
264	5%	0.78	0.90
265	6%	0.71	0.82
266	7%	0.66	0.76
267			
268	Volume Savings Sensitivity		
269		0.74	0.86
270	50%	1.12	1.29
271	40%	1.04	1.20
272	30%	0.97	1.12
273	20%	0.89	1.03
274	10%	0.82	0.94
275	0%	0.74	0.86
276	-10%	0.67	0.77
277	-20%	0.60	0.69
278	-30%	0.52	0.60
279	-40%	0.45	0.52
280	-50%	0.37	0.43
281			

	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		11/10/2011	
7	Quarter		
8		15	
9			
10		Resic	
11			
		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
282	Gas Cost/Free Ridership Total Program TRC Sensitivity		
283	Gas Cost		
284	1.70	60%	70%
285	\$ 16.00	2.08	1.80
286	\$ 15.00	1.95	1.69
287	\$ 14.00	1.82	1.58
288	\$ 13.00	1.69	1.46
289	\$ 12.00	1.56	1.35
290	\$ 11.00	1.43	1.24
291	\$ 10.00	1.30	1.13
292	\$ 9.00	1.17	1.01
293	\$ 8.00	1.04	0.90
294	\$ 7.00	0.91	0.79
295			
296	Gas Cost/Free Ridership Total Program TRC Sensitivity		
297	Gas Cost		
298	2.71	60%	70%
299	\$ 16.00	3.24	2.82
300	\$ 15.00	3.05	2.65
301	\$ 14.00	2.85	2.48
302	\$ 13.00	2.66	2.31
303	\$ 12.00	2.47	2.14
304	\$ 11.00	2.27	1.98
305	\$ 10.00	2.08	1.81
306	\$ 9.00	1.89	1.64
307	\$ 8.00	1.69	1.47
308	\$ 7.00	1.50	1.31

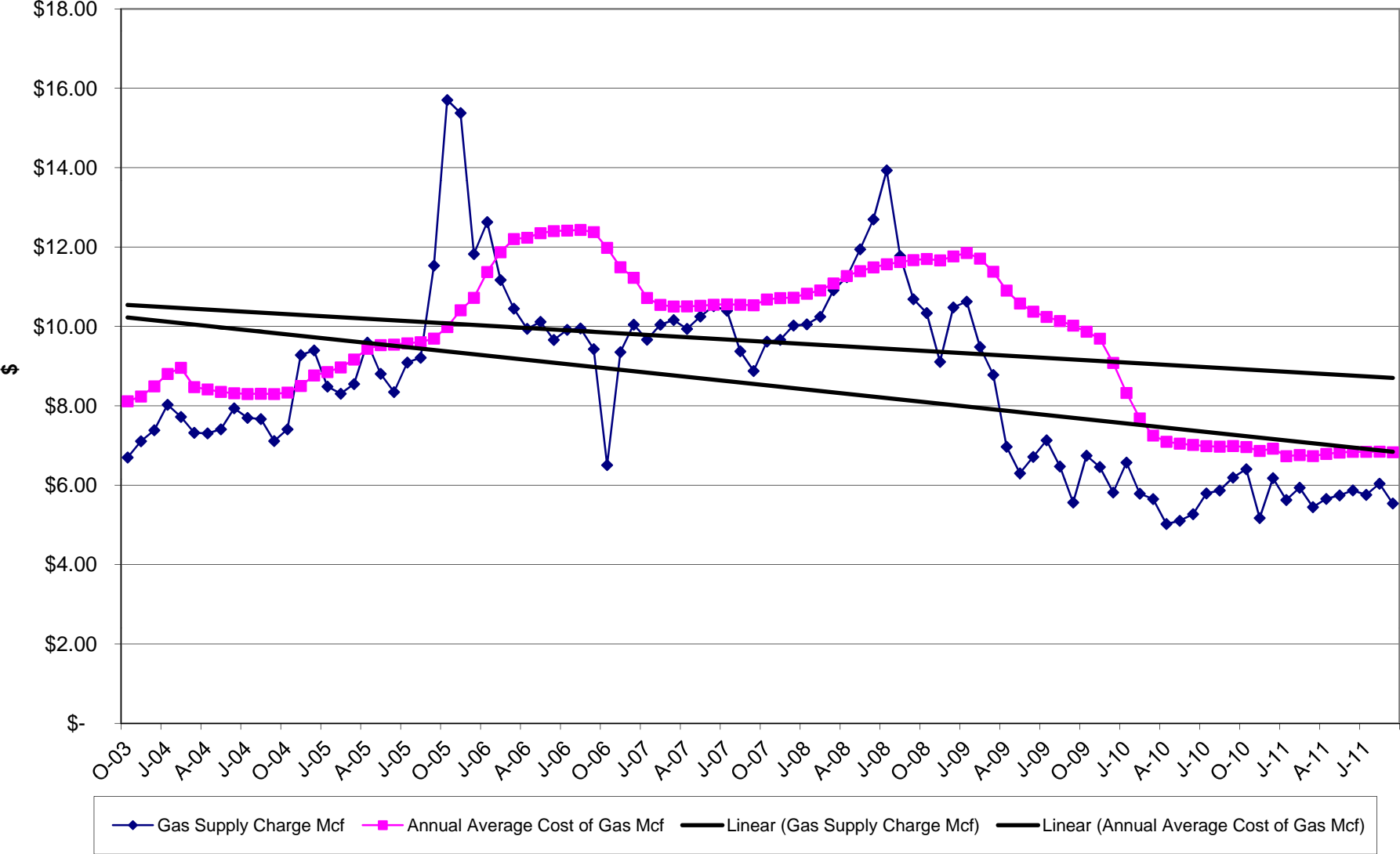
	A	J	K	L	M	N	O
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6		11/10/2011					
7	Quarter						
8		15					
9							
10		Resid					
11							
		Total Res Rebates	LIURP	Total Res	Total Non Res Rebates	General Outreach	Total Program
221	Sensitivity Analysis						
222	TRC - Free Ridership Sensitivity						
223		1.63	1.23	1.55	1.76	4.01	1.70
224	0%	1.69	1.23	1.61	1.76	4.46	1.76
225	10%	1.63	1.23	1.55	1.76	4.01	1.70
226	20%	1.56	1.21	1.49	1.76	3.56	1.63
227	30%	1.48	1.09	1.40	1.76	3.12	1.53
228	40%	1.38	0.97	1.29	1.76	2.67	1.43
229	50%	1.27	0.85	1.17	1.76	2.23	1.31
230	60%	1.13	0.72	1.02	1.76	1.78	1.17
231	70%	0.95	0.60	0.85	1.76	1.34	1.01
232	80%	0.73	0.48	0.65	1.76	0.89	0.83
233							
234	Societal - Test Free Ridership Sensitivity						
235		2.59	1.92	2.46	2.79	6.76	2.71
236	0%	2.68	1.92	2.55	2.79	7.47	2.81
237	10%	2.59	1.92	2.46	2.79	6.76	2.71
238	20%	2.48	1.90	2.37	2.79	6.05	2.61
239	30%	2.35	1.71	2.22	2.79	5.34	2.46
240	40%	2.20	1.51	2.05	2.79	4.63	2.29
241	50%	2.03	1.32	1.85	2.79	3.92	2.10
242	60%	1.81	1.12	1.63	2.79	3.22	1.89
243	70%	1.53	0.93	1.36	2.79	2.51	1.64
244	80%	1.18	0.73	1.04	2.79	1.80	1.36
245							
246	TRC Gas Cost Sensitivity						
247		1.63	1.23	1.55	1.76	4.01	1.70
248	\$ 16.00	2.89	2.18	2.76	3.13	7.13	3.02
249	\$ 15.00	2.71	2.04	2.59	2.94	6.68	2.83
250	\$ 14.00	2.53	1.91	2.42	2.74	6.24	2.64
251	\$ 13.00	2.35	1.77	2.24	2.54	5.79	2.45
252	\$ 12.00	2.17	1.63	2.07	2.35	5.35	2.26
253	\$ 11.00	1.99	1.50	1.90	2.15	4.90	2.08
254	\$ 10.00	1.81	1.36	1.73	1.96	4.46	1.89
255	\$ 9.00	1.63	1.23	1.55	1.76	4.01	1.70
256	\$ 8.00	1.45	1.09	1.38	1.57	3.56	1.51
257	\$ 7.00	1.27	0.95	1.21	1.37	3.12	1.32
258	Discount Rate Sensitivity						
259		1.63	1.23	1.55	1.76	4.01	1.70
260	1%	2.39	2.01	2.32	2.52	4.44	2.45
261	2%	2.18	1.78	2.11	2.32	4.34	2.24
262	3%	2.00	1.59	1.92	2.14	4.24	2.06
263	4%	1.83	1.43	1.76	1.97	4.15	1.90
264	5%	1.69	1.29	1.62	1.83	4.05	1.76
265	6%	1.57	1.17	1.49	1.70	3.97	1.64
266	7%	1.46	1.06	1.38	1.58	3.88	1.53
267							
268	Volume Savings Sensitivity						
269		1.63	1.23	1.55	1.76	4.01	1.70
270	50%	2.44	1.84	2.33	2.64	6.02	2.55
271	40%	2.28	1.72	2.17	2.47	5.61	2.38
272	30%	2.12	1.59	2.02	2.29	5.21	2.21
273	20%	1.95	1.47	1.86	2.11	4.81	2.04
274	10%	1.79	1.35	1.71	1.94	4.41	1.87
275	0%	1.63	1.23	1.55	1.76	4.01	1.70
276	-10%	1.46	1.10	1.40	1.59	3.61	1.53
277	-20%	1.30	0.98	1.24	1.41	3.21	1.36
278	-30%	1.14	0.86	1.09	1.23	2.81	1.19
279	-40%	0.98	0.74	0.93	1.06	2.41	1.02
280	-50%	0.81	0.61	0.78	0.88	2.01	0.85
281							

	A	J	K	L	M	N	O
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6		11/10/2011					
7	Quarter						
8		15					
9							
10		Resid					
11							
		Total Res Rebates	LIURP	Total Res	Total Non Res Rebates	General Outreach	Total Program
282	Gas Cost/Free Ridership Total Program TRC Sensitivity						
283	Gas Cost	Free Ridership					
284	1.70	80%	90%	100%			
285	\$ 16.00	1.48	1.11	0.67			
286	\$ 15.00	1.39	1.04	0.63			
287	\$ 14.00	1.30	0.97	0.59			
288	\$ 13.00	1.20	0.90	0.55			
289	\$ 12.00	1.11	0.83	0.50			
290	\$ 11.00	1.02	0.76	0.46			
291	\$ 10.00	0.93	0.69	0.42			
292	\$ 9.00	0.83	0.62	0.38			
293	\$ 8.00	0.74	0.56	0.34			
294	\$ 7.00	0.65	0.49	0.29			
295							
296	Gas Cost/Free Ridership Total Program TRC Sensitivity						
297	Gas Cost	Free Ridership					
298	2.71	80%	90%	100%			
299	\$ 16.00	2.33	1.76	1.09			
300	\$ 15.00	2.19	1.65	1.02			
301	\$ 14.00	2.05	1.55	0.96			
302	\$ 13.00	1.91	1.45	0.90			
303	\$ 12.00	1.77	1.34	0.83			
304	\$ 11.00	1.64	1.24	0.77			
305	\$ 10.00	1.50	1.14	0.71			
306	\$ 9.00	1.36	1.03	0.65			
307	\$ 8.00	1.22	0.93	0.58			
308	\$ 7.00	1.08	0.83	0.52			

	A	P	Q	R	S	T	U
1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6		11/10/2011					
7	Quarter						
8		15					
9		Pre/Post Analysis					
10		Residential					
11							
		Appliance Rebates - Heating Systems Residential	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Water Heater Tank Residential	Appliance Rebates - Tankless Water Heater Residential	Total Res Rebates	LIURP
221	Sensitivity Analysis						
222	TRC - Free Ridership Sensitivity						
223		1.22	8.79	0.89	0.79	1.59	0.72
224	0%	1.27	9.37	0.94	0.84	1.66	0.72
225	10%	1.22	8.79	0.89	0.79	1.59	0.72
226	20%	1.17	8.15	0.84	0.74	1.52	0.72
227	30%	1.10	7.46	0.77	0.68	1.43	0.64
228	40%	1.03	6.70	0.71	0.61	1.32	0.57
229	50%	0.94	5.86	0.63	0.54	1.20	0.50
230	60%	0.83	4.94	0.54	0.45	1.05	0.43
231	70%	0.69	3.91	0.43	0.36	0.88	0.35
232	80%	0.52	2.76	0.31	0.26	0.65	0.28
233							
234	Societal - Test Free Ridership Sensitivity						
235		1.95	14.02	1.43	1.27	2.54	1.12
236	0%	2.02	14.95	1.50	1.35	2.64	1.12
237	10%	1.95	14.02	1.43	1.27	2.54	1.12
238	20%	1.86	13.01	1.34	1.19	2.42	1.11
239	30%	1.76	11.91	1.25	1.09	2.28	1.00
240	40%	1.64	10.71	1.14	0.99	2.11	0.88
241	50%	1.50	9.38	1.02	0.88	1.92	0.76
242	60%	1.33	7.91	0.88	0.75	1.69	0.65
243	70%	1.12	6.28	0.72	0.61	1.42	0.53
244	80%	0.86	4.45	0.53	0.45	1.07	0.42
245							
246	TRC Gas Cost Sensitivity						
247		1.22	8.79	0.89	0.79	1.59	0.72
248	\$ 16.00	2.18	15.62	1.58	1.40	2.83	1.29
249	\$ 15.00	2.04	14.64	1.48	1.32	2.66	1.21
250	\$ 14.00	1.91	13.67	1.39	1.23	2.48	1.13
251	\$ 13.00	1.77	12.69	1.29	1.14	2.30	1.05
252	\$ 12.00	1.63	11.72	1.19	1.05	2.12	0.97
253	\$ 11.00	1.50	10.74	1.09	0.97	1.95	0.89
254	\$ 10.00	1.36	9.76	0.99	0.88	1.77	0.80
255	\$ 9.00	1.22	8.79	0.89	0.79	1.59	0.72
256	\$ 8.00	1.09	7.81	0.79	0.70	1.42	0.64
257	\$ 7.00	0.95	6.83	0.69	0.61	1.24	0.56
258	Discount Rate Sensitivity						
259		1.22	8.79	0.89	0.79	1.59	0.72
260	1%	1.75	12.59	1.21	1.07	2.28	1.19
261	2%	1.61	11.56	1.12	1.00	2.09	1.05
262	3%	1.48	10.65	1.05	0.93	1.93	0.94
263	4%	1.37	9.84	0.98	0.87	1.78	0.84
264	5%	1.27	9.12	0.92	0.82	1.65	0.76
265	6%	1.18	8.47	0.86	0.77	1.54	0.69
266	7%	1.10	7.90	0.81	0.72	1.43	0.63
267							
268	Volume Savings Sensitivity						
269		1.22	8.79	0.89	0.79	1.59	0.72
270	50%	1.84	13.18	1.34	1.18	2.39	1.09
271	40%	1.71	12.30	1.25	1.11	2.23	1.01
272	30%	1.59	11.42	1.16	1.03	2.07	0.94
273	20%	1.47	10.54	1.07	0.95	1.91	0.87
274	10%	1.35	9.67	0.98	0.87	1.75	0.80
275	0%	1.22	8.79	0.89	0.79	1.59	0.72
276	-10%	1.10	7.91	0.80	0.71	1.43	0.65
277	-20%	0.98	7.03	0.71	0.63	1.27	0.58
278	-30%	0.86	6.15	0.62	0.55	1.12	0.51
279	-40%	0.73	5.27	0.53	0.47	0.96	0.43
280	-50%	0.61	4.39	0.45	0.39	0.80	0.36
281							

	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		11/10/2011	
7	Quarter		
8		15	
9			
10		Resic	
11		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
197	Work Paper 1		
198	Participant Calculations		
199			
200	Program Participants	3,274	1,717
201	Annualization Factor	1	1
202	Total Participants for Analysis	3,274	1,717
203			
204	Workpaper 2		
205			
206	CO2 Benefit		
207			
208	Cost of CO2 \$/Ton	\$ 15.00	\$ 15.00
209			
210	Cost of CO2 \$/Pound	\$ 0.01	\$ 0.01
211			
212	Lbs CO2 / Billion BTU	117,000	117,000
213			
214	Lbs CO2 / Million BTU	117	117
215			
216	DTH Conversion Factor	1.035	1.035
217			
218	Lbs CO2 / Mcf	121.095	121.095
219			
220	Cost of CO2 \$/Mcf	\$ 0.91	\$ 0.91

Average Cost of Gas



National Fuel Gas Distribution Corporation

Conservation Incentive Program

Preliminary Measurement and Verification Analysis

Development of Multipliers Used in Development of the Western New York – Total
Resource Cost Test

August 15, 2008

Introduction

Included in the Preliminary Measurement and Verification (“M&V”) analysis of National Fuel Gas Distribution Corporation’s (“Distribution” or “the Company”) conservation incentive program (“CIP”) is an estimate of the Western New York Total Resource Cost Test (“WNY-TRC”). The WNY-TRC test was included in the CIP’s M&V analysis to provide an estimate of the impact of the benefits of the program directly to the economy of the Company’s service territory. The Company’s CIP provides two direct benefits to its service territory: (1) overall net natural gas supply cost savings to customers, and (2) increased economic activity associated with program spending.

For purposes of this analysis the Company focused on net program benefits. That is, the overall natural gas supply cost savings are the difference between savings to customers from reduced consumption less the costs incurred by the Company and the customer to bring those savings about. The direct effect of energy efficiency savings is to increase the overall income of customers within the Company’s service territory. In order to capture the ripple effect of this increase in income the Company developed an “income multiplier” for use in the CIP’s M&V analysis.

The analysis also recognizes that the cost incurred to bring those savings about has an additional benefit to the service territory since the costs incurred to bring about those savings were largely spent in the service territory. In effect, expenditures on energy efficiency initiatives by the customer and the Company transfer costs from natural gas supply charges that, for the most part, leave the service territory, to purchases of equipment and services within the service territory that ripple through the local economy to the overall benefit of the service territory. In order to capture the ripple effect of these expenditures the Company developed “expenditure multipliers” for use in the CIP M&V analysis.

The table below summarizes the multipliers used in the M&V analysis for the WNY-TRC calculation.

Multipliers Used in the CIP’s M&V Analysis	
Description	Multiplier
WNY Income Multiplier	0.49
Expenditure Multiplier – Appliance Rebates and LIURP	0.46
Expenditure Multiplier – Thermostats	0.49
Expenditure Multiplier – Advertising	0.87

Development of Multipliers

The Company utilized IMPLAN Pro® Version 2.0 to develop macroeconomic multipliers for its service territory. IMPLAN Pro® Version 2.0, uses Input-output analysis to develop multipliers for specific regions that the user can define. For purposes of the development of multipliers to be used in the WNY-TRC test the region was defined as the major counties in the Company’s service territory. As explained in the IMPLAN Pro® Version 2.0 user manual:

“Input-output analysis is a means of examining relationships within an economy, both between businesses and between businesses and final consumers. It captures all monetary market transactions for consumption in a given time period. The resulting mathematical formulae allow examination of the effects of a change in one or several economic activities on an entire economy (impact analysis).”¹

The Table below lists the counties in the Company’s service territory, including, the number of customers, and identifies whether the county was included in the analysis.

Counties in National Fuel Gas Distribution Corporation’s New York Service Territory		
Counties	Customers	Included in Study?
Allegany	10,955	Yes
Cattaraugus	13,775	Yes
Chautauqua	44,999	Yes
Erie	353,057	Yes
Genesee	11,066	Yes
Livingston	841	No
Monroe	1,039	No
Niagara	50,824	Yes
Ontario	1,792	Yes
Steuben	6,671	No
Wyoming	5,721	Yes
Total	499,740	

The counties included in the analysis were counties where the Company has a significant presence and where there are no larger population areas within the county that are served by another local natural gas distribution company.

Spending within an economy will result in three overall ripple effects: (1) direct, (2) indirect, and (3) induced. Direct effects are the impacts that result from the direct purchase of a product or service within the study area (for example, the payments made by a customer to a contractor for the installation of a furnace). Indirect effects result from the industries purchasing from other industries in order to meet the initial demand. (Continuing with the example, the contractor must purchase supplies and services from other vendors in order to support its business). Induced effects result from the impact on all local industries generated by the direct and indirect effects of the initial demand. Throughout these iterations dollars of demand “leak” from the local economy to other domestic regional (United States) and foreign economies. The energy efficiency initiatives of CIP can be seen as transferring the satisfaction of BTU demand from extra-

¹ IMPLAN Pro® Version 2.0; User Guide, Analysis Guide, Data Guide, Page 95.

regional natural gas commodity purchases to intra-regional energy efficiency purchases. In other words, without the CIP 100% of the satisfaction customer BTU demand “leaks” out of the service territory, with CIP some portion of the benefits of satisfying that demand remains in the local economy.

IMPLAN Pro® Version 2.0 provides the impact of such spending into two general categories: (1) Overall demand (“Output”), and (2) Value Added which is equal to labor income, other property type income, and indirect business taxes. For purposes of this analysis multipliers were developed focusing only on value added results in order to be conservative.

Calculation of WNY Income Multiplier

The WNY Income multiplier was developed by determining: (1) the propensity of households to spend on products and services within the service territory and, (2) a calculation of the ripple effect of such spending through the economy. Utilizing IMPLAN Pro® Version 2.0, it was determined that approximately 87% of household income in the service territory was spent on goods and services.

Page 1 of Attachment 1 to this appendix provides the various income multipliers for the households reported in IMPLAN Pro® Version 2.0. The value added multiplier for household spending within the service territory is estimated to be 56%. That is for every dollar of household spending, an additional \$0.56 of value will be added to the local economy through increased labor income, other property type income, and indirect business taxes resulting from that spending. Based on the approximately 87% of household income that is spent on goods and services by households within the service territory and the 56% value added associated with local spending an overall income multiplier to apply to savings under the CIP was calculated at 49% ($49\% = 87\%$ multiplied by 56%).

Calculation of Expenditure Multipliers

The analysis developed three expenditure multipliers to be applied in the M&V analysis to program expenditures: (1) Appliance Rebates and LIURP, (2) Thermostats, and (3) Advertising. Each of these expenditures will be satisfied from purchases of goods and services from various industries in the local economy. IMPLAN Pro® Version 2.0 can be utilized to determine the ripple effects of these purchases in the local economy. The table below provides a summary of the allocation of program costs to the selected industries in the local economy.

Expenditure Industry Allocations			
	Expenditures		
Industry Segment	Appliance Rebates and LIURP	Thermostats	Advertising
Contractors	50%	50%	
Wholesale Equipment and Insulation	50%		
Retail Building Supplies		50%	
Advertising			100%

Utilizing IMPLAN Pro® Version 2.0, the ripple effect of an assumed \$1,000,000 of purchases in each of the industries was utilized to develop the multipliers. Page 2 of Attachment 1 to this appendix provides the various multipliers reported in IMPLAN Pro® Version 2.0 for the industries utilized by the Company's CIP.

The value added multipliers for each industry are summarized in the table below.

Industry Value Added Multipliers	
Industry Segment	Multiplier
Contractors	72.2%
Wholesale Equipment and Insulation	20.0%
Retail Building Supplies	26.1%
Advertising	86.8%

Applying the value added multipliers to the allocations from the previous table determines the program multipliers used in the M&V analysis.

Expenditure Industry Multipliers			
	Expenditures		
Industry Segment	Appliance Rebates and LIURP	Thermostats	Advertising
Contractors	36.1%	36.1%	
Wholesale Equipment and Insulation	10.0%		
Retail Building Supplies		13.0%	
Advertising			86.8%
Total	46.1%	49.1%	86.8%

New York Division

Calculation of WNY Multipliers

Impact of Income Change in Selected Segment

Income Impact \$ 1,000,000

Segment: LT \$10K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 354,320	\$ 97,114	\$ 111,270	\$ 562,704
Output	\$ 950,950	\$ 183,718	\$ 186,854	\$ 1,321,522
Employment Multiplier	5.6	1.4	1.7	8.7
Value Added	35%	10%	11%	56%
Output	95%	18%	19%	132%
Segment: \$10K-15K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 354,632	\$ 97,016	\$ 112,265	\$ 563,913
Output	\$ 950,994	\$ 182,732	\$ 188,524	\$ 1,322,250
Employment Multiplier	5.9	1.4	1.8	9.1
Value Added	35%	10%	11%	56%
Output	95%	18%	19%	132%
Segment: \$15K-25K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 354,632	\$ 97,016	\$ 112,265	\$ 563,913
Output	\$ 950,994	\$ 182,732	\$ 188,524	\$ 1,322,250
Employment Multiplier	5.9	1.4	1.8	9.1
Value Added	35%	10%	11%	56%
Output	95%	18%	19%	132%
Segment: \$25K-35K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 354,126	\$ 95,425	\$ 111,538	\$ 561,089
Output	\$ 951,628	\$ 178,951	\$ 187,303	\$ 1,317,882
Employment Multiplier	5.9	1.4	1.7	9
Value Added	35%	10%	11%	56%
Output	95%	18%	19%	132%
Segment: \$35K-50K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 363,948	\$ 93,021	\$ 107,496	\$ 564,465
Output	\$ 951,775	\$ 173,671	\$ 180,517	\$ 1,305,963
Employment Multiplier	5.7	1.3	1.7	8.7
Value Added	36%	9%	11%	56%
Output	95%	17%	18%	131%
Segment: \$50K-75K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 374,539	\$ 92,880	\$ 107,337	\$ 574,756
Output	\$ 951,627	\$ 172,513	\$ 180,249	\$ 1,304,389
Employment Multiplier	5.8	1.3	1.7	8.8
Value Added	37%	9%	11%	57%
Output	95%	17%	18%	130%
Segment: \$75K-100K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 383,411	\$ 93,743	\$ 109,380	\$ 586,534
Output	\$ 951,115	\$ 173,102	\$ 183,680	\$ 1,307,897
Employment Multiplier	6.1	1.4	1.7	9.2
Value Added	38%	9%	11%	59%
Output	95%	17%	18%	131%
Segment: \$100K-150K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 383,411	\$ 93,743	\$ 109,380	\$ 586,534
Output	\$ 951,115	\$ 173,102	\$ 183,680	\$ 1,307,897
Employment Multiplier	6.1	1.4	1.7	9.2
Value Added	38%	9%	11%	59%
Output	95%	17%	18%	131%
Segment: GT \$150K				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 383,411	\$ 93,743	\$ 109,380	\$ 586,534
Output	\$ 951,115	\$ 173,102	\$ 183,680	\$ 1,307,897
Employment Multiplier	6.1	1.4	1.7	9.2
Value Added	38%	9%	11%	59%
Output	95%	17%	18%	131%

National Fuel Gas Distribution Corporation
New York Division

Calculation of WNY Multipliers

Impact of Spending in Selected Segment
Spending Amount \$ 1,000,000

Segment: Contractors				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 341,429	\$ 183,832	\$ 197,232	\$ 722,493
Output	\$ 968,335	\$ 360,096	\$ 331,211	\$ 1,659,642
Employment	6.8	2.8	3.1	12.7
Multiplier				
Value Added	34.1%	18.4%	19.7%	72.2%
Output	96.8%	36.0%	33.1%	166.0%
Segment: Retail Building Supplies				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 159,549	\$ 46,063	\$ 55,770	\$ 261,382
Output	\$ 265,187	\$ 79,724	\$ 93,651	\$ 438,562
Employment	3.4	0.7	0.9	5
Multiplier				
Value Added	16.0%	4.6%	5.6%	26.1%
Output	26.5%	8.0%	9.4%	43.9%
Segment: Wholesale				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 131,938	\$ 27,898	\$ 40,221	\$ 200,057
Output	\$ 195,701	\$ 49,399	\$ 67,541	\$ 312,641
Employment	6.8	2.8	3.1	12.7
Multiplier				
Value Added	13.2%	2.8%	4.0%	20.0%
Output	19.6%	4.9%	6.8%	31.3%
Segment: Advertising				
Impact	Direct	Indirect	Induced	Total
Value Added	\$ 486,679	\$ 164,745	\$ 216,583	\$ 868,007
Output	\$ 948,478	\$ 317,323	\$ 363,704	\$ 1,629,505
Employment	7.1	2.4	3.4	12.9
Multiplier				
Value Added	48.7%	16.5%	21.7%	86.8%
Output	94.8%	31.7%	36.4%	163.0%

M&V Multipliers				
	Direct	Indirect	Induced	Total
LIURP, Res Appliance Rebates & Commercial Rebates				
% Contractors	50%	50%	50%	50%
% Wholesale	50%	50%	50%	50%
Value Added	24%	11%	12%	46%
Output	58%	20%	20%	99%
Tstat Rebates				
% Contractors	50%	50%	50%	50%
% Retail	50%	50%	50%	50%
Value Added	25%	11%	13%	49%
Output	62%	22%	21%	105%
Outreach				
% Advertising	100%	100%	100%	100%
Value Added	48.7%	16.5%	21.7%	86.8%
Output	94.8%	31.7%	36.4%	163.0%

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
CIP SUMMARY THROUGH SEPTEMBER 30, 2011

	CIP <u>Expenditures</u>	CIP <u>Funding</u>	NYSERDA <u>Spending</u> ¹
LIURP			
Payments to NYSERDA			
2007 payments	\$500,000.00		
2008 payments	2,440,000.00		
2009 payments	3,140,000.00		
2010 payments	2,740,000.00		
2011 payments			
	5/31/2011	760,000.00	
	7/31/2011	760,000.00	
		<u>\$10,340,000.00</u>	
Expenditures made by NYSERDA			
Audit Fee/Education			\$890,022.00
Insulation			5,680,614.00
Air Sealing			907,508.00
Heating System Repair/Replacement			590,608.00
Thermostats			24,259.00
DHW Improvements			192,909.00
Showerheads			11,023.00
Pipe Wrapping			9,134.00
Other			321,368.00
Total Through 9/30/11			<u>\$8,627,445.00</u>
Residential Rebate Program			
Payments to EFI			
2007 payments	\$0.00		
2008 payments	3,103,257.08		
2009 payments	3,491,608.84		
2010 payments	4,298,665.06		
	1/28/2011	244,039.50	
	2/3/2011	242,619.00	
	2/11/2011	230,571.00	
	2/23/2011	144,558.50	
	3/11/2011	167,560.50	
	3/23/2011	103,283.46	
	4/11/2011	120,923.00	
	4/27/2011	104,140.50	
	5/6/2011	72,567.00	
	5/25/2011	65,900.50	
	6/8/2011	44,810.00	
	6/29/2011	56,363.50	
	7/13/2011	44,244.50	
	7/28/2011	55,264.00	
	8/16/2011	42,782.00	
	8/25/2011	68,446.00	
	9/9/2011	45,478.50	
	9/27/2011	69,511.00	
		<u>\$12,816,593.44</u>	
Mailing to Contractors May 2008			\$123.00
Non-residential rebates paid by EFI			<u>\$38,048.96</u>
Residential Rebates paid by EFI			<u>\$12,778,667.48</u>

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
CIP SUMMARY THROUGH SEPTEMBER 30, 2011

	CIP <u>Expenditures</u>	CIP <u>Funding</u>	NYSERDA <u>Spending</u> ¹
Non Residential Rebate Program			
Payments to NYSERDA			
2007 payments	\$200,000.00		
2008 payments	\$1,161,951.04		
2009 payments	\$0.00		
2010 payments	\$900,000.00		
	<u>\$2,261,951.04</u>		
Non-residential rebates paid by EFI	\$38,048.96		
Subtotal Non-residential Rebates	<u>\$2,300,000.00</u>		
Transfer to Multi Family Program	522,516.00		
Total Non-residential Rebates	<u><u>\$1,777,484.00</u></u>		
Expenditures by NYSERDA through 9/30/11			<u>\$1,018,318.92</u>
Jobs Encumbered through 9/30/11 or Paid by NYSERDA after 9/30/11			<u><u>\$248,604.32</u></u>

General Outreach and Education

Expenditures (In House)	<u>Cumulative</u>
Material	\$3,919.09
Transportation	191.50
Contractors	811,503.47
Office Employee	6,999.57
Print Advertising	540,173.19
Radio Advertising	417,643.81
TV Advertising	511,007.91
Brochures	70,029.06
Bill Inserts	80,295.67
Direct mail	287,007.54
Internet	185,004.21
Billboards	323,263.28
Misc. Advertising	1,159,196.90
Postage	2,216.66
Transfer to Austerity Bill Credit ²	800,000.00
	<u><u>\$5,198,451.86</u></u>

Low Income Outreach and Education

Expenditures (In House)	<u>Cumulative</u>
Material	\$568.07
Transportation	168.50
Contractors	196,389.51
Office Employee	2,378.46
Print Advertising	228,559.50
Radio Advertising	189,829.20
TV Advertising	234,652.28
Brochures	27,125.19
Bill Inserts	33,387.69
Direct mail	138,858.10
Internet	83,710.51
Billboards	162,679.26
Misc. Advertising	753,208.32
Postage	300.78
	<u><u>\$2,051,815.37</u></u>

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
CIP SUMMARY THROUGH SEPTEMBER 30, 2011

	CIP <u>Expenditures</u>	CIP <u>Funding</u>	NYSERDA <u>Spending</u> ¹
EEPS Payments to NYSERDA (Spending Assumed to be Same as Funding)			
Calendar 2010	\$5,261,392.72		
Calendar 2011 (See Page 2)	<u>3,275,425.50</u>		
	\$8,536,818.22		\$8,536,818.22
 Conservation Incentive Program Surcharge (through 9/30/11)			
		<u>Cumulative</u>	
Funding of CIPs by CMR (3/7/08)		\$1,716,259.04	
Surcharge		\$41,547,776.60	
Reconciliations		<u>\$2,213,148.73</u>	
NYSERDA Administration Fees per NYSERDA Reconciliation through November 2009			\$608,458.00
NYSERDA Interest per NYSERDA Reconciliation (NYSERDA estimate) through November 2009			<u>(\$76,422.00)</u>
 Total	 <u>\$40,683,236.93</u>	 <u>\$45,477,184.37</u>	 <u>\$18,963,222.46</u>

1 - NYSERDA Spending updated through September 30, 2011

2 - Transfer to Austerity Bill Credit C 09-M-0435

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
EEPS NYSERDA FUNDING SCHEDULE

Calendar 2010	C 09G0363					C 10M0457	Total
	7/27/09	8/24/09	10/23/09	1/4/10	6/24/10	12/30/10	
Obligations							
MultiFamily Performance Program	1,061,296.00						1,061,296.00
Low Income MultiFamily Performance Program	265,324.00				276,868.00		542,192.00
Industrial and Process Efficiency Program		581,128.00			202,731.00		783,859.00
Large Commercial and Industrial Energy Efficiency Program							0.00
Existing Facilities Program			79,590.00				79,590.00
FlexTech Program			23,417.00		27,115.00		50,532.00
High Performance New Construction Program				56,329.00			56,329.00
Home Performance with Energy Star Program				1,112,377.00			1,112,377.00
NY Energy Star Homes (New Construction)				819,646.00			819,646.00
Assisted Home Performance with Energy Star Program				325,688.00			325,688.00
EmPower New York				325,688.00	86,683.00		412,371.00
Agriculture Energy Efficiency					17,512.00		17,512.00
Low Income Single Family Home Performance (New & Existing)							0.00
Low Income Multifamily Building Performance							0.00
	<u>1,326,620.00</u>	<u>581,128.00</u>	<u>103,007.00</u>	<u>2,639,728.00</u>	<u>610,909.00</u>	<u>0.00</u>	<u>5,261,392.00</u>
Payments to NYSERDA							
2/10/2010	17,546.75	581,128.00	103,007.00				701,681.75
4/15/2010				879,909.66			879,909.66
4/30/2010	436,357.75						436,357.75
5/27/2010				879,909.75			879,909.75
7/31/2010	436,357.75						436,357.75
8/31/2010				879,909.31			879,909.31
10/5/2010					524,226.00		524,226.00
10/29/2010	436,357.75				86,683.00		523,040.75
	<u>1,326,620.00</u>	<u>581,128.00</u>	<u>103,007.00</u>	<u>2,639,728.72</u>	<u>610,909.00</u>	<u>0.00</u>	<u>5,261,392.72</u>

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
EEPS NYSERDA FUNDING SCHEDULE

Calendar 2011	C 09G0363					C 10M0457	Total
	7/27/09	8/24/09	10/23/09	1/4/10	6/24/10	12/30/10	
Obligations							
MultiFamily Performance Program	849,036.00						849,036.00
Low Income MultiFamily Performance Program	212,260.00				562,125.00		774,385.00
Industrial and Process Efficiency Program		581,128.00					581,128.00
Large Commercial and Industrial Energy Efficiency Program					405,463.00		405,463.00
Existing Facilities Program			106,120.00				106,120.00
FlexTech Program			35,459.00		54,230.00		89,689.00
High Performance New Construction Program				89,482.00			89,482.00
Home Performance with Energy Star Program				1,483,170.00			1,483,170.00
NY Energy Star Homes (New Construction)				1,092,861.00			1,092,861.00
Assisted Home Performance with Energy Star Program				434,251.00			434,251.00
EmPower New York				434,251.00	175,992.00		610,243.00
Agriculture Energy Efficiency					35,023.00		35,023.00
Low Income Single Family Home Performance (New & Existing)							0.00
Low Income Multifamily Building Performance							0.00
	<u>1,061,296.00</u>	<u>581,128.00</u>	<u>141,579.00</u>	<u>3,534,015.00</u>	<u>1,232,833.00</u>	<u>0.00</u>	<u>6,550,851.00</u>
Payments to NYSERDA							
1/28/2011	265,324.00	145,282.00					410,606.00
4/30/2011			35,394.75	883,503.75	308,208.25		1,227,106.75
7/31/2011	265,324.00	145,282.00	35,394.75	883,503.75	308,208.25		1,637,712.75
							0.00
	<u>530,648.00</u>	<u>290,564.00</u>	<u>70,789.50</u>	<u>1,767,007.50</u>	<u>616,416.50</u>	<u>0.00</u>	<u>3,275,425.50</u>

Appendix H - Residential CIP Rebate Program Customer Survey Results Cumulative thru 09/30/2011

	Total	
Rebates Received	52,841	
Flawed Rebates	11,208	21% of 52,841 Rebates Received
Rebates Processed	41,633	79% of 52,841 Rebates Received
Randomly Selected Customers	4,157	10% of 41,633 Rebates Processed
Customers Actually Contacted	3,157	8% of 41,633 Rebates Processed
Responsive Customers	<u>1,843</u>	4% of 41,633 Rebates Processed
Non-Responsive Customers (refused to participate or hung up on phone rep)	1,314	3% of 41,633 Rebates Processed
Q1 - Program Awareness		
Contractor	1,208	66% of Customers Responding
NFG Bill Insert	244	13% " " "
News/Newspapers	182	10% " " "
Friends/Word of Mouth	194	11% " " "
TV	152	8% " " "
NFG Website	125	7% " " "
NFG Letters	24	1% " " "
NFG Billboards	19	1% " " "
Radio	62	3% " " "
Other	6	
*Note: responses total > 1843 since many customers cited several sources	<u><u>2,216</u></u>	
Q2 - Rebate Influence on Upgrade Decision		
Not Important	259	14% of the Customers were NOT Influenced by the NFG rebate in their purchase
Somewhat Important	673	37%
Very Important	910	49% 86% of the Customers were Influenced by the NFG rebate in their purchase
	<u>1,842</u>	
Q3 - Received Rebate Check		
Yes	1,775	96% of the Customers had received their rebate check
No	67	4%
	<u>1,842</u>	
Q4 - Satisfaction with Time to Receive Rebate		
1- Very Dissatisfied	43	2% 5% of the Customers were NOT satisfied with the time it took to receive rebate
2- Dissatisfied	48	3%
3- Neither Dissatisfied or Satisfied	167	9%
4- Satisfied	357	20%
5- Very Satisfied	1,159	65% 85% of the Customers were satisfied with the time it took to receive rebate
	1,774	
N/A	68	4% of the Customers had NOT received their rebate check
	<u>1,842</u>	
Q5 - Satisfaction with the Application Process		
1- Very Dissatisfied	36	2% 4% of the Customers were NOT satisfied with the application process
2- Dissatisfied	37	2%
3- Neither Dissatisfied or Satisfied	142	8%
4- Satisfied	409	22%
5- Very Satisfied	1,216	66% 88% of the Customers were satisfied with the application process
	<u>1,840</u>	
Q6 - Satisfaction with Administrator, EFI		
1- Very Dissatisfied	23	5% 7% of the Customers contacting EFI by phone were NOT satisfied with EFI
2- Dissatisfied	9	2%
3- Neither Dissatisfied or Satisfied	50	10%
4- Satisfied	89	19%
5- Very Satisfied	308	64% 83% of the Customers contacting EFI by phone were satisfied with EFI
	479	
N/A	1,361	74% of the Customers did not contact EFI by phone
	<u>1,840</u>	
Q7 - Satisfaction with Inspection by CSG		
1- Very Dissatisfied	8	2% 2% of the Customers with inspections were NOT satisfied with CSG
2- Dissatisfied	3	0%
3- Neither Dissatisfied or Satisfied	16	4%
4- Satisfied	40	11%
5- Very Satisfied	301	82% 93% of the Customers with inspections were satisfied with CSG
	368	
N/A	1,361	79% of the Customers had no inspection done
	<u>1,729</u>	
Q8 - Overall Satisfaction with Rebate Program		
1- Very Dissatisfied	20	1% 1% of the Customers were NOT satisfied with rebate program
2- Dissatisfied	8	0%
3- Neither Dissatisfied or Satisfied	61	3%
4- Satisfied	250	14%
5- Very Satisfied	1,501	82% 96% of the Customers were satisfied with rebate program
	<u>1,840</u>	

Pre-/Post Consumption Analysis Methodology

The pre/post analysis of customer consumption reviewed the consumption characteristics for customers receiving rebates twelve months before the customer installed the high efficiency natural gas equipment and twelve months after the customer installed the high efficiency natural gas equipment. All consumption information was normalized to remove the effects of weather from the pre/post consumption analysis.

The procedure for conducting the analysis followed the following steps. From the customer's rebate application the month that the customer installed the high efficiency natural gas equipment was determined. The customer's consumption for the twelve months previous to the equipment installation was determined, summed for all customers receiving rebates during the month, and the changes in consumption due to weather were eliminated. That is, the customers' previous months consumption was "weather normalized". The analysis next determined the customer's consumption for the twelve months after the equipment was installed, summed the consumption information, and weather normalized that data stream. If a customer did not have twelve months of pre or post equipment consumption available for analysis that customer was removed from the analysis.

The Company currently has thirty-two months of complete pre and post consumption data for the following residential rebate categories: (1) Heating Systems, (2) Programmable Thermostats, (3) Heating Systems with Programmable Thermostats, (4) Hot Water Tank Systems, and (5) Tankless Hot water Systems. In order to isolate the impact of the effect of installing individual units, customers that installed multiple high efficiency applications were removed from the analysis. Twenty-eight months of data is available for the Company's Low Income Usage Reduction Program ("LIURP"). The Company currently has pre/post consumption data for the time periods provided in Table 1 below.

Table 1		
Month Equipment Installed	Pre Equipment Installation Consumption Month	Post Equipment Installation Consumption Month
November 2007	November 2006-October 2007	December 2007 – November 2008
December 2007	December 2006-November 2007	January 2008-December 2008
January 2008	January 2007-December 2007	February 2008-January 2009
February 2008	February 2007-January 2008	March 2008-February 2009
March 2008	March 2007-February 2008	April 2008-March 2009
April 2008	April 2007-March 2008	May 2008–April 2009
May 2008	May 2007 – April 2008	June 2008–May 2009
June 2008	June 2007 – May 2008	July 2008-June 2009
July 2008	July 2007-June 2008	August 2008-July 2009
August 2008	August 2007-July 2008	September 2008–August 2009
September 2008	September 2007-August 2008	October 2008-September 2009
October 2008	October 2007-September 2008	November 2008-October 2009
November 2008	November 2007-October 2008	December 2008-November 2009
December 2008	December 2007-November 2008	January 2009-December 2009
January 2009	January 2008-December 2008	February 2009-January 2010
February 2009	February 2008-January 2009	March 2009-February 2010
March 2009	March 2008-February 2009	April 2009-March 2010
April 2009	April 2008-March 2009	May 2009–April 2010
May 2009	May 2008 – April 2009	June 2009–May 2010
June 2009	June 2008 – May 2009	July 2009-June 2010
July 2009	July 2008 – June 2009	August 2009 – July 2010
August 2009	August 2008 – July 2009	September 2009 – August 2010
September 2009	September 2008 – August 2009	October 2009 – September 2010
October 2009	October 2008-September 2009	November 2009-October 2010
November 2009	November 2008-October 2009	December 2009-November 2010
December 2009	December 2008-November 2009	January 2010-December 2010
January 2010	January 2009-December 2009	February 2010-January 2011
February 2010	February 2009-January 2010	March 2010-February 2011
March 2010	March 2009-February 2010	April 2010-March 2011
April 2010	April 2009-March 2010	May 2010–April 2011
May 2009	May 2009 – April 2010	June 2010–May 2011
June 2009	June 2009 – May 2010	July 2010-June 2011

The average consumption change for the months tested is summarized in Table 2 below.

Table 2		
Equipment	Change in Consumption Per Account	
	Mcf per Account	Percent Change
Heating Systems	14.190	12.9%
Programmable Thermostats	5.968	5.9%
Heating Systems W/P.Tstats	13.960	13.1%
Storage Tank Water Heater	4.338	4.1%
Tankless Water Heater	7.797	7.7%
LIURP (Data for 25 Mths)	23.110	13.4%

Attachment 1 to this appendix provides the consumption change for each piece of equipment by month.

How do these results compare to the changes in consumption for the average residential account on the Company's system and the average usage per account for non-participating customers? Attachment 2 provides a response to these questions. Attachment 2 provides a graphical representation of pre and post rebate percent average annual savings by month, percent average changes in residential usage per account by month, and estimated percent average changes in non-participant usage per account by month. As can be seen from these graphs the percent average reduction in usage for customers receiving heating system rebates and LIURP program participants is significantly greater than the average for the residential customer class as a whole and the estimated percent average reduction in the usage per account of the non-participating customers. Reductions in usage for customers receiving rebates for thermostats only was lower than LIURP customers and customers receiving rebates for heating systems. Customers receiving rebates for hot water systems had usage reductions only slightly above the average for the residential class as a whole and non-participating customers. Attachment 3 provides a description of how the average changes in normalized residential class usage per account and changes in non-participant usage per account were estimated. Attachment 3 also explains why using such total system averages is a reasonable benchmark the National Fuel Gas Distribution Corporations service territory.

The Company has compared its weather normalization method used in its pre and post consumption analysis with the Princeton Scorekeeping Method (PRISM). The weather normalization technique utilized by the Company is the standard weather normalization technique utilized by the Company for reporting purposes for rate cases, Company sales forecasts, gas supply planning, etc. PRISM is a statistical procedure that utilizes simple regression analysis for determining weather normalized consumption.

Both the Company weather normalization method and PRISM share the basic formula that customer consumption will be equal to the summation of a customer's non-heating sensitive (eg., cooking, water heating, clothes drying, etc) requirements and heat sensitive requirements (eg., the space heating applications of furnaces and boilers). Both models also share the

assumption that heat sensitive requirements will be the function of usage per heating degree day multiplied by the total number of heating degree days. Where the methods differ is in the calculation of the non-heating variable and the usage per heating degree day variable. Under the Company method the non-heating usage per month is determined to be the average monthly consumption in months with no heating degree days (typically July and August). The Company then determines the usage per heating degree day by month to be the ratio of monthly consumption less non-heating usage per month divided by the number of heating degree days in the month. The Company method defines heating degree days using the same definition of the National Oceanic and Atmospheric Administration (“NOAA”), namely, total heating degree days are the difference between the base temperature of 65° F and actual daily temperature (actual temperatures above 65° F are consider to be cooling degree days). The PRISM methodology utilizes simple regression analysis for determining these variables. The PRISM methodology utilizes an iterative analysis to determine base consumption. That is the PRISM methodology adjusts the base temperature used for determining HDD in a step by step manner recalculating the regression analysis. The PRSIM method determines the level of base temperature for calculating HDDs, the non-heating (constant) variable, and the heating usage per degree day variables by using the regression model that yields the best R² (a statistical measure of the explanatory power of the model – ie., the higher the R² the better the variables in the model explain consumption). Where the Company method uses a constant base temperature (65° F) for each set of pre and post consumption analysis, the PRISM model will determine base temperature upon the “best fitting” regression line.

The purpose of this report is not to identify the merits of the PRISM methodology or the methodology used by the Company. The purpose is to identify what the differences in those methods are. The Table 3 below summarizes the total results of the two methods for heating system rebates and the LIURP program. Attachment 4 provides additional results on a monthly basis.

Table 3						
Weather Normalized Consumption – Mcf						
	Usage Per Account				Weighted Annual Consumption	
	1 Year Prior	1 Year After	Change	% Change	Pre	Post
Heating Systems – Total Installed 11/07-03/09						
Company Method	113.463	100.209	-13.254	-11.7%	355,820.4	314,255.4
PRISM	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6
LIURP						
Company Method	191.197	166.165	-25.032	-13.1%	89,671.3	77,931.1
PRISM	190.729	166.031	-24.699	-12.9%	89,452.1	77,868.4

The Company's pre-post billing methodology has also been reviewed independently by The Cadmus Group, Inc. / Energy Services ("Cadmus"). A copy of the Cadmus draft report is provided in Attachment 5 to this appendix. The Cadmus report concluded with the following recommendation:

"In the current evaluation methodology, National Fuel incorporates a simple yet robust monthly level billing analysis method. Cadmus does not recommend that National Fuel change its method since it is an excellent method for determining savings. The method provides both reliable savings estimates and a simple weather normalization method. Furthermore, the Company method yields transparent monthly estimates of savings, and can be used to calculate savings for each month, ideal for savings reporting. This is also helpful for finding the weather normalized savings on a monthly basis for a specific measure category in a given installation month."

National Fuel Gas Distribution Corporation
New York Division
Conservation Incentive Program
Residential Appliance Rebate Program
Pre and Post Installation Consumption Analysis

Month Unit Installed	Customers	Heating System Only										Weighted Annual Consumption			
		1 Year Prior to Installation					1 Year After Installation					1 Year Prior to Installation		1 Year After Installation	
		Installation	Installation	Change	% Change	Post	Installation	Installation	Change	% Change	Post	Pre	Post	Pre	Post
November-07	201	112,044	98,313	-13,731	-12.3%	19,760.9	112,044	97,002	-15,042	-13.4%	22,520.8	19,497.4	22,520.8	18,750.3	
December-07	359	113,612	99,054	-14,558	-12.8%	35,560.4	113,612	95,280	-18,332	-16.1%	40,786.7	34,205.5	40,786.7	33,404.6	
January-08	213	116,975	106,109	-10,866	-9.3%	22,601.2	116,975	102,553	-14,422	-12.3%	24,915.7	21,843.8	24,915.7	21,522.8	
February-08	146	114,084	100,864	-13,220	-11.6%	14,726.1	114,084	99,254	-14,830	-13.0%	16,656.3	14,491.1	16,656.3	14,389.9	
March-08	113	115,928	102,260	-13,668	-11.8%	13,099.9	115,928	98,500	-17,428	-15.0%	13,099.9	11,130.5	13,099.9	10,932.3	
April-08	91	111,945	98,904	-13,041	-11.6%	9,000.3	111,945	98,038	-15,907	-14.2%	10,187.0	8,739.5	10,187.0	8,949.1	
May-08	101	103,957	90,811	-13,146	-12.6%	10,499.7	103,957	87,860	-16,097	-15.5%	10,499.7	8,873.9	10,499.7	8,967.7	
June-08	95	112,103	99,062	-13,041	-11.6%	10,649.8	112,103	97,850	-14,253	-12.7%	10,649.8	9,295.8	10,649.8	9,465.0	
July-08	121	100,443	90,239	-10,144	-10.1%	12,153.6	100,443	87,859	-12,584	-12.5%	12,153.6	10,630.9	12,153.6	10,630.9	
August-08	137	105,998	91,530	-14,468	-13.6%	14,521.7	105,998	90,408	-15,590	-14.7%	14,521.7	12,385.9	14,521.7	12,385.9	
September-08	163	107,441	91,271	-16,170	-15.1%	17,512.9	107,441	89,557	-17,884	-16.6%	17,512.9	14,597.8	17,512.9	14,597.8	
October-08	221	117,632	101,013	-16,619	-14.1%	25,986.7	117,632	97,452	-20,180	-17.2%	25,986.7	21,536.9	25,986.7	21,536.9	
November-08	221	108,129	93,513	-14,616	-13.5%	20,666.4	108,129	90,580	-17,549	-16.2%	23,896.5	20,018.2	23,896.5	20,018.2	
December-08	233	105,149	93,167	-11,982	-11.4%	21,707.9	105,149	91,038	-14,111	-13.4%	24,499.7	21,211.9	24,499.7	21,211.9	
January-09	184	115,497	104,838	-10,659	-9.2%	19,290.2	115,497	102,792	-12,705	-11.0%	21,251.4	18,913.7	21,251.4	18,913.7	
February-09	146	112,629	99,129	-13,500	-12.0%	16,443.8	112,629	96,773	-15,856	-14.1%	16,443.8	14,128.9	16,443.8	14,128.9	
March-09	114	115,457	101,215	-14,242	-12.3%	13,162.1	115,457	102,688	-12,769	-11.1%	13,162.1	11,706.4	13,162.1	11,706.4	
April-09	81	103,953	89,570	-14,383	-13.8%	8,420.2	103,953	90,868	-13,085	-12.6%	8,420.2	7,360.3	8,420.2	7,360.3	
May-09	85	104,827	92,015	-12,812	-12.2%	8,910.3	104,827	93,173	-11,654	-11.1%	8,910.3	7,919.7	8,910.3	7,919.7	
June-09	85	113,715	93,055	-20,660	-18.2%	9,665.8	113,715	96,116	-17,599	-15.5%	9,665.8	8,169.9	9,665.8	8,169.9	
July-09	88	108,043	90,629	-17,414	-16.1%	7,975.4	108,043	95,078	-12,965	-11.9%	7,975.4	7,191.7	7,975.4	7,191.7	
August-09	98	107,097	91,405	-15,692	-14.7%	10,495.5	107,097	96,116	-10,981	-10.1%	10,495.5	9,665.8	10,495.5	9,665.8	
September-09	164	105,413	91,430	-13,983	-13.3%	17,287.7	105,413	92,127	-13,286	-12.6%	17,287.7	14,994.5	17,287.7	14,994.5	
October-09	291	108,319	93,423	-14,896	-13.8%	31,520.8	108,319	95,078	-13,241	-12.2%	31,520.8	27,186.1	31,520.8	27,186.1	
November-09	317	106,269	89,180	-17,089	-16.1%	33,687.3	106,269	88,180	-18,089	-17.0%	33,687.3	28,270.1	33,687.3	28,270.1	
December-09	225	114,054	97,515	-16,539	-14.5%	25,662.2	114,054	97,515	-16,539	-14.5%	25,662.2	21,940.9	25,662.2	21,940.9	
January-10	150	105,848	91,115	-14,733	-13.9%	15,877.2	105,848	91,115	-14,733	-13.9%	15,877.2	13,667.3	15,877.2	13,667.3	
February-10	118	104,624	93,078	-11,546	-11.0%	12,345.6	104,624	93,078	-11,546	-11.0%	12,345.6	10,983.2	12,345.6	10,983.2	
March-10	74	113,280	98,526	-14,754	-13.0%	8,382.7	113,280	98,526	-14,754	-13.0%	8,382.7	7,290.9	8,382.7	7,290.9	
April-10	70	110,536	94,332	-16,204	-14.7%	7,737.5	110,536	94,332	-16,204	-14.7%	7,737.5	6,603.2	7,737.5	6,603.2	
May-10	50	101,623	91,189	-10,434	-10.3%	5,081.2	101,623	91,189	-10,434	-10.3%	5,081.2	4,559.5	5,081.2	4,559.5	
June-10	63	100,647	91,539	-9,108	-9.0%	6,340.8	100,647	91,539	-9,108	-9.0%	6,340.8	5,767.0	6,340.8	5,767.0	
Total	4,818	109,937	95,748	-14,190	-12.9%	529,676.8	111,174	95,388	-15,785	-14.2%	345,750.5	296,657.8	345,750.5	296,657.8	
							113,204	95,816	-17,387	-15.4%	149,315.8	126,381.7	149,315.8	126,381.7	

National Fuel Gas Distribution Corporation
 New York Division
 Conservation Incentive Program
 Residential Appliance Rebate Program
 Pre and Post Installation Consumption Analysis

Month Unit Installed	Customers	Programmable Thermostats Only												Weighted Annual Consumption			
		1 Year Prior to Installation						1 Year After Installation						1 Year Prior to Installation		1 Year After Installation	
		Installation	Post	Change	% Change	Pre	Post	Installation	Post	Change	% Change	Pre	Post	Change	% Change	Pre	Post
November-07	41	107,024	4,206.1	-4.436	-4.1%	4,388.0	4,206.1	-171.9	-3.9%	107,024	99,513	-7,511	-7.0%	4,388.0	4,080.0	-308.0	-7.0%
December-07	121	100,265	11,969.4	-1,344	-1.3%	12,132.1	11,969.4	-162.7	-1.3%	100,265	95,236	-5,029	-5.0%	12,132.1	11,523.6	-608.5	-5.0%
January-08	111	106,805	11,422.3	-3,901	-3.7%	11,855.4	11,422.3	-433.1	-3.7%	106,805	97,331	-9,474	-8.9%	11,855.4	10,803.7	-1,051.7	-8.9%
February-08	75	105,457	7,287.1	-8,296	-7.9%	7,909.3	7,287.1	-622.2	-7.9%	105,457	96,410	-9,047	-8.6%	7,909.3	7,230.8	-678.5	-8.6%
March-08	79	93,674	8,916.6	-6,122	-6.5%	7,400.2	8,916.6	1,516.4	20.5%	93,674	83,707	-9,967	-10.6%	7,400.2	6,612.9	-787.3	-10.6%
April-08	48	94,348	4,135.7	-8,187	-8.7%	4,528.7	4,135.7	-393.0	-8.7%	94,348	86,976	-7,372	-7.8%	4,528.7	4,174.8	-353.9	-7.8%
May-08	38	94,918	3,388.9	-5,736	-6.0%	3,606.9	3,388.9	-218.0	-6.0%	94,918	85,233	-9,685	-10.2%	3,606.9	3,238.9	-368.0	-10.2%
June-08	39	102,434	3,994.9	-6,287	-6.1%	3,994.9	3,994.9	0.0	0.0%	102,434	94,319	-8,115	-7.9%	3,994.9	3,678.4	-316.5	-7.9%
July-08	42	92,087	89,190	-2,897	-3.1%	3,867.7	3,746.0	-121.7	-3.1%	92,087	85,630	-6,457	-7.0%	3,867.7	3,596.5	-271.2	-7.0%
August-08	32	109,322	101,076	-8,246	-7.5%	3,498.3	3,234.4	-263.9	-7.5%	109,322	97,112	-12,210	-11.2%	3,498.3	3,107.6	-390.7	-11.2%
September-08	27	92,991	90,620	-2,371	-2.5%	2,510.8	2,446.7	-64.1	-2.5%	92,991	87,005	-5,986	-6.4%	2,510.8	2,349.1	-161.7	-6.4%
October-08	93	104,663	9,733.7	-8,630	-8.2%	9,733.7	8,931.1	-802.6	-8.2%	104,663	92,548	-12,115	-11.6%	9,733.7	8,607.0	-1,126.7	-11.6%
November-08	143	115,188	15,364.9	-7,741	-6.7%	16,471.9	15,364.9	-1,107.0	-6.7%	115,188	104,413	-10,775	-9.4%	16,471.9	14,931.1	-1,540.8	-9.4%
December-08	106	104,779	10,386.9	-6,789	-6.5%	11,106.6	10,386.9	-719.7	-6.5%	104,779	96,391	-8,388	-8.0%	11,106.6	10,217.4	-889.2	-8.0%
January-09	75	109,881	7,719.0	-6,961	-6.3%	8,241.1	7,719.0	-522.1	-6.3%	109,881	103,939	-5,942	-5.4%	8,241.1	7,795.4	-445.7	-5.4%
February-09	59	102,888	6,071.0	-6,371	-6.2%	6,071.0	5,695.1	-375.9	-6.2%	102,888	95,396	-7,502	-7.3%	6,071.0	5,628.4	-442.6	-7.3%
March-09	50	105,693	9,674.8	-8,945	-8.5%	5,284.7	4,837.4	-447.3	-8.5%	105,693	96,552	-9,141	-8.6%	5,284.7	4,827.6	-457.1	-8.6%
April-09	33	100,243	3,308.0	-5,554	-5.5%	3,308.0	3,124.9	-183.1	-5.5%	100,243	96,063	-4,180	-4.2%	3,308.0	3,170.1	-137.9	-4.2%
May-09	27	103,252	2,787.8	-8,368	-8.1%	2,787.8	2,561.9	-225.9	-8.1%	103,252	96,726	-6,526	-6.3%	2,787.8	2,611.6	-176.2	-6.3%
June-09	28	110,115	3,083.2	-1,342	-1.2%	3,083.2	3,045.6	-37.6	-1.2%	110,115	111,895	1,780	1.6%	3,083.2	3,133.1	49.9	1.6%
July-09	39	98,323	3,834.6	-6,483	-6.6%	3,834.6	3,581.8	-252.8	-6.6%	98,323	91,840	-6,483	-6.6%	3,834.6	3,581.8	-252.8	-6.6%
August-09	38	92,066	3,498.5	-1,075	-1.2%	3,498.5	3,457.7	-40.8	-1.2%	92,066	90,991	-1,075	-1.2%	3,498.5	3,457.7	-40.8	-1.2%
September-09	32	94,582	3,026.6	-3,806	-4.0%	3,026.6	2,904.8	-121.8	-4.0%	94,582	90,776	-3,806	-4.0%	3,026.6	2,904.8	-121.8	-4.0%
October-09	122	96,817	11,811.7	-6,893	-7.1%	11,811.7	10,970.7	-841.0	-7.1%	96,817	89,924	-6,893	-7.1%	11,811.7	10,970.7	-841.0	-7.1%
November-09	209	97,156	20,305.6	-6,939	-7.1%	20,305.6	18,855.4	-1,450.2	-7.1%	97,156	90,217	-6,939	-7.1%	20,305.6	18,855.4	-1,450.2	-7.1%
December-09	59	98,823	5,830.6	-3,760	-3.8%	5,830.6	5,608.7	-221.9	-3.8%	98,823	95,063	-3,760	-3.8%	5,830.6	5,608.7	-221.9	-3.8%
Total	1,766	101,975	180,087.6	-5,968	-5.9%	180,087.6	169,548.8	-10,538.8	-5.9%	104,009	95,752	-8,257	-7.9%	131,780.0	121,317.9	-10,462.1	-7.9%

National Fuel Gas Distribution Corporation
 New York Division
 Conservation Incentive Program
 Residential Appliance Rebate Program
 Pre and Post Installation Consumption Analysis

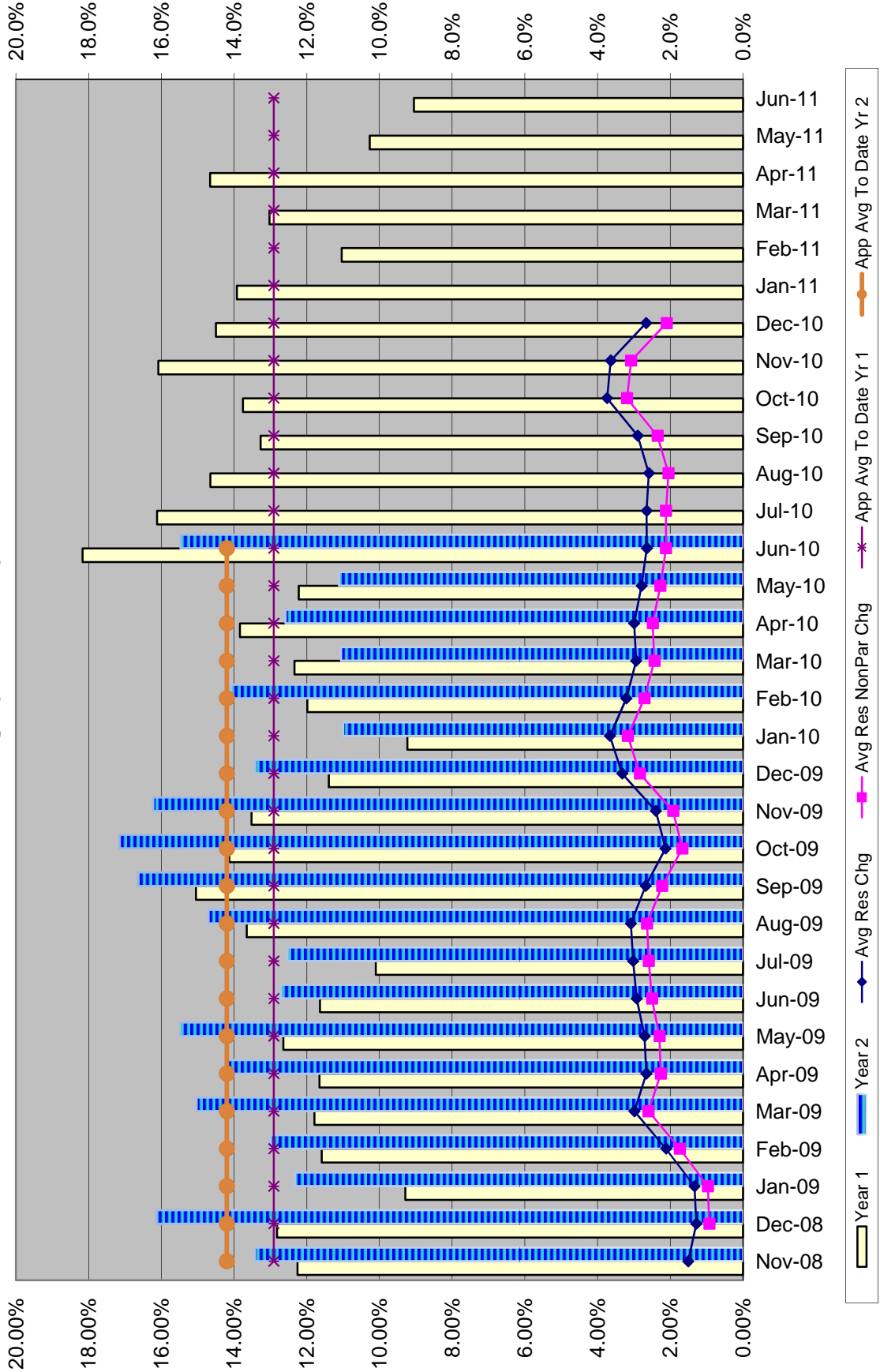
Month Unit Installed	Customers	Storage Tank Water Heating Only Normalized Consumption (Mcf)										Weighted Annual Consumption					
		1 Year Prior to Installation		1 Year After Installation		Change		% Change		Pre		Post					
November-07	12	96,865	93,346	-3,519	-3.6%	1,162.4	1,120.2	-8,764	-9.0%	1,162.4	1,057.2	96,865	87,731	-9,134	-9.4%	1,162.4	1,052.8
December-07	45	107,185	102,600	-4,585	-4.3%	4,823.3	4,617.0	-8,518	-7.9%	4,823.3	4,440.0	107,185	97,138	-10,047	-9.4%	4,823.3	4,371.2
January-08	78	108,874	108,228	-646	-0.6%	8,492.2	8,441.8	-3,282	-3.0%	8,492.2	8,236.2	108,874	103,464	-5,410	-5.0%	8,492.2	8,070.2
February-08	45	109,553	104,491	-5,062	-4.6%	4,929.9	4,702.1	-7,201	-6.6%	4,929.9	4,605.8	109,553	101,622	-7,931	-7.2%	4,929.9	4,573.0
March-08	60	108,963	106,543	-2,420	-2.2%	6,537.8	6,392.6	-6,376	-5.9%	6,537.8	6,155.2	108,963	102,274	-6,689	-6.1%	6,537.8	6,136.4
April-08	102	108,835	105,553	-3,282	-3.0%	11,101.2	10,766.4	-6,599	-6.1%	11,101.2	10,428.1	108,835	104,535	-4,300	-4.0%	11,101.2	10,662.6
May-08	72	107,497	101,306	-6,191	-5.8%	7,739.8	7,294.0	-9,780	-9.1%	7,739.8	7,035.6	107,497	99,991	-7,506	-7.0%	7,739.8	7,199.4
June-08	42	107,484	102,187	-5,297	-4.9%	4,514.3	4,291.9	-10,097	-9.4%	4,514.3	4,090.3	107,484	101,302	-6,182	-5.8%	4,514.3	4,254.7
July-08	49	98,538	95,565	-2,973	-3.0%	4,828.4	4,682.7	-1,770	-1.8%	4,828.4	4,741.6	98,538	96,768	-1,770	-1.8%	4,828.4	4,741.6
August-08	42	110,855	107,584	-3,271	-3.0%	4,655.9	4,518.5	-7,140	-6.4%	4,655.9	4,356.0	110,855	103,715	-7,140	-6.4%	4,655.9	4,356.0
September-08	51	102,502	94,912	-7,590	-7.4%	5,227.6	4,840.5	-7,411	-7.2%	5,227.6	4,849.6	102,502	95,091	-7,411	-7.2%	5,227.6	4,849.6
October-08	45	105,253	101,189	-4,064	-3.9%	4,736.4	4,553.5	-8,183	-7.8%	4,736.4	4,368.2	105,253	97,070	-8,183	-7.8%	4,736.4	4,368.2
November-08	53	113,465	109,763	-3,702	-3.3%	6,013.6	5,817.4	-7,891	-7.0%	6,013.6	5,595.4	113,465	105,574	-7,891	-7.0%	6,013.6	5,595.4
December-08	64	108,337	103,721	-4,616	-4.3%	6,933.6	6,638.1	-6,847	-6.3%	6,933.6	6,495.4	108,337	101,490	-6,847	-6.3%	6,933.6	6,495.4
January-09	59	102,702	95,417	-7,285	-7.1%	6,059.4	5,629.6	-9,620	-9.4%	6,059.4	5,491.8	102,702	93,082	-9,620	-9.4%	6,059.4	5,491.8
February-09	76	106,402	102,461	-3,941	-3.7%	8,086.6	7,787.0	-5,159	-4.8%	8,086.6	7,694.5	106,402	101,243	-5,159	-4.8%	8,086.6	7,694.5
March-09	75	110,744	103,453	-7,291	-6.6%	8,305.8	7,759.0	-6,440	-5.8%	8,305.8	7,822.8	110,744	104,304	-6,440	-5.8%	8,305.8	7,822.8
April-09	67	106,554	102,515	-4,039	-3.8%	7,139.1	6,868.5	-5,265	-4.9%	7,139.1	6,786.4	106,554	101,289	-5,265	-4.9%	7,139.1	6,786.4
May-09	65	103,993	96,827	-7,166	-6.9%	6,759.5	6,293.8	-5,765	-5.5%	6,759.5	6,384.8	103,993	98,228	-5,765	-5.5%	6,759.5	6,384.8
June-09	70	94,170	90,466	-3,704	-3.9%	6,591.9	6,332.6	-2,209	-2.3%	6,591.9	6,437.3	94,170	91,961	-2,209	-2.3%	6,591.9	6,437.3
July-09	52	109,144	108,245	-899	-0.8%	5,675.5	5,628.7			5,675.5	5,628.7						
August-09	57	111,203	107,817	-3,386	-3.0%	6,338.6	6,145.6			6,338.6	6,145.6						
September-09	56	108,022	104,710	-3,312	-3.1%	6,049.2	5,863.8			6,049.2	5,863.8						
October-09	83	102,648	97,977	-4,671	-4.6%	8,519.8	8,132.1			8,519.8	8,132.1						
November-09	89	99,549	95,611	-3,938	-4.0%	8,859.9	8,509.4			8,859.9	8,509.4						
December-09	56	113,935	107,969	-5,966	-5.2%	6,380.4	6,046.3			6,380.4	6,046.3						
Total	1,565	106,365	102,027	-4,338	-4.1%	166,461.9	159,673.0	-6,456	-6.1%	166,461.9	159,673.0	106,347	99,891	-6,456	-6.1%	124,638.6	117,072.2

National Fuel Gas Distribution Corporation
New York Division
Conservation Incentive Program
Residential Appliance Rebate Program
Pre and Post Installation Consumption Analysis

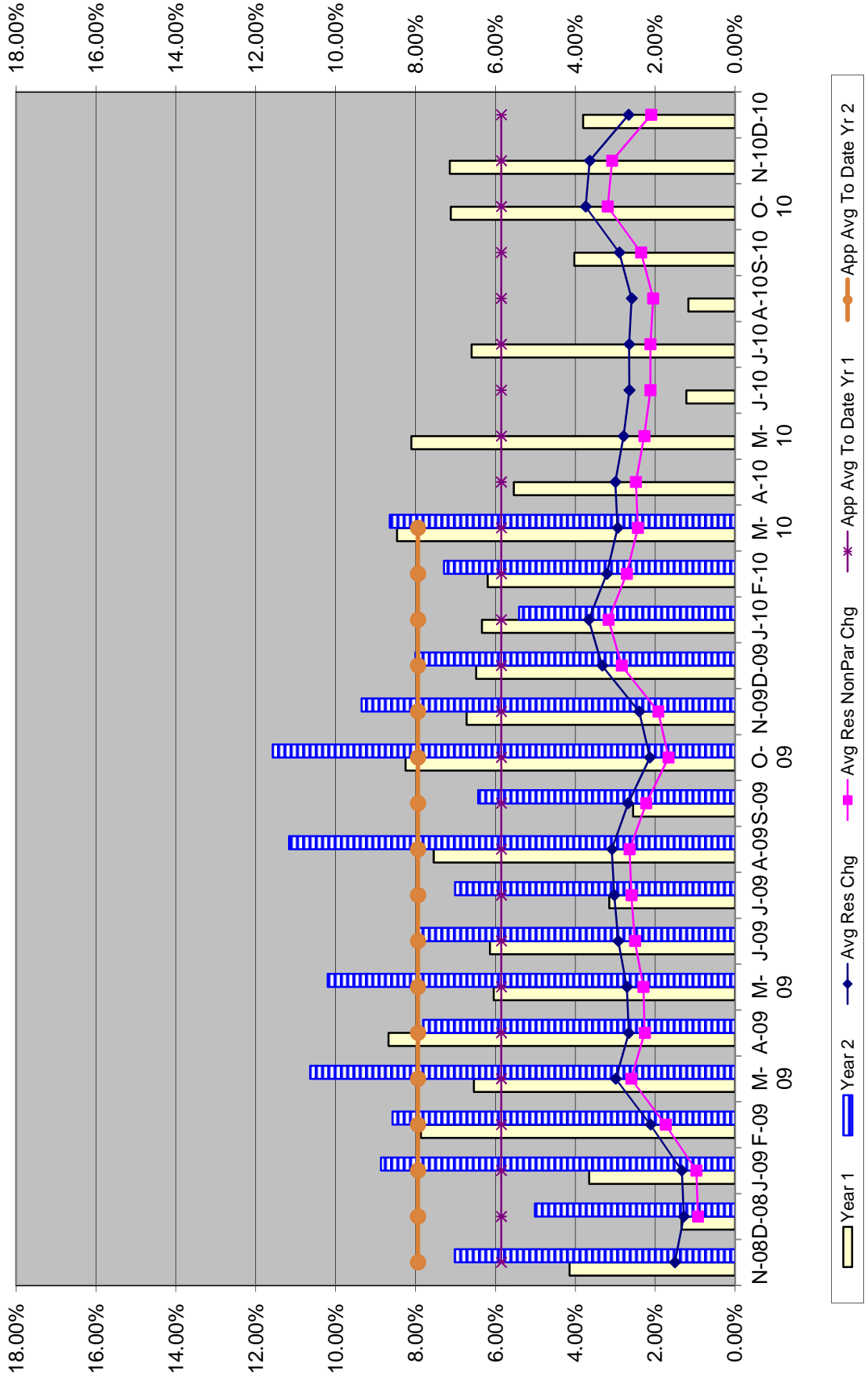
Month/Unit Installed	Customers	Tankless Water Heating Only													
		1 Year Prior to Installation						1 Year After Installation							
		Installation	1 Year After Installation	Change	% Change	Pre	Post	Installation	1 Year After Installation	Change	% Change	Pre	Post		
November-07	17	95,076	89,216	-5,860	-6.2%	1,616.3	1,516.7	-99.6	-6.2%	1,616.3	1,491.9	-124.4	-7.7%	1,616.3	1,397.6
December-07	55	101,693	96,495	-5,198	-5.1%	5,593.1	5,307.2	-285.9	-5.1%	5,593.1	5,204.1	-389.0	-7.0%	5,593.1	5,136.6
January-08	53	113,829	104,541	-9,288	-8.2%	6,032.9	5,540.7	-492.2	-8.2%	6,032.9	5,431.4	-601.5	-10.0%	6,032.9	5,316.0
February-08	34	91,406	83,472	-7,934	-8.7%	3,107.8	2,838.0	-269.8	-8.7%	3,107.8	2,859.7	-248.1	-8.0%	3,107.8	2,872.4
March-08	17	108,368	98,872	-9,496	-8.8%	1,842.3	1,680.8	-161.5	-8.8%	1,842.3	1,627.9	-214.4	-11.6%	1,842.3	1,633.4
April-08	33	108,148	99,497	-8,651	-8.0%	3,568.9	3,283.4	-285.5	-8.0%	3,568.9	3,115.9	-453.0	-12.7%	3,568.9	3,121.4
May-08	28	104,094	95,264	-8,830	-8.5%	2,914.6	2,751.4	-163.2	-5.6%	2,914.6	2,708.1	-206.5	-7.1%	2,914.6	2,757.5
June-08	25	97,189	92,955	-4,234	-4.4%	2,429.7	2,323.9	-105.8	-4.4%	2,429.7	2,322.7	-107.0	-4.4%	2,429.7	2,322.7
July-08	20	101,718	91,013	-10,705	-10.5%	2,034.4	1,820.3	-214.1	-10.5%	2,034.4	1,816.7	-217.7	-10.7%	2,034.4	1,816.7
August-08	23	83,218	75,409	-7,809	-9.4%	1,914.0	1,734.4	-179.6	-9.4%	1,914.0	1,660.8	-253.2	-13.2%	1,914.0	1,660.8
September-08	28	103,764	100,383	-3,381	-3.3%	2,905.4	2,810.7	-94.7	-3.3%	2,905.4	2,690.7	-214.7	-7.4%	2,905.4	2,690.7
October-08	24	103,487	96,619	-6,868	-6.6%	2,483.7	2,318.9	-164.8	-6.6%	2,483.7	2,194.5	-289.2	-11.6%	2,483.7	2,194.5
November-08	20	110,416	105,112	-5,304	-4.8%	2,208.3	2,102.2	-106.1	-4.8%	2,208.3	2,093.0	-115.3	-5.2%	2,208.3	2,093.0
December-08	22	111,151	98,540	-12,611	-11.3%	2,445.3	2,167.9	-277.4	-11.3%	2,445.3	2,110.5	-334.8	-13.7%	2,445.3	2,110.5
January-09	25	93,713	86,888	-6,825	-7.3%	2,342.8	2,172.2	-170.6	-7.3%	2,342.8	2,130.3	-212.5	-9.1%	2,342.8	2,130.3
February-09	30	107,084	102,433	-4,651	-4.3%	3,212.5	3,073.0	-139.5	-4.3%	3,212.5	2,908.9	-303.6	-9.5%	3,212.5	2,908.9
March-09	36	94,877	87,797	-7,080	-7.5%	3,415.6	3,160.7	-254.9	-7.5%	3,415.6	3,151.7	-263.9	-7.7%	3,415.6	3,151.7
April-09	49	107,514	95,019	-12,495	-11.6%	5,268.2	4,655.9	-612.3	-11.6%	5,268.2	4,795.1	-473.1	-9.0%	5,268.2	4,795.1
May-09	36	89,291	81,224	-8,067	-9.0%	3,214.5	2,924.1	-290.4	-9.0%	3,214.5	2,942.4	-272.1	-8.5%	3,214.5	2,942.4
June-09	41	91,189	83,653	-7,536	-8.3%	3,738.7	3,429.8	-308.9	-8.3%	3,738.7	3,629.7	-109.0	-2.9%	3,738.7	3,629.7
July-09	35	95,806	87,345	-8,461	-8.8%	3,353.2	3,057.1	-296.1	-8.8%	3,353.2	3,057.1	-296.1	-8.8%	3,353.2	3,057.1
August-09	39	104,370	99,107	-5,263	-5.0%	4,070.4	3,865.2	-205.2	-5.0%	4,070.4	3,865.2	-205.2	-5.0%	4,070.4	3,865.2
September-09	43	97,485	87,379	-10,106	-10.4%	4,191.9	3,757.3	-434.6	-10.4%	4,191.9	3,757.3	-434.6	-10.4%	4,191.9	3,757.3
October-09	43	96,083	84,824	-11,259	-11.7%	4,131.6	3,647.4	-484.2	-11.7%	4,131.6	3,647.4	-484.2	-11.7%	4,131.6	3,647.4
November-09	53	108,304	100,039	-8,265	-7.6%	5,740.1	5,302.1	-438.0	-7.6%	5,740.1	5,302.1	-438.0	-7.6%	5,740.1	5,302.1
December-09	83	103,248	96,313	-6,935	-6.7%	8,569.6	7,994.0	-575.6	-6.7%	8,569.6	7,994.0	-575.6	-6.7%	8,569.6	7,994.0
Total	912	101,256	93,460	-7,797	-7.7%	92,345.8	85,235.2	-7,110.6	-7.7%	92,345.8	85,235.2	-7,110.6	-7.7%	92,345.8	85,235.2
		1 Year Prior to Installation	1 Year After Installation	Change	% Change	Pre	Post	Change	% Change	Pre	Post	Change	% Change	Pre	Post
		103,457	94,327	-9,130	-8.8%	62,289.1	56,886.0	-5,403.1	-8.7%	62,289.1	56,886.0	-5,403.1	-8.7%	62,289.1	56,886.0

Month Unit Installed	Customers	LIURP												Normalized Consumption (Mcf)		Weighted Annual Consumption							
		1 Year Prior				1 Year After				2nd Year				3rd Year				1 Year Prior to Installation		After Installation			
		Installation	Post	Change	% Change	Installation	Post	Change	% Change	Installation	Post	Change	% Change	Installation	Post	Change	% Change	Pre	Post	Pre	Post		
March-08	2	225,583	207,221	-18,362	-8.1%	208,972	417.9	-16,611	-7.4%	208,972	417.9	-16,611	-7.4%	208,972	417.9	-16,611	-7.4%	225,583	197,036	-28,547	-12.7%	451.2	394.1
April-08	14	216,962	197,512	-19,450	-9.0%	181,110	2,765.2	-35,852	-16.5%	181,110	2,765.2	-35,852	-16.5%	181,110	2,765.2	-35,852	-16.5%	216,962	178,182	-38,780	-17.9%	3,037.5	2,494.5
May-08	20	193,173	172,289	-20,874	-10.8%	163,487	3,446.0	-29,686	-15.4%	163,487	3,446.0	-29,686	-15.4%	163,487	3,446.0	-29,686	-15.4%	193,173	170,946	-22,227	-11.5%	3,863.5	3,418.9
June-08	14	185,551	176,229	-9,322	-5.0%	172,999	2,467.2	-12,562	-6.8%	172,999	2,467.2	-12,562	-6.8%	172,999	2,467.2	-12,562	-6.8%	185,551	150,739	-34,812	-18.8%	2,597.7	2,110.3
July-08	10	182,309	170,260	-12,049	-6.6%	158,149	1,702.6	-24,160	-13.3%	158,149	1,702.6	-24,160	-13.3%	158,149	1,702.6	-24,160	-13.3%	182,309	150,739	-34,812	-18.8%	1,823.1	1,581.5
August-08	22	200,738	177,723	-23,015	-11.5%	166,312	3,909.9	-34,426	-17.1%	166,312	3,909.9	-34,426	-17.1%	166,312	3,909.9	-34,426	-17.1%	200,738	150,739	-34,812	-18.8%	4,416.2	3,658.9
September-08	25	210,164	181,105	-29,059	-13.8%	170,365	4,527.6	-39,799	-18.9%	170,365	4,527.6	-39,799	-18.9%	170,365	4,527.6	-39,799	-18.9%	210,164	150,739	-34,812	-18.8%	5,254.1	4,259.1
October-08	31	188,356	173,464	-14,892	-7.9%	168,022	5,377.4	-20,334	-10.8%	168,022	5,377.4	-20,334	-10.8%	168,022	5,377.4	-20,334	-10.8%	188,356	150,739	-34,812	-18.8%	5,839.0	5,208.7
November-08	52	198,483	171,990	-26,493	-13.3%	167,582	8,943.5	-30,901	-15.6%	167,582	8,943.5	-30,901	-15.6%	167,582	8,943.5	-30,901	-15.6%	198,483	150,739	-34,812	-18.8%	10,321.1	8,714.3
December-08	25	202,905	177,472	-25,433	-12.5%	163,915	5,072.6	-38,990	-19.2%	163,915	5,072.6	-38,990	-19.2%	163,915	5,072.6	-38,990	-19.2%	202,905	150,739	-34,812	-18.8%	5,072.6	4,097.9
January-09	42	199,676	172,127	-27,549	-13.8%	161,558	7,229.3	-38,118	-19.1%	161,558	7,229.3	-38,118	-19.1%	161,558	7,229.3	-38,118	-19.1%	199,676	150,739	-34,812	-18.8%	8,386.4	6,785.4
February-09	56	180,212	153,393	-26,819	-14.9%	152,983	8,590.0	-27,229	-15.1%	152,983	8,590.0	-27,229	-15.1%	152,983	8,590.0	-27,229	-15.1%	180,212	150,739	-34,812	-18.8%	10,091.9	8,567.0
March-09	91	177,148	149,326	-27,822	-15.7%	148,237	13,568.7	-28,911	-16.3%	148,237	13,568.7	-28,911	-16.3%	148,237	13,568.7	-28,911	-16.3%	177,148	150,739	-34,812	-18.8%	16,120.5	13,489.6
April-09	74	183,996	151,535	-32,461	-17.6%	149,920	11,213.6	-34,076	-18.5%	149,920	11,213.6	-34,076	-18.5%	149,920	11,213.6	-34,076	-18.5%	183,996	150,739	-34,812	-18.8%	13,615.7	11,094.1
May-09	39	166,332	145,231	-21,101	-12.7%	142,256	6,486.9	-24,076	-14.5%	142,256	6,486.9	-24,076	-14.5%	142,256	6,486.9	-24,076	-14.5%	166,332	150,739	-34,812	-18.8%	6,486.9	5,548.0
June-09	45	144,557	132,093	-12,464	-8.6%	132,780	5,944.2	-11,777	-8.1%	132,780	5,944.2	-11,777	-8.1%	132,780	5,944.2	-11,777	-8.1%	144,557	150,739	-34,812	-18.8%	6,505.1	5,975.1
July-09	63	147,724	124,957	-22,767	-15.4%	124,957	9,306.6	-22,767	-15.4%	124,957	9,306.6	-22,767	-15.4%	124,957	9,306.6	-22,767	-15.4%	147,724	150,739	-34,812	-18.8%	9,306.6	7,872.3
August-09	102	154,331	131,598	-22,733	-14.7%	131,598	13,423.0	-22,733	-14.7%	131,598	13,423.0	-22,733	-14.7%	131,598	13,423.0	-22,733	-14.7%	154,331	150,739	-34,812	-18.8%	15,741.8	13,423.0
September-09	102	161,454	140,149	-21,305	-13.2%	140,149	16,468.3	-21,305	-13.2%	140,149	16,468.3	-21,305	-13.2%	140,149	16,468.3	-21,305	-13.2%	161,454	150,739	-34,812	-18.8%	16,468.3	14,295.2
October-09	101	159,733	139,391	-20,342	-12.7%	140,607	16,133.0	-18,126	-11.2%	140,607	16,133.0	-18,126	-11.2%	140,607	16,133.0	-18,126	-11.2%	159,733	150,739	-34,812	-18.8%	16,133.0	14,078.5
November-09	37	162,231	140,607	-21,624	-13.3%	139,261	6,002.5	-23,070	-14.2%	139,261	6,002.5	-23,070	-14.2%	139,261	6,002.5	-23,070	-14.2%	162,231	150,739	-34,812	-18.8%	6,002.5	5,202.5
December-09	2	144,841	139,261	-5,580	-3.9%	139,261	289.7	-5,580	-3.9%	139,261	289.7	-5,580	-3.9%	139,261	289.7	-5,580	-3.9%	144,841	150,739	-34,812	-18.8%	289.7	278.5
January-10	0	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0
February-10	0	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0
March-10	3	141,846	112,618	-29,228	-20.6%	112,618	425.5	-29,228	-20.6%	112,618	425.5	-29,228	-20.6%	112,618	425.5	-29,228	-20.6%	141,846	150,739	-34,812	-18.8%	425.5	337.9
April-10	14	142,219	118,667	-23,552	-16.6%	118,667	1,991.1	-23,552	-16.6%	118,667	1,991.1	-23,552	-16.6%	118,667	1,991.1	-23,552	-16.6%	142,219	150,739	-34,812	-18.8%	1,991.1	1,661.3
May-10	10	139,268	125,541	-13,727	-9.9%	125,541	1,392.7	-13,727	-9.9%	125,541	1,392.7	-13,727	-9.9%	125,541	1,392.7	-13,727	-9.9%	139,268	150,739	-34,812	-18.8%	1,392.7	1,255.4
June-10	9	159,033	134,974	-24,059	-15.1%	134,974	1,431.3	-24,059	-15.1%	134,974	1,431.3	-24,059	-15.1%	134,974	1,431.3	-24,059	-15.1%	159,033	150,739	-34,812	-18.8%	1,431.3	1,214.8
Total	1,005	172,204	149,094	-23,110	-13.4%	149,094	173,065.0	-23,110	-13.4%	149,094	173,065.0	-23,110	-13.4%	149,094	173,065.0	-23,110	-13.4%	198,996.16	168,357.72	-30,638	-15.4%	103,882.5	87,624.7

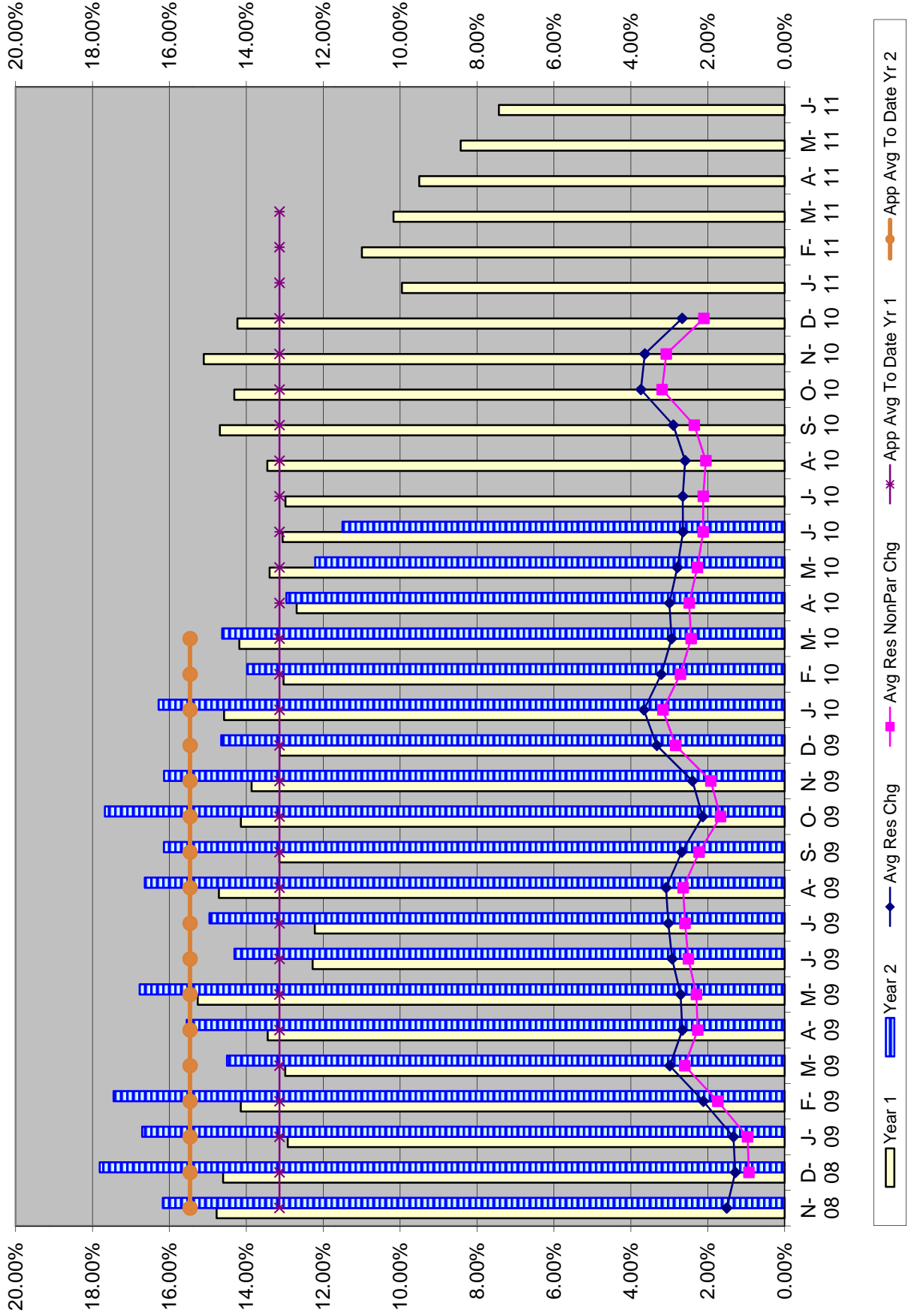
Pre Post Savings
Heating Systems Only



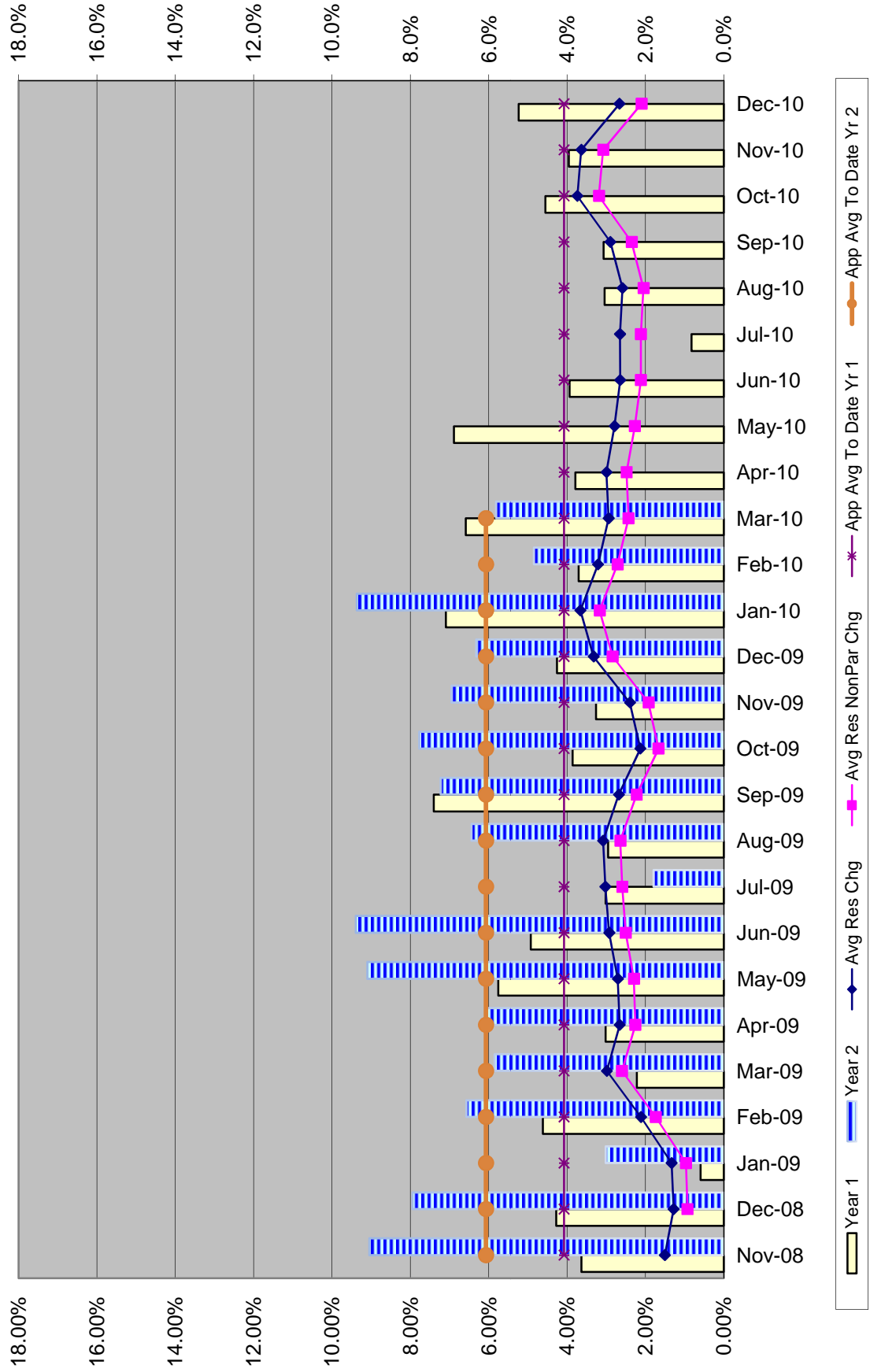
Pre Post Savings
Programmable Thermostats



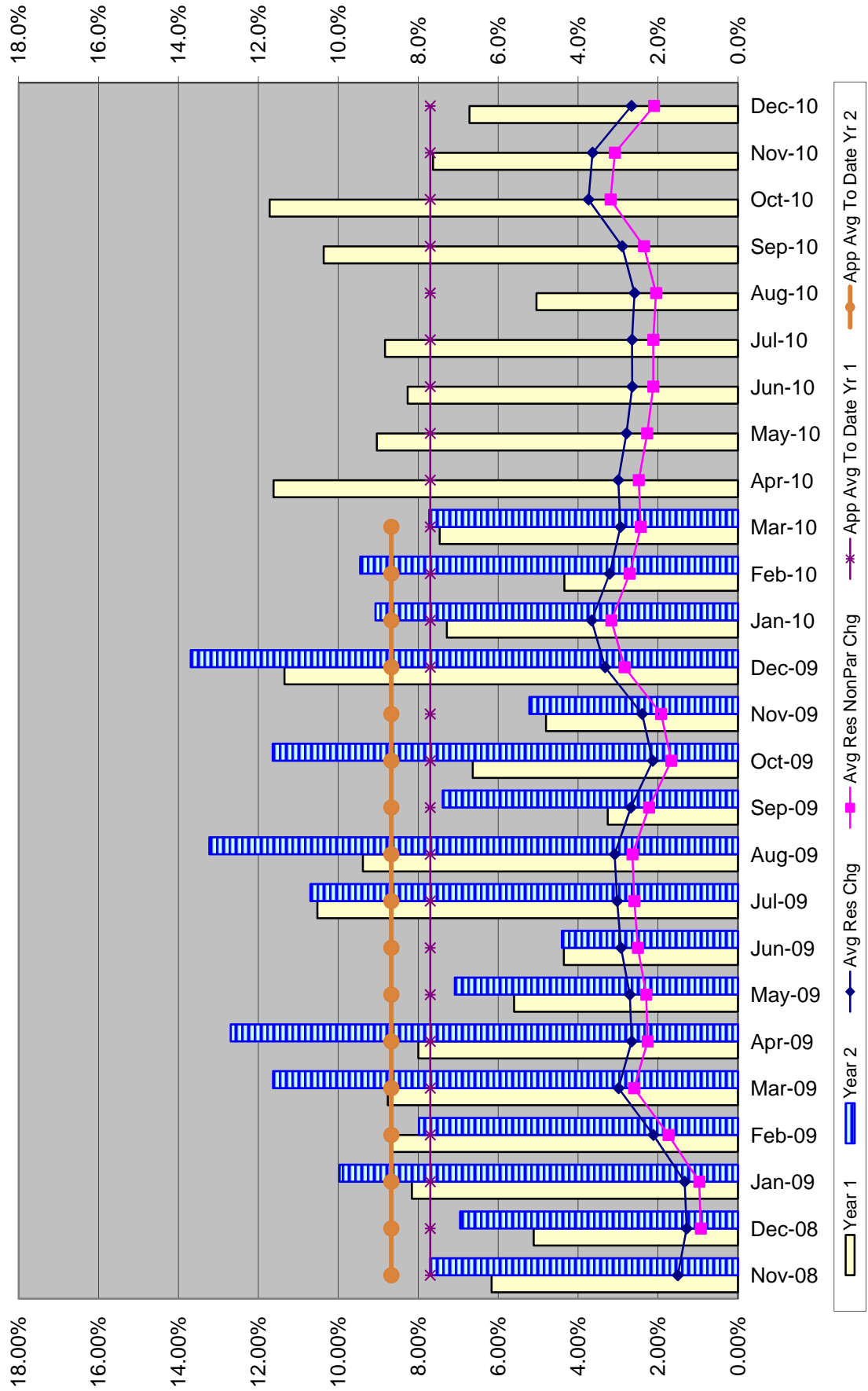
Pre Post Savings
Heating Systems & Programmable Thermostats

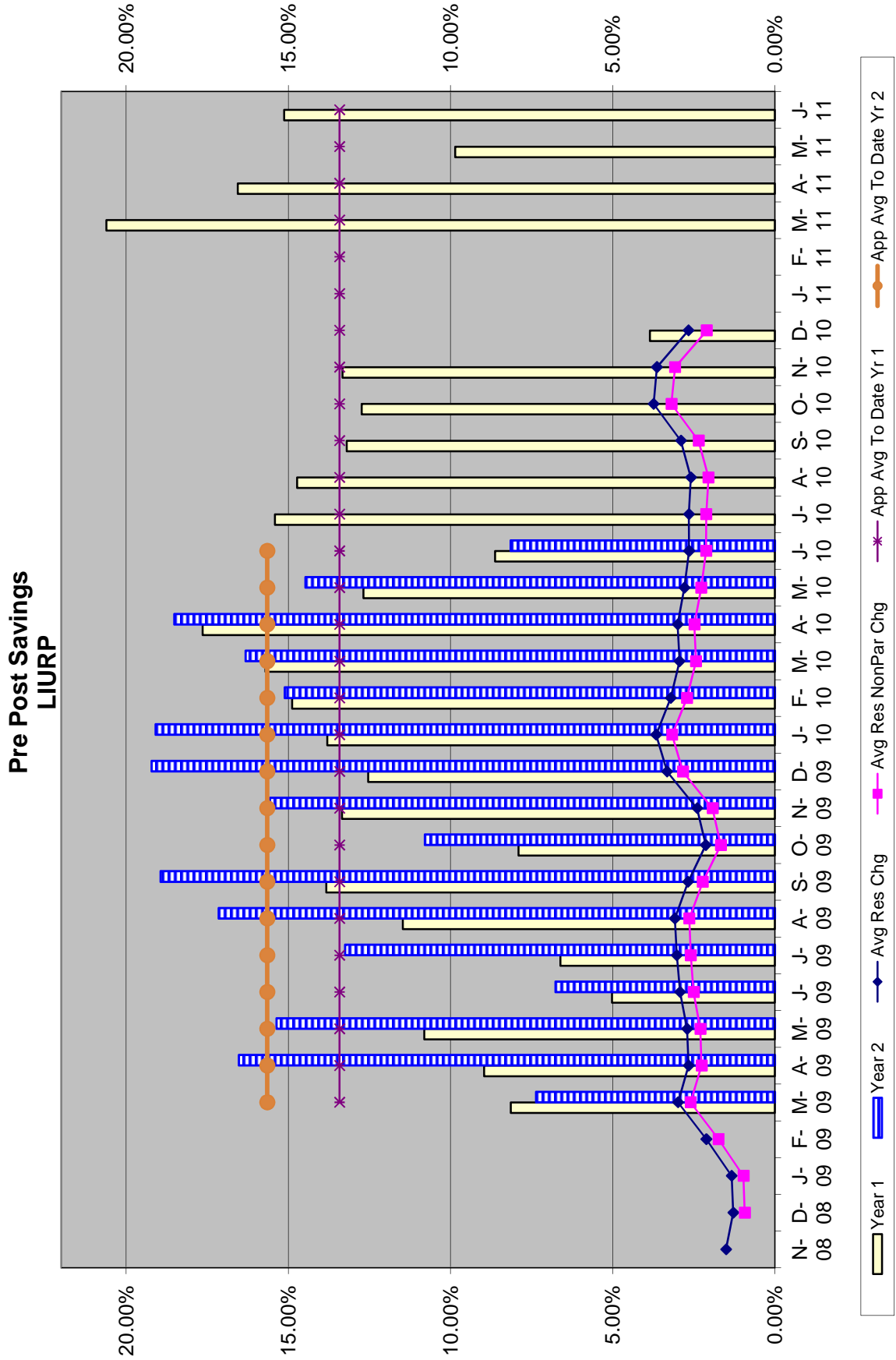


**Pre Post Savings
Water Tank Heaters**



**Pre Post Savings
Tankless Water Heaters**





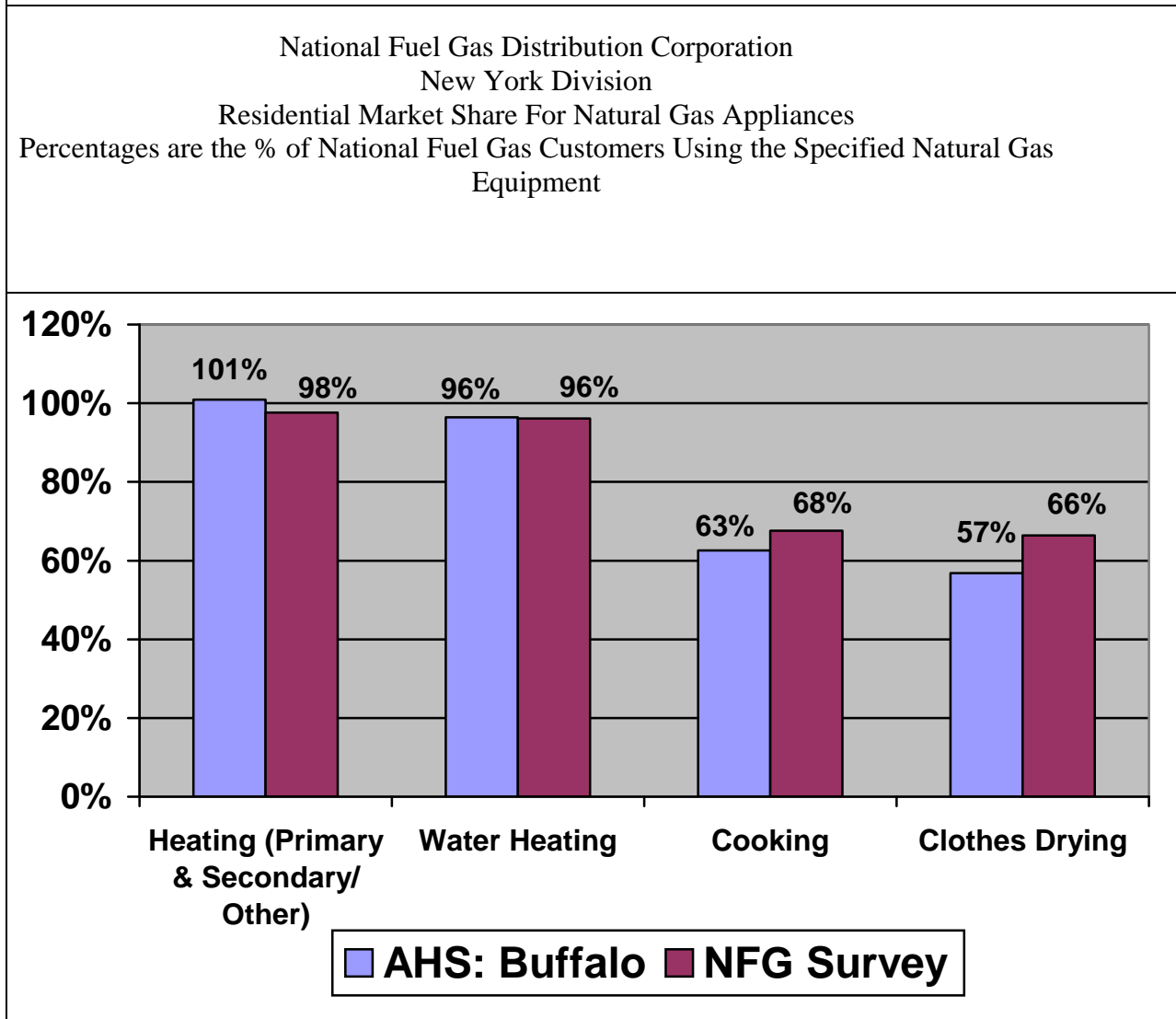
Control Group for Measuring Significance of Residential Customer Rebate Program and
Low Income Usage Reduction Program (“LIURP”) Participant Savings.

I) Summary

This appendix describes the control group used for comparing the natural gas savings of customers receiving appliance rebates under the CIPs program with those customers that have not received a rebate. Due to the somewhat unique characteristics of National Fuel Gas Distribution Corporation’s residential customer base, the average actual consumption per account for the residential class of customer will be used as the starting point for any determination of differences in consumption between customers participating in the rebate program and non-participating customers.

The residential customers on the Company’s system are relatively homogeneous in terms of whether they use natural gas for space heating and water heating. Based on both internal Company sponsored studies and US Department of Census information, the percentage of residential customers that use natural gas for space heating and water heating is between approximately 96% to 98%. Chart 1 below provides a summary of the percentage of the Company’s customers that utilize natural gas in the major natural gas burning appliances.

CHART 1



Since nearly all residential customers use natural gas for both space heating and water heating, the starting point for determining non-participant customer consumption is the average usage per residential account. Table 1, Column (1), provides this amount for the 12 months ended December 2007, December 2008, December 2009, and December 2010. This value is the total average consumption of both customers participating in the CIP program and non-participating customers. In order to determine the average

consumption of non-participating customers, estimated average savings of customers participating in the CIPs program are identified (Column (2) of Table 1) and subtracted from the average total usage per account to determine non-participating customers (Column (3) of Table 1).

Table 1					
12 Months Ended	(1)		(2)	(3)	
	Total Residential Weather Normalized Usage Per Account		Impact on Total Avg. Usage per Account for Rebate & LIURP Participants	Total Usage Per Account Non-Participants	
	(Mcf)	% Chg	(Mcf)	(Mcf)	% Chg
December 2007	107.4			107.4	
December 2008	106.0	-1.3%	0.4	106.4	-0.9%
December 2009	102.5	-3.3%	0.9	103.4	-2.8%
December 2010	99.8	-2.7%	1.5	101.3	-2.0%

The results of Table 1 provide a reasonable benchmark to compare actual measured savings of participating customers from the pre and post consumption analysis with a reasonable estimated range of changes in consumption for non-participating customers. The reasonable range of consumption change for non-participating customers is likely to be within the percent change provided in Columns (1) and Columns (3).

II) Sources Used For Determining Market Share Information Provided in Chart 1

The sources of the data used in Chart 1 include: (1) American Housing Survey for the Buffalo Metropolitan Area: 2002; Issued July 2003; conducted by the U.S. Census Bureau for the U.S. Department of Housing and Urban Development, (“AHS: Buffalo”); and (2) National Fuel Gas Distribution Corporation, 2006 Residential Market Study (“NFG Survey”). The AHS: Buffalo study reports fuel uses for major residential

applications for households within the Buffalo metropolitan area. The Buffalo metro area is defined in the AHS: Buffalo as Niagara and Erie County. The NFG Survey is a random telephone survey of 400 households across the twelve counties in New York that comprise National Fuel Gas Distribution Corporation’s New York service territory.

	AHS: Buffalo			NFG Survey	
	Housing Units (000)	Gas as % of Total	% of Housing Units w/gas Using Gas in Listed Application	Gas as % of Total	% of Housing Units w/gas Using Gas in Listed Application
Occupied Housing Units	461.3				
Units Using Natural Gas	422.6	92%		84%	
Main House/Primary Heating Fuel	402.2	87%	95%	81%	96%
Other House/Secondary Heating Fuels ¹	24.3	6%	6%	2%	2%
Total Heating	426.5	93%	101%	83%	98%
Water Heating	407.3	88%	96%	81%	96%
Cooking	264.6	57%	63%	57%	68%
Clothes Drying	239.9	52%	57%	59%	66%

As can be seen from the results reported in Table 2 both the AHS: Buffalo study and the NFG Survey provide evidence that nearly all residential customers that have access to natural gas supplies utilize natural gas for heating. This is not surprising given the cost advantages of natural gas compared to other fuel sources used for heating. The nearly complete dominance of natural gas as the primary heating fuel for residential

¹ The AHS: Buffalo study allows for more than one appliance being reported for “Other Heating Equipment”. Therefore multiple other heating units could be reported. For example a customer may have a wood burning stove that they may characterize as their “main heating fuel” they may also have a natural gas furnace and a natural gas fireplace. It is the capability to report more than one other heating source that likely leads to a percentage total of natural gas heating applications of greater than 100% for the AHS: Buffalo study. In contrast, the NFG Survey allows for only one “secondary heating” source to be reported by the customer.

households within the Company's service territory is likely unique among the major metropolitan areas in New York State.²

This high saturation amount supports the use of total average residential consumption as a reasonable benchmark to compare savings with residential customers that have received rebates. It is likely that customers that received rebates face the same economic, behavioral, and other influences on energy consumption that the average non-participating customer experiences. For example, both residential customers that have received rebates and those that have not have received messages regarding the importance to conserve energy from a variety of sources including, the Company, the New York Public Service Commission, and NYSERDA. These customers also face the same pricing signals as well as the overall influence of economic circumstances within the service territory.

III) Description of Data and Calculations Used in Table 1

The data included in Table 1 is developed from the following sources:

Column (1) of Table 1 is the total weather normalized usage per account for residential customers on the Company's system. Column (1) of Table 1 is the total weather normalized average consumption from residential customers including customers participating in the CIPs and customers that are not participating in the CIP. Column (3) provides an estimate of residential usage per account for non-participating customers. It was determined as calculated below in Table 3. The estimate of non-participating customer usage per account simply takes the deemed savings associated with customers participating in the program and adds them back to the total annual residential

² For example American Housing Surveys for the New York City and Rochester metropolitan areas yield heating saturations for households with natural gas service in the 50% and 92% range respectively.

consumption per accounts and then divides this sum by the total number of residential accounts.

Year 12 Months Ended December	Total Annual Residential Volumes (Mcf) (1)	Estimated Residential Rebate & LIURP Savings (Mcf) (2)	Annual Volumes Assuming no Savings (Mcf) (3)= (1)+(2)	Avg Number of Accts (4)	Average Unadjusted Res Usage per Acct (Mcf) (5)= (1)/(4)	Average Adjusted Res Usage per Account (Mcf) (6)= (3)/(4)	Impact on Total Usage per Account (7)= (2)/(4)
2007	51,525,220			479,639	107.4		
2008	51,081,192	179,618	51,260,810	481,689	106.0	106.4	0.4
2009	49,443,110	412,565	49,885,675	482,273	102.5	103.4	0.9
2010	48,246,001	663,468	48,909,469	483,485	99.8	101.3	1.5

National Fuel Gas Distribution Corporation
New York Division
Conservation Incentive Program
Residential Appliance Rebate Program
Pre and Post Installation Consumption Analysis

		Heating System Only																		
		Standard Normalization Method						PRISM Normalization Method												
		Normalized Consumption (Mcf)						Normalized Consumption (Mcf)												
Month Unit Installed	Customers	1 Year Prior to Installation			1 Year After Installation			Weighted Annual Consumption			1 Year Prior to Installation - Prism			1 Year After Installation - Prism			Weighted Annual Consumption			
		Installation	Change	% Change	Installation	Change	% Change	Pre	Post	% Change	Pre	Post	% Change	Pre	Post	% Change	Pre	Post	% Change	
November-07	220	113.664	100.732	-12.932	-11.4%	25,006.1	22,161.0	115.01	100.360	-14.65	-12.7%	25,302.2	22,079.2	116.66	100.480	-16.18	-13.9%	45,497.4	39,187.2	-13.9%
December-07	390	115.984	100.883	-15.101	-13.0%	45,233.8	39,344.4	118.82	107.060	-11.760	-9.9%	28,041.5	25,266.2	119.310	104.54	-14.770	-12.4%	19,924.8	17,458.2	-12.4%
January-08	236	118.459	108.045	-10.414	-8.8%	27,956.3	25,498.6	117.93	105.270	-12.66	-10.7%	15,330.9	13,685.1	112.57	101.220	-11.35	-10.1%	12,045.0	10,830.5	-10.1%
February-08	167	120.540	105.544	-14.996	-12.4%	20,130.2	17,625.8	104.66	91.220	-13.44	-12.8%	11,617.3	10,125.4	111.56	98.770	-12.79	-11.5%	11,267.6	9,975.8	-11.5%
March-08	130	118.935	105.797	-13.138	-11.0%	15,461.6	13,753.6	101.53	91.540	-9.990	-9.8%	13,402.0	12,083.3	106.81	93.340	-13.470	-12.6%	15,167.0	13,254.3	-12.6%
April-08	107	112.705	101.647	-11.058	-9.8%	12,059.4	10,876.2	106.13	90.490	-15.640	-14.7%	18,254.4	15,564.3	118.7	103.250	-15.450	-13.0%	28,844.1	25,089.8	-13.0%
May-08	111	105.553	91.731	-13.822	-13.1%	11,716.4	10,182.1	107.260	93.620	-13.640	-12.7%	25,635.1	22,375.2	107.320	96.990	-10.330	-9.6%	27,259.3	24,635.5	-9.6%
June-08	101	112.002	98.726	-13.276	-11.9%	11,312.2	9,971.3	114.890	106.590	-8.300	-7.2%	23,437.6	21,744.4	112.090	98.840	-13.250	-11.8%	17,710.2	15,616.7	-11.8%
July-08	132	101.358	92.617	-8.741	-8.6%	13,379.3	12,225.4	124.370	112.490	-11.880	-9.6%	16,168.1	14,623.7	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	-11.6%
August-08	142	107.459	93.244	-14.215	-13.2%	15,259.2	13,240.6	106.81	93.340	-13.470	-12.6%	15,167.0	13,254.3	106.13	90.490	-15.640	-14.7%	18,254.4	15,564.3	-14.7%
September-08	172	106.911	90.596	-16.315	-15.3%	18,388.7	15,582.5	118.7	103.250	-15.450	-13.0%	28,844.1	25,089.8	107.260	93.620	-13.640	-12.7%	25,635.1	22,375.2	-12.7%
October-08	243	119.156	103.411	-15.745	-13.2%	28,954.9	25,128.9	107.320	96.990	-10.330	-9.6%	27,259.3	24,635.5	107.320	96.990	-10.330	-9.6%	27,259.3	24,635.5	-9.6%
November-08	239	108.180	93.651	-14.529	-13.4%	25,855.0	22,382.6	114.890	106.590	-8.300	-7.2%	23,437.6	21,744.4	114.890	106.590	-8.300	-7.2%	23,437.6	21,744.4	-7.2%
December-08	254	107.668	96.327	-11.341	-10.5%	27,347.7	24,467.1	112.090	98.840	-13.250	-11.8%	17,710.2	15,616.7	112.090	98.840	-13.250	-11.8%	17,710.2	15,616.7	-11.8%
January-09	204	115.470	106.126	-9.344	-8.1%	23,555.9	21,649.7	124.370	112.490	-11.880	-9.6%	16,168.1	14,623.7	124.370	112.490	-11.880	-9.6%	16,168.1	14,623.7	-9.6%
February-09	158	113.160	98.811	-14.349	-12.7%	17,879.3	15,612.1	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	-11.6%
March-09	130	125.574	111.948	-13.626	-10.9%	16,324.6	14,553.2	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	-11.6%
Total	3,136	113.463	100.209	-13.254	-11.7%	355,820.4	314,255.4	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	-11.6%

National Fuel Gas Distribution Corporation
 New York Division
 Conservation Incentive Program
 Pre and Post Installation Consumption Analysis

LIURP - Heating Measure Only and Heating and Base Load Measures													
Normalized Consumption (Mcf)													
Month Unit Installed	Customers	Standard Normalization Method						Prism Normalization Method					
		1 Year Prior to Installation			1 Year After Installation			1 Year Prior to Installation			1 Year After Installation		
		Installation	Change	% Change	Installation	Change	% Change	Installation - Prism	Change	% Change	Installation - Prism	Change	% Change
		Weighted Annual Consumption			Weighted Annual Consumption			Weighted Annual Consumption			Weighted Annual Consumption		
		Pre	Post	% Change	Pre	Post	% Change	Pre	Post	% Change	Pre	Post	% Change
March-08	2	224.434	206.736	-7.9%	448.9	413.5	-7.8%	223.73	206.19	-7.8%	447.5	412.4	-7.2%
April-08	16	207.584	188.378	-9.3%	3,321.3	3,014.0	-9.2%	210.83	187.12	-11.2%	3,373.3	2,993.9	-11.2%
May-08	21	191.983	172.857	-10.0%	4,031.6	3,630.0	-10.0%	193.26	172.55	-10.7%	4,058.5	3,623.6	-10.7%
June-08	17	191.124	177.806	-7.0%	3,249.1	3,022.7	-7.0%	190.33	177.19	-6.9%	3,235.6	3,012.2	-6.9%
July-08	12	182.788	166.310	-9.0%	2,193.5	1,995.7	-9.0%	180.68	166.8	-7.7%	2,168.2	2,001.6	-7.7%
August-08	23	199.974	176.599	-11.7%	4,599.4	4,061.8	-11.7%	199.15	176.14	-11.6%	4,580.5	4,051.2	-11.6%
September-08	27	212.308	185.368	-12.7%	5,732.3	5,004.9	-12.7%	213.95	185.05	-13.5%	5,776.7	4,996.4	-13.5%
October-08	36	189.81	171.991	-9.4%	6,833.2	6,191.7	-9.4%	190.48	171.15	-10.1%	6,857.3	6,161.4	-10.1%
November-08	59	198.374	172.794	-12.9%	11,704.1	10,194.8	-12.9%	197.48	172.43	-12.7%	11,651.3	10,173.4	-12.7%
December-08	31	205.462	176.288	-14.2%	6,369.3	5,464.9	-14.2%	205.07	176.59	-13.9%	6,357.2	5,474.3	-13.9%
January-09	48	196.928	171.102	-13.1%	9,452.5	8,212.9	-13.1%	195.76	170.89	-12.7%	9,396.5	8,202.7	-12.7%
February-09	64	180.461	153.149	-15.1%	11,549.5	9,801.5	-15.1%	179.39	153.4	-14.5%	11,481.0	9,817.6	-14.5%
March-09	113	178.642	149.759	-16.2%	20,186.5	16,922.8	-16.2%	177.6	149.98	-15.6%	20,068.8	16,947.7	-15.6%
Total	469	191.197	166.165	-13.1%	89,671.3	77,931.3	-12.9%	190.729	166.031	-12.9%	89,452.1	77,868.4	-12.9%



Draft

National Fuel Gas Distribution Corporation, New York Division, Conservation Incentive Program: Impact Analysis Review

Prepared for
National Fuel Gas Distribution Corporation

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1. Introduction

National Fuel is a gas-only utility operating in western New York. National Fuel offers the Conservation Incentive Program (CIP), an overarching energy efficiency program with four main components:

- Low-Income Usage Reduction Program (LIURP)
- Residential Rebates
- Nonresidential Rebates
- Outreach and Education

National Fuel has retained The Cadmus Group, Inc. (Cadmus) to assist with evaluation, measurement, and verification (EM&V) of CIP. Cadmus has assisted Distribution with preparing an EM&V plan, which was approved by Public Service Commission (PSC) staff in early 2011, and is currently conducting a process evaluation of CIP and impact evaluation of the CIP Outreach and Education initiatives.

As part of its evaluation efforts, National Fuel has prepared a pre-post analysis of customer consumption for determining savings associated with CIP. The pre-post analysis is one of several statistical techniques for determining the savings of energy-efficiency programs. This method involves using monthly—or interval—consumption data to measure program impacts. In its role as a third-party evaluator, Cadmus reviewed National Fuel’s billing analysis for the impact evaluation. This report provides the results of Cadmus’ review which included:

1. A review of National Fuel’s methodology and data;
2. A review of National Fuel’s methodology for consistency with accepted industry practices; and
3. A comparison of National Fuel and PRISM analysis results, which included replicating select analyses.

2. Overview of analyses

The National Fuel rates department currently estimates measure level gas MCF savings for the Conservation Incentive Program (CIP) and the LIURP program through a monthly pre-post-billing analysis approach. In order to prevent misattribution of savings to other measures, the billing analyses are estimated only for customers installing the specific measures.

The programs and technologies evaluated by National Fuel are:

- Group 1: CIP – Heating System Only
- Group 2: CIP – Programmable Thermostats Only
- Group 3: CIP – Water Heating System Only

- Group 3A: CIP – Water Heating System Only (Storage Water Heaters Only)
- Group 3B: CIP – Water Heating System Only (Tankless Water Heaters Only)
- Group 4: CIP – Heating System + Programmable Thermostat Only
- Group LIURP: Low Income Usage Reduction Program only

The data used in the Company billing analyses include customer level billing data, actual weather data, and thirty-year normal heating degree day typical meteorological year (TMY) data from 1971-2000 (TMY 2). The billing data is actual monthly cycle billing data for the 12 months before measure installation, and the 12 months after measure installation. The actual installation month is excluded from the post periods. Both the actual weather data and the thirty-year TMY 2 weather normal data are averaged across the 21 billing cycles used by the Company. This method assures that the weather data, on average, will be representative of the entire National Fuel territory, and that a consistent weather series can be applied to any program or measure grouping in National Fuel's territory.

3. Standard Practice for Residential Billing Analyses

The standard billing analysis method for savings impact evaluations with repeated monthly or for measure cohort specific analyses is the Princeton Scorekeeping Method (PRISM). This method allows for easy weather normalization at the account level, at the cohort bin analysis level, and for separate measure analyses. The PRISM program itself does, however, have some drawbacks. This includes the challenges associated with formatting data for PRISM and a requirement to run each weather station analysis separately.

Another drawback of PRISM relates to reference temperature. While the PRISM method chooses a specific reference temperature for each home or group of homes by default, it can also use a standard, fixed 65-degree base temperature. The heating degree days on any given day, is the number of degrees that the temperature is below the base temperature. For example, at 50 degrees the base-65 heating degree days are 15, and the base-60 heating degree days are 10. The 65-degree base temperature is often used by the National Oceanic and Atmospheric Administration (NOAA) and, as a result, weather average normal heating degree days from NOAA such as TMY (1961-1990) and TMY 2 data (1971-2000) thirty-year averages are readily available for the 65-degree base.

Moreover, this fixed base also simplifies model estimation significantly. When PRISM is allowed to choose the temperature base yielding the best model R-square, a measure of model fit, often the reference temperature will vary significantly between accounts. A fixed reference temperature assures that PRISM will not select an extreme reference-base temperature such as 45 or 75, which is not easily explained and non-standard. Cadmus billing analyses have shown that PRISM variable reference temperature models have yielded results similar to fixed-base model results.

Disaggregating consumption into base load and weather-sensitive usage is an important part of billing analysis. This is particularly important when dealing with a program like National Fuel's where there are variable measure types such as water heating and space heating measures. PRISM is unreliable in developing non-weather sensitive base load usage, particularly for gas homes. PRISM will often times find a much lower (50% lower) or negative base load in a home because of the predominant temperature dependant usage. The lower or negative intercepts will yield unreasonable base load estimates which will show higher space heating program savings and much lower water heating program savings from the misallocation. Obtaining the base load or non-weather sensitive usage directly from low-usage months (such as July or August for gas utilities) is the most accurate method for a home or a measure category within a group of homes. In the summer months there is no temperature-sensitive heating usage, and this accurately represents the base-load usage including water heating, drying, and cooking, as these applications are present in the home.

PRISM is also limited in that it compares heating degree days and usage over the entire year rather than accounting for the seasonality inherent in energy use, particularly gas usage. Rather than normalizing weather at a monthly level, effectively obtaining separate usage slopes for each month, PRISM obtains the best fit based on the entire year. In order to calculate the monthly normalized usage, the best fit slope for the year is applied to the monthly average heating degree days. While this yields accurate normalized annual consumption (NAC), it is problematic in that the usage per heating degree day actually varies considerably depending on the month. The PRISM analysis will allocate less usage to peak winter months (for example, January through March) and attribute more weather-sensitive usage to shoulder (April and May) and summer months (July through September) than is reasonable. This attribution of weather-sensitive savings to shoulder and summer months impacts the intercept, biasing the true base-load usage.

4. Summary of National Fuel Analyses

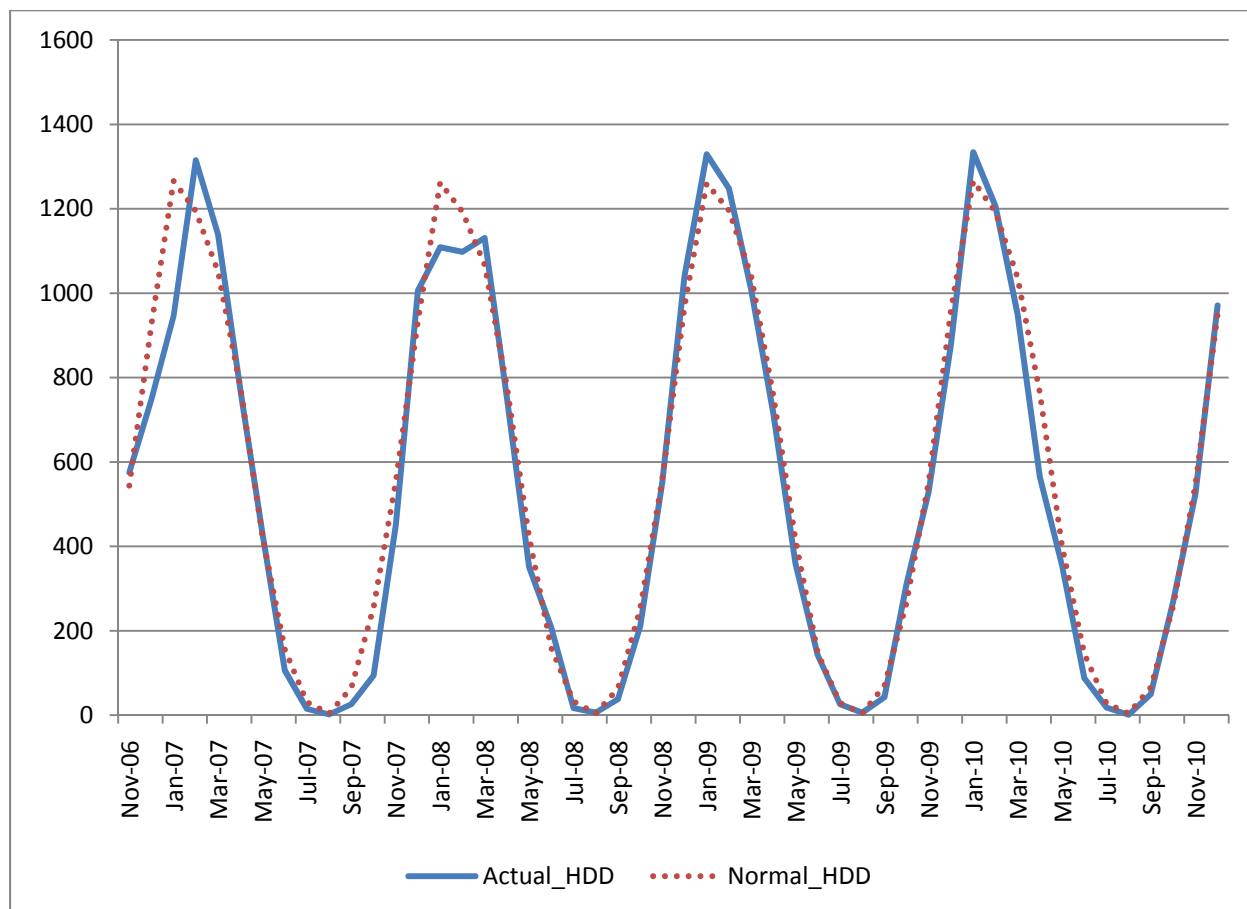
As mentioned above, National Fuel uses a pre-post weather normalization method for each single measure installation in each measure group billing analysis. The Company's approach addresses all of the PRISM shortcomings described above.

Rather than using an annual approach and obtaining a likely unreasonable base-load, National Fuel obtains the base load (non-weather sensitive) usage directly from the low-usage months of July, August, and sometimes September. This is the most accurate method of determining base load usage for a home or for a measure category group.

The Company pre-post billing analysis method is an improvement over PRISM since separate slopes are obtained for each month, rather than an annual slope. The summer months weather-sensitive usage is zero so all of the usage in those months is correctly allocated to base-load usage only. Moreover, even in winter months, the Company method will obtain separate slopes (usages per heating degree day) in the peak winter months of January through March, versus the shoulder months of May and June where the slope (usage per heating degree day) is lower.

Figure 1 below presents the actual and normal monthly weather data series used in the Company's billing analysis. In any given month, if there are more or less heating degree days, the weather sensitive (non-base load usage) is normalized using the normal heating degree days. If the normal heating degree days are higher than the actual heating degree days, the monthly usage is adjusted upwards.

Figure 1. Actual monthly heating degree days compared to normal heating degree days.



The weather normalization method used by National Fuel is simpler to incorporate, and more transparent than PRISM.

Based on the billing analysis attrition information of customers provided by National Fuel, 19% of customers (5,712 of 29,416) are dropped from the analysis due to the restriction of each customer having all 12 months of pre and post data. Keeping customers with all the billing data keeps the analysis balanced, removing issues due to movers where a customer in one period can

vary in terms of number of occupants or gas equipment usage, potentially skewing the analysis. Also, missing data for pre or post months will cause imbalanced, skewed usage totals when summing across the customers at the monthly level. It would possible that the pre-period would include only winter months and the post-period contain only summer months, yielding savings that are biased upwards.

The Company performed an analysis in Attachment 4 of the August 17, 2010 filing report comparing the Company billing analysis method versus the best practice PRISM method for both the LIURP group and the CIP program (heating-measures-only group). While the individual group savings for each month of installation varied by as much as 15%, the average savings across all the groups in a measure category were nearly identical.

For this review, Cadmus requested customer level billing data, along with the associated actual and normal weather data series for the Group 3A (storage water heater) and LIURP measure categories. The customer specific data was reviewed and Cadmus verified that when the customer level data is aggregated up to the summary measure analysis level across the accounts, the summaries yield identical results to those presented in the Company filings.

Moreover, Cadmus performed a PRISM billing analysis for the two groups-CIP storage water heaters only group (Group 3A) and the LIURP group - with measure installations in September 2009. For both groups, pre and post PRISM fixed-base 65-degree models were used. The PRISM models provided estimates of weather sensitive, base load, and overall usage and savings per customer.

Table 1. Comparison of Group 3A analysis provides a comparison of the Company billing analysis and the PRISM fixed-base (65 degree) method. As expected, for both the Group 3A and LIURP groups, the PRISM method yielded lower non-weather sensitive base-load usage than the Company's analysis. The Group 3A savings however were fairly similar between the Company method with a 4.6 MCF (4.5%) reduction, and the PRISM base 65 model with a 3.9 MCF (3.8%) reduction in usage.

Table 1. Comparison of Group 3A analysis

Storage Water Heaters September 2009 (n = 58)		Company Method (MCF per customer)			PRISM (Base 65) (MCF per customer)		
Period	Time Period	Weather Sensitive Load	Base Load	Total Load	Weather Sensitive Load	Base Load	Total Load
Pre	Oct08 - Sep09	80.6	22.9	103.5	89.1	15.0	104.1
Post	Nov09 - Oct10	78.4	20.5	98.8	87.9	12.3	100.2
Pre-Post	Savings	2.3	2.4	4.6	1.2	2.7	3.9
(Pre-Post) /Pre	Percent Savings	2.8%	10.4%	4.5%	1.4%	17.9%	3.8%

Similarly for the LIURP group, the Company method yielded a 20.7 MCF (12.9%) reduction, and the PRISM base 65-degree model yielded a 20.6 MCF (12.7%) reduction in usage. The pre and post weather total normalized usages for the two methods are very similar. Again, as expected although the Company method provides higher base load estimates than PRISM, the total usage and savings estimates per participant are very similar.

Table 2. Comparison of LIURP analysis

LIURP September 2009 (n = 112)		Company Method (MCF per customer)			PRISM (Base 65) (MCF per customer)		
Period	Time Period	Weather Sensitive Load	Base Load	Total Load	Weather Sensitive Load	Base Load	Total Load
Pre	Oct08 - Sep09	126.8	34.1	160.9	137.1	24.5	161.7
Post	Nov09 - Oct10	113.4	26.8	140.1	121.7	19.3	141.1
Pre-Post	Savings	13.4	7.3	20.7	15.4	5.2	20.6
(Pre-Post) /Pre	Percent Savings	10.6%	21.5%	12.9%	11.2%	21.2%	12.7%

5. Recommendations

In the current evaluation methodology, National Fuel incorporates a simple yet robust monthly level billing analysis method. Cadmus does not recommend that National Fuel change its method since it is an excellent method for determining savings. The method provides both reliable savings estimates and a simple weather normalization method. Furthermore, the Company method yields transparent monthly estimates of savings, and can be used to calculate savings for each month, ideal for savings reporting. This is also helpful for finding the weather normalized savings on a monthly basis for a specific measure category in a given installation month.