



national fuel

February 28, 2012

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 Sixteenth Quarterly Program Status Report and Annual Report of Program Results through December 31, 2011 for National Fuel Gas Distribution Corporation's Conservation Incentive Program. These Reports are 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
and Annual Report of
Program Results through December 31, 2011
Case 07-G-0141
Submitted to the New York State Department of Public Service
February 28, 2012

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

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CONSERVATION INCENTIVE PROGRAM
Program Status Report
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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 Continuation of National Fuel Gas Distribution Corporation’s Conservation Incentive Program with Modifications, issued and effective November 22, 2010.

timeline in its CIP implementation plan submitted to the Commission on January 21, 2011. This report is filed consistent with that timeline. In the 2010 CIP Order the Commission encouraged the Company to report zip code information for completed projects. Appendix J provides zip code summaries for projects completed during program years 1 through 4.

On October 25, 2011, the Commission issued its Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule (“2011 EEPS Order”).⁴ The 2011 EEPS Order, among other things, integrated the Company’s CIP into the statewide EEPS.⁵ This report will be the final quarterly report filed in this format. Future reports will be filed consistent with the implementation of the 2011 EEPS Order.

B. Report Overview

This report summarizes the status of the Company’s CIP as of December 31, 2011. Included in this report is an update of the status of the M&V plan. As explained in the initial report and this February 2012 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.⁶

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.⁷

⁴ Case 07-M-0548 – Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Case 07-G-0141 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules, Regulations of National Fuel Gas Distribution Corporation for Gas Service, Order Authorizing Efficiency Programs, Revising Incentive mechanism, and Establishing a Surcharge Schedule (issued and effective October 25, 2011) (“2011 EEPS Order”).

⁵ 2011 EEPS Order, p. 17.

⁶ 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.

⁷ Cases 03-E-0640 and 06-G-0746, RDM Proceeding, Order Requiring Proposals for Revenue Decoupling Mechanisms (issued and effective April 20, 2007).

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.

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.

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 sixteen 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 September 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.

Program M&V Summary Based on Deemed Savings Assumptions Included in the Company’s Base Rate Case 07-G-0141				
	Total	Residential	Non-Residential	Outreach
Base				
TRC	1.76	1.60	1.87	4.31
TRC-WNY	2.63	2.38	2.78	6.81
Societal Test	2.81	2.54	2.97	7.24
Adjusted				
TRC	1.69	1.55	1.82	3.88
TRC-WNY	2.54	2.30	2.70	6.16
Societal Test	2.71	2.46	2.89	6.55

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

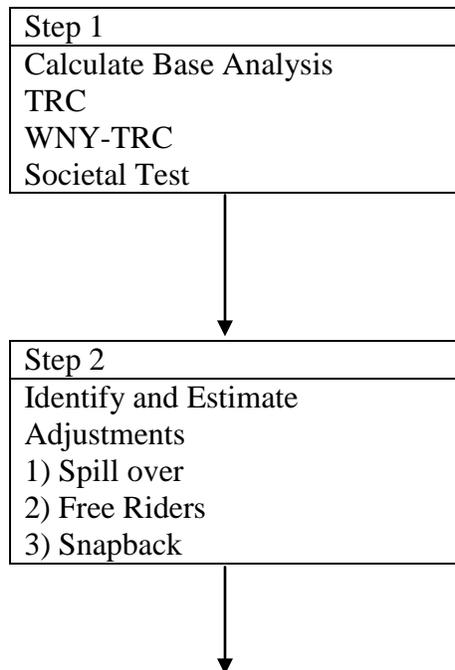
costs. The NGS costs exclude the delivery and minimum charge rates billed to customers since in the long run these costs are not avoided.

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



Step 3
Calculate Adjusted Analysis
TRC
WNY-TRC
Societal Test

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.⁸ This is the fourth 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 December 2011. The price trend has been updated through December 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

⁸ 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”).

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 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.⁹

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 12/2011	104.428	410.862
* 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

⁹ 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.

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, 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 Method¹⁰ (“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) ¹¹	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) ¹²	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)	14.50			6.45	4.50	8.17
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.

¹⁰ Appendix I provides greater detail on the PRISM method.

¹¹ Based on deemed savings provided in the Company’s last base rate case.

¹² Based on TecMarket’s Standard Technical Manual formulas and formula variable values for the Company’s service territory.

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.

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 December 31, 2011, a total of 37,343 customers have been referred to the contractor for LIURP services. Of these, 33,676 have been sent a letter/application, and 7,941 applications have been returned. This has resulted in 4,039 customers referred for services, 478 applications on hold and 3,424 customers deemed ineligible. Of the 3,321

currently active program participants, 3,030 jobs have been completed, with 198 jobs in process and another 93 energy audits in process. The 3,030 completed jobs consisted of insulation measures for 2,283 customers, air sealing measures for 2,386 customers, heating system repairs/replacements for 1,643 customers and low flow showerheads for 714 customers. The total cost of all the measures to date is \$10,137,030, with an average cost per measure of \$3,346.

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

b. External

As of December 31, 2011, the Company estimates that the 3,030 completed conservation measure jobs will result in 128,749 Mcf of annual energy savings, which equates to \$1,309,161 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	1.27
Base Societal Test w/WNY Benefits	1.99
TRC Adjusted	1.27
Adjusted Societal Test w/WNY Benefits	1.99

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 reports¹³ 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.

¹³ Reports through December 31, 2010.

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 rebate programs still exceeds the costs. As explained in Appendix I, the pre and post analysis utilized thirty-one 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 track¹⁴ proposal as offering one of the greatest potentials for cost effective natural gas energy efficiency initiatives.

¹⁴ 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.

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):

	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	90% AFUE ¹⁵	\$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 ¹⁶	\$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:

¹⁵ 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.

¹⁶ 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.

	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

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 December 31, 2011, a total of 68,235 rebates were processed by EFI, for a total rebate amount of \$12,696,130. This represents approximately 426% of the estimated total annual budget of \$2,980,677 for this program, in the first forty-seven months since becoming effective. As of December 31, 2011, EFI was paid \$811,219 to administer this program per Distribution’s contract with them. This represents approximately 280% 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	33,915	\$10,783,550
Water Heating	5,783	\$1,312,388	5,329	\$ 1,188,350
Thermostat	16,390	\$ 409,755	28,991	\$ 724,230
Total Rebate	26,025	\$2,980,677	68,235	\$12,696,130
General Admin.				\$ 144,800
Processing				\$ 408,077
Inspections			2,953	\$ 258,342
Total Admin.		\$ 289,050		\$ 811,219
Total Program		\$3,269,727		\$13,507,349

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 December 31, 2011, 2,953 of these inspections have been completed, which represents approximately a 5% sample of the total rebate population of 68,235 rebates, and no fraudulent claims have been discovered. Second, EFI has conducted a phone survey to a random sample of 1,959 customers (approximately 4% of the 43,454 customers receiving a rebate through December 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 (67%), Company bill inserts (13%) and friends/word of mouth (10%). A total of 86% of rebate participants indicated the rebate was important in influencing them to make their equipment upgrade decision. Finally, 95% 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	1.68	1.82	0.85	1.19	2.31	8.95	0.46	0.79	0.92
Base Societal Test w/WNY Benefits	2.67	2.89	1.34	1.88	3.67	14.28	0.71	1.26	1.48
TRC Adjusted	1.62	1.75	0.83	1.15	2.25	8.39	0.44	0.75	0.86
Adjusted Societal Test w/WNY Benefits	2.58	2.78	1.31	1.83	3.57	13.40	0.70	1.20	1.39

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	1.68	1.26	9.84	0.95	0.85
Base Societal Test w/WNY Benefits	2.68	2.01	15.69	1.52	1.37
TRC Adjusted	1.61	1.21	9.22	0.90	0.80
Adjusted Societal Test w/WNY Benefits	2.57	1.93	14.72	1.44	1.30

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 thirty two 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 estimated resulting gas energy savings. A technical engineering analysis must first be performed to confirm energy savings. The rebate amount will be \$15/Mcf multiplied by the estimated savings, 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 December 31, 2011, a total of 1,150 rebates were processed by EFI and NYSERDA, for a total rebate amount of \$1,148,059. This represents approximately 87% 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 December 31, 2011, EFI and NYSERDA were paid a total of \$104,149 to administer this program per Distribution’s contract with them. This represents approximately 81% 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	644	\$1,049,436
Water Heating	N/A	N/A	67	\$ 35,038
Cooking	N/A	N/A	14	\$ 12,500
Process Heating	N/A	N/A	1	\$ 25,000
Thermostat	N/A	N/A	424	\$ 26,085
Total Rebate	N/A	\$1,319,860	1,150	\$1,148,059
General Admin.				\$0
Processing				\$ 100,166
Inspections			85	\$ 3,983
Total Admin.		\$ 127,993		\$ 104,149
Total Program		\$1,447,853		\$1,252,208

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 45 rebates have been processed through this method as of December 31, 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 December 31, 2011, 712 customers have taken advantage of this simpler rebate option available to them.

Finally, now that the program's introductory 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	1.87
Base Societal Test w/WNY Benefits	2.97
TRC Adjusted	1.82
Adjusted Societal Test w/WNY Benefits	2.89

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 three of the CIP, Distribution is transitioning the program from an introductory phase to “one that maintains a solid awareness of the program.”

2. Goal

The goal of the communications plan is to educate customers on the need for and the benefit of employing energy efficiency measures. 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 (October 1- December 31, 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 in September and continued into 4th quarter for the second half of the campaign, running October 17th - November 5th.
- There were 412 spots scheduled for these last 3 weeks of the campaign.
- Each week is projected to obtain an 89 - 99% reach and 5.5 times frequency against adults 25-54, with a projected 526 gross rating points planned.

Radio Advertisement:

- The fall campaign on radio began on September 12th and continued into 4th quarter, running October 17th – November 5th.
- There were 391 spots scheduled for this second half of the campaign.
- Each week is projected to obtain a 55-59% reach and 6.5 times frequency against adults 25-54, with a projected 385 gross rating points planned.
- This campaign also included 114 spots on two unrated outlying stations to cover the southern portion of the service area that cannot be reached with the rated radio stations.

Transit Advertising (Bus Shelters and Bus Cards)

- No Transit Advertising from October 1 –December 31.

Outdoor Advertising – Billboards, Bulletins and Posters

- One bulletin campaign ran from October 3rd – October 30th positioned on major highways and travel routes throughout the service area.

- This campaign included eight bulletin advertisements in the market for a total of 955,542 projected impressions.

Pay Per Click Program

- Program ran from September 27th – October 30th
- Utilized both Google and Bing
- Program delivered a total of 48,703 impressions, 1,417 clicks and a click-through rate of 2.91%

Website (NationalFuelForThought.com)

- This program-specific website generated approximately 8,917 visits (with 21,701 page views among those visits) from October 1 to December 31, 2011.
- See for a screen shot of the website's homepage.

Other Website Outreach

- The banner advertising campaign started on September 26th and ran to November 5th.
- The campaign achieved a combined 4,391,618 impressions through a combination of local sites and custom channels purchased through an ad network.
- The custom channel of sites included the categories of Business/Finance, Health, Real Estate/Home Improvement, Travel/Weather, Sports, Technology and local news sites.
- The campaign achieved 2,902 clicks and a .06% click-through-rate.

Handouts and Program Materials:

- Conservation kits and program materials were distributed at community events by employees and to customers throughout our service area through heating and cooling appliance dealers, area not-for-profit organizations, health and human service agencies, the offices of local elected officials and at local appliance stores.
 - Approximately 780 kits were distributed between Oct. 1 and Dec 31, 2011.
- Along with starter-materials to help customers weatherize their homes and a flyer on programs and services for our customers, the conservation kits included:
 - **Program brochures, describing rebate program features for residential and non-residential customers.** These were also distributed upon request to employees, customers, heating and cooling appliance dealers and local appliance stores.
See attached for samples.
 - **Conservation Tip Sheet, including tips and facts about energy conservation and websites that contain conservation information.** This tip sheet was redesigned and updated during June and July 2010. These were also distributed upon

request to employees, customers, heating and cooling appliance dealers and local appliance stores.

- See attached for a sample tip sheet.

- **Online Energy Analysis Flyer, including tips and facts about energy conservation and websites that contain conservation information.** This flyer was redesigned and updated in 2010. These were also distributed upon request to employees, customers, heating and cooling appliance dealers and local appliance stores.
 - See attached for a sample flyer.

Community Outreach:

- Program materials and conservation kits were distributed at the following:
 - WUFO Expo 2011 – 150 kits
 - Buffalo Niagara Partnership – 50 kits
 - Hamburg Municipal Energy Workshop – 50 kits
 - WNY Coalition for Utilities & Housing Workshop – 80 kits
 - Chautauqua County Energy Conference – 110 kits
 - Safe & Seen Halloween/ECC – 110 kits
 - UB Student Association – 50 kits
 - Catholic Charities of Hornell – 70 kits
 - Ellicottville Chamber of Commerce – 10 kits
 - Schiller Park Music Festival – 100 kits
- Program materials were provided or mailed out upon request at:
 - National Fuel’s Buffalo Customer Assistance Center
 - National Fuel’s Apple Tree Customer Assistance Center
 - National Fuel’s Jamestown Customer Assistance Center
 - National Fuel’s New York Customer Response Center

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 December 31, 2011, approximately \$1,152,570 was spent for a total CIP Outreach and Education spend of approximately \$7.049 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	4.31
Base Societal Test w/WNY Benefits	7.24
TRC Adjusted	3.88
Adjusted Societal Test w/WNY Benefits	6.55

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 5.82 if the volume savings resulting from general outreach are 50% greater than those assumed in the base analysis to 1.94 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 sixteenth 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 December 31, 2011. This will be the final quarterly report filed in this format. Future reports will be filed consistent with reporting requirements established with the implementation of the 2011 EEPS Order.

Appendix A - Low Income Usage Reduction Program Cumulative Results through 12/31/11

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

Customers Referred (NFG & Other)	37,343		
Customer Letter/Application Sent	33,676 *	90%	of 37,343 Referrals
Applications Returned	7,941	24%	of 33,676 Applications Sent

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

Applications on Hold (Landlord Authorization):	461	6%	of 7,941 Applications Returned
Applications on Hold (Additional Information/Other):	17	0%	of 7,941 Applications Returned
Deemed Ineligible (house for sale etc)	<u>3,424</u>	43%	of 7,941 Applications Returned
Assigned to Contractors for Service	4,039	51%	of 7,941 Applications Returned

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

Audits in Process	93	2%	of 4,039 Households assigned to Contractors for Service
Jobs in Process	198	5%	of 4,039 Households assigned to Contractors for Service
Jobs Completed	<u>3,030</u>	75%	of 4,039 Households assigned to Contractors for Service
Program Participants	3,321		
Jobs Cancelled	716	18%	of 4,039 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	3,086	tbd	tbd	\$1,030,594	\$334
Insulation	2,283	95,608	\$965,218	\$6,588,823	\$2,886
Air Sealing	2,386	21,861	\$213,661	\$1,043,368	\$437
Heating System Repair/Replacement	1,643	6,929	\$87,365	\$696,623	\$424
Thermostats	307	3,321	\$30,967	\$31,941	\$104
DHW Improvements	211	281	\$3,692	\$199,459	\$945
Showerheads	714	528	\$5,652	\$12,384	\$17
Pipe Wrapping	551	142	\$1,847	\$9,255	\$17
Other	<u>2,023</u>	<u>79</u>	<u>\$759</u>	<u>\$524,583</u>	<u>\$259</u>
Total	3,030	128,749	\$1,309,161	<u>\$10,137,030</u>	\$3,346

^{*} Therm cost savings are based on the average National Fuel Residential Utility Prices for January 2010 and July 2010 as posted by the PSC minus the non-bypassable service charge (\$.99 per therm).

Appendix B - Residential CIP Rebate Program Cumulative Results through 12/31/11

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>341</u>	\$350.00	<u>\$119,350.00</u>			
Subtotal	2509		\$986,550.00	\$7.50	\$18,817.50	\$1,005,367.50
Boiler - Steam	97	\$200.00	\$19,400.00	\$7.50	\$727.50	\$20,127.50
Furnace >= 90% with ECM	4364	\$400.00	\$1,745,600.00			
Furnace >= 90% with ECM	<u>2085</u>	\$350.00	<u>\$739,850.00</u>			
Subtotal	6449		\$2,485,450.00	\$7.50	\$48,367.50	\$2,533,817.50
Furnace >= 90%	21549	\$300.00	\$6,464,700.00			
Furnace >= 90%	<u>3311</u>	\$250.00	<u>\$827,450.00</u>			
Subtotal	24860		\$7,292,150.00	\$7.50	\$186,442.50	\$7,478,592.50
Subtotal	33915		\$10,783,550.00		\$254,355.00	\$11,037,905.00
II. Water Heating						
Indirect Water Heater	236	\$300.00	\$70,800.00			
Indirect Water Heater	<u>82</u>	\$250.00	<u>\$20,500.00</u>			
Subtotal	318		\$91,300.00	\$6.50	\$2,067.00	\$93,367.00
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	5329		\$1,188,350.00		\$34,638.50	\$1,222,988.50
III. Programmable Thermostat	28991	\$24.98 *	\$724,229.95	\$4.11 *	\$119,083.50 **	\$843,313.45
Total all Equipment	<u>68,235</u>		<u>\$12,696,129.95</u>		<u>\$408,077.00</u>	<u>\$13,104,206.95</u>
Program Administration	13 months (12/07 - 12/08)			\$2,000.00	\$26,000.00	
	24 months (1/09 - 12/10)			\$3,200.00	\$76,800.00	
	12 months (1/10 - 12/11)			\$3,500.00	<u>\$42,000.00</u>	
					\$144,800.00	
Inspections	2476			\$87.00	\$215,412.00	
	<u>477</u>			\$90.00	<u>\$42,930.00</u>	
	2953				\$258,342.00	
PROGRAM TOTAL						\$13,507,348.95

* 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 12/31/11

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 12/31/11

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	104	\$2,352.88 *	\$244,700.00	9.00%	\$22,023.00	\$266,723.00
Boiler - Steam	6	\$1,775.33 *	\$10,652.00	9.00%	\$958.68	\$11,610.68
Unit Heater	42	\$1,547.62 *	\$65,000.00	9.00%	\$5,850.00	\$70,850.00
Furnace	<u>288</u>	\$962.29 *	<u>\$277,140.00</u>	9.00%	<u>\$24,942.60</u>	<u>\$302,082.60</u>
Subtotal	440		\$597,492.00		\$53,774.28	\$651,266.28
II. Water Heating						
Water Heater - Storage Tank	19	\$150.00	\$3,000.00	9.00%	\$270.00	\$3,270.00
Water Heater - Tankless	<u>25</u>	\$350.00	<u>\$21,950.00</u>	9.00%	\$1,975.50	<u>\$23,925.50</u>
Subtotal	44		\$24,950.00		\$2,245.50	\$27,195.50
III. Cooking						
	14	\$892.86 *	\$12,500.00	9.00%	\$1,125.00	\$13,625.00
IV. Programmable Thermostat						
	214	\$97.48 *	\$20,860.00	9.00%	\$1,877.40 **	\$22,737.40
Total all Equipment	<u>712</u>		<u>\$655,802.00</u>		<u>\$59,022.18</u>	<u>\$714,824.18</u>
Inspections	13			N/A	\$1,634.00	
PROGRAM SUBTOTAL						\$716,458.18

* 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 12/31/11

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	30	\$9,533.58	\$286,007.50	9.00%	\$25,740.68	\$311,748.18
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>9</u>	\$10,417.94 *	<u>\$93,761.42</u>	9.00%	<u>\$8,438.53</u>	<u>\$102,199.95</u>
Subtotal	41	\$9,784.00	\$401,143.92		\$36,102.95	\$437,246.87
II. Water Heating						
Water Heater - Storage Tank	3	\$1,829.33	\$5,488.00	9.00%	\$493.92	\$5,981.92
Water Heater - Tankless	<u>0</u>		<u>\$0.00</u>	9.00%	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal	3	\$1,829.33	\$5,488.00		\$493.92	\$5,981.92
III. Process Heating						
	1		\$25,000.00	9.00%	\$2,250.00	\$27,250.00
IV. Programmable Thermostat						
	0		\$0.00	9.00%	\$0.00	\$0.00
Total all Equipment	<u>45</u>		<u>\$431,631.92</u>		<u>\$38,846.87</u>	<u>\$470,478.79</u>
Inspections	45			N/A	\$0.00	
PROGRAM SUBTOTAL						\$470,478.79

Appendix C - Small Non-Residential CIP Rebate Program Cumulative Results through 12/31/11

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	\$3,518.35	\$538,307.50	\$47,906.18	\$586,213.68
Boiler - Steam	6	\$0.00	\$10,652.00	\$958.68	\$11,610.68
Unit Heater	44	\$1,963.07	\$86,375.00	\$7,773.75	\$94,148.75
Furnace	432	\$741.53	\$320,340.00	\$26,022.60	\$346,362.60
Other	<u>9</u>	\$10,417.94	<u>\$93,761.42</u>	<u>\$8,438.53</u>	<u>\$102,199.95</u>
Subtotal	644	\$1,629.56	\$1,049,435.92	\$91,099.73	\$1,140,535.65
II. Water Heating					
Water Heater - Storage Tank	34	\$302.59	\$10,288.00	\$841.92	\$11,129.92
Water Heater - Tankless	<u>33</u>	\$750.00	<u>\$24,750.00</u>	<u>\$2,027.50</u>	<u>\$26,777.50</u>
Subtotal	67	\$522.96	\$35,038.00	\$2,869.42	\$37,907.42
III. Cooking	14	\$892.86	\$12,500.00	\$1,125.00	\$13,625.00
IV. Process Heating	1	\$0.00	\$25,000.00	\$2,250.00	\$27,250.00
V. Programmable Thermostat	424	\$61.52	\$26,084.96	\$2,822.40	\$28,907.36
Total all Equipment	<u>1,150</u>		<u>\$1,148,058.88</u>	<u>\$100,166.55</u>	<u>\$1,248,225.43</u>
Inspections	85			\$3,983.00	
PROGRAM TOTAL					\$1,252,208.43

Appendix D – Outreach and Education Results through December 31, 2011



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

 **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



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!

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 calentadores. Mide la cantidad de calor que realmente se entrega a la casa, comparado con la cantidad de combustible que debe proporcionarse al calentador.

† ECM - Motores controlados 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

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 nationalfuelthought.com to learn more.

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.

	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		2/8/2012					
7	Quarter	Year	Month				
8		16	Dec-11	49			
9							
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 - Programmable 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	7.04%	2.66%	0.41%	1.84%	6.15%	0.07%
16	Total Number of Participants	24,716	2,490	97	6,449	28,781	318
17	Total Annual Mcf Saved	450,247	51,418	1,785	117,480	217,463	1,762
18	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
19	Total DTH Saved	466,005	53,217	1,847	121,592	225,074	1,823
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	4,112	470	16	1,073	1,986	16
25	Estimated Peak Day Impact DTH	4,256	486	17	1,110	2,055	17
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	0.93	0.11	0.00	0.24	0.45	0.00
28	II. Program Cost Information						
29	Company Direct Costs	\$ 7,434,313	\$ 997,625	\$ 20,128	\$ 2,533,818	\$ 837,143	\$ 93,367
30	Company Admin Costs	\$ 48,415	\$ 6,497	\$ 131	\$ 16,501	\$ 5,452	\$ 608
31	Company Advertising Costs	\$ 1,850,370	\$ 248,305	\$ 5,010	\$ 630,657	\$ 208,362	\$ 23,239
32	Total Initial Program Costs - Company	\$ 9,333,098	\$ 1,252,427	\$ 25,268	\$ 3,180,976	\$ 1,050,957	\$ 117,214
33	Total Initial Program Costs - Participant	\$ 17,301,200	\$ 3,984,000	\$ 67,900	\$ 10,318,400	\$ 719,525	\$ 349,800
34	Total Initial Program Costs	\$ 26,634,298	\$ 5,236,427	\$ 93,168	\$ 13,499,376	\$ 1,770,482	\$ 467,014
35	Per Participant Initial Program Costs - Company	\$ 300.79	\$ 400.65	\$ 207.50	\$ 392.90	\$ 29.09	\$ 293.61
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	\$ 1,000.79	\$ 2,000.65	\$ 907.50	\$ 1,992.90	\$ 54.09	\$ 1,393.61
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	\$ 68.00	\$ 49.85
52	Total NGS Savings	\$ 4,052,220	\$ 462,760	\$ 16,063	\$ 1,057,322	\$ 1,957,167	\$ 15,854
53	V. Direct Cost Benefit Summary						
54	Present Value of Participant Savings	\$ 1,959.28	\$ 2,492.95	\$ 2,221.35	\$ 1,781.27	\$ 550.31	\$ 668.75
55	Present Value of Total Savings	\$ 48,425,584	\$ 6,207,436	\$ 215,471	\$ 11,487,389	\$ 15,838,446	\$ 212,662
56	Present Value of Total Initial Program Costs per Annual Participant	\$ 1,001	\$ 2,001	\$ 908	\$ 1,993	\$ 54	\$ 1,394
57	Present Value of Total Initial Program Costs	\$ 26,634,298	\$ 5,236,427	\$ 93,168	\$ 13,499,376	\$ 1,770,482	\$ 467,014
58	TRC	1.82	1.19	2.31	0.85	8.95	0.46
59	VI. TRC-WNY						
60	WNY Incremental Expenditures	\$ 24,783,928	\$ 4,988,122	\$ 88,159	\$ 12,868,719	\$ 1,562,120	\$ 443,775
61	WNY Expenditure Multiplier	0.46	0.46	0.46	0.46	0.49	0.46
62	WNY Expenditure Benefits	\$ 11,400,607	\$ 2,294,536	\$ 40,553	\$ 5,919,611	\$ 765,439	\$ 204,137
63	Advertising	\$ 1,850,370	\$ 248,305	\$ 5,010	\$ 630,657	\$ 208,362	\$ 23,239
64	Advertising Multiplier	0.87	0.87	0.87	0.87	0.87	0.87
65	Advertising Benefits	\$ 1,609,822	\$ 216,025	\$ 4,358	\$ 548,671	\$ 181,275	\$ 20,218
66	WNY Expenditure & Adv Benefits	\$ 13,010,429	\$ 2,510,561	\$ 44,911	\$ 6,468,282	\$ 946,714	\$ 224,354
67	Customer Net Savings	\$ 21,791,287	\$ 971,010	\$ 122,302	\$ (2,011,986)	\$ 14,067,964	\$ (254,352)
68	WNY Income Multiplier	0.49	0.49	0.49	0.49	0.49	0.49
69	WNY Customer Net Savings Benefits	\$ 10,677,730	\$ 475,795	\$ 59,928	\$ (985,873)	\$ 6,893,302	\$ (124,633)
70	Total WNY Benefits	\$ 23,688,159	\$ 2,986,356	\$ 104,840	\$ 5,482,409	\$ 7,840,016	\$ 99,722
71	TRC-WNY	2.71	1.76	3.44	1.26	13.37	0.67
72	VII. Societal Test						
73	Environmental						
74	Total	\$ 4,886,747	\$ 626,408	\$ 21,744	\$ 1,159,221	\$ 1,598,297	\$ 21,460
75	Other						
76	Total	\$ 4,886,747	\$ 626,408	\$ 21,744	\$ 1,159,221	\$ 1,598,297	\$ 21,460
77	Total Incremental Societal Benefits	\$ 4,886,747	\$ 626,408	\$ 21,744	\$ 1,159,221	\$ 1,598,297	\$ 21,460
78	Total Benefits W/ TRC WNY	\$ 77,000,490	\$ 9,820,200	\$ 342,054	\$ 18,129,019	\$ 25,276,759	\$ 333,843
79	Societal Test	2.89	1.88	3.67	1.34	14.28	0.71

	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		2/8/2012					
7	Quarter	Year	Month				
8		16	Dec-11	49			
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 - Programmable Tstat Residential	Appliance Rebates - Indirect Heater Residential
80	Adjustment Detail						
81	I. Spillover						
82	Total Spillover Impact (Mcf)	-	-	-	-	-	-
83	Total Participants	24,716	2,490	97	6,449	28,781	318
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	24,716	2,490	97	6,449	28,781	318
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	7.04%	2.66%	0.41%	1.84%	6.15%	0.07%
99	Annual Number of Participants	24,716	2,490	97	6,449	28,781	318
100	Total Mcf Adjusted	(45,025)	(5,142)	(178)	(11,748)	(21,746)	(176)
101	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
102	Total DTH Adjusted	(46,601)	(5,322)	(185)	(12,159)	(22,507)	(182)
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	\$ (1,730,120)	\$ (398,400)	\$ (6,790)	\$ (1,031,840)	\$ (71,953)	\$ (34,980)
111	Total Initial Program Costs	\$ (1,730,120)	\$ (398,400)	\$ (6,790)	\$ (1,031,840)	\$ (71,953)	\$ (34,980)
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	\$ (405,222)	\$ (46,276)	\$ (1,606)	\$ (105,732)	\$ (195,717)	\$ (1,585)

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1	National Fuel Gas Distribution Corporation						
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5							
6		2/8/2012					
7	Quarter	Year	Month				
8		16 Dec-11	49				
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 - Programmable Tstat Residential	Appliance Rebates - Indirect Heater Residential
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	7.04%	2.66%	0.41%	1.84%	6.15%	0.07%
134	Total Number of Participants	24,716	2,490	97	6,449	28,781	318
135	Total Mcf Saved	405,222	46,276	1,606	105,732	195,717	1,585
136	DTH Conversion	1,035	1,035	1,035	1,035	1,035	1,035
137	Total DTH Saved	419,405	47,896	1,663	109,433	202,567	1,641
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	3,700.66	422.61	14.67	965.59	1,787.37	14.48
142	Estimated Peak Day Impact Dth	3,830.18	437.40	15.18	999.39	1,849.93	14.99
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	0.84	0.10	0.00	0.22	0.41	0.00
145	II. Program Cost Information						
146	Company Direct Costs	\$ 7,434,313	\$ 997,625	\$ 20,128	\$ 2,533,818	\$ 837,143	\$ 93,367
147	Company Admin Costs	\$ 48,415	\$ 6,497	\$ 131	\$ 16,501	\$ 5,452	\$ 608
148	Company Advertising Costs	\$ 1,850,370	\$ 248,305	\$ 5,010	\$ 630,657	\$ 208,362	\$ 23,239
149	Total Initial Program Costs - Company	\$ 9,333,098	\$ 1,252,427	\$ 25,268	\$ 3,180,976	\$ 1,050,957	\$ 117,214
150	Total Initial Program Costs - Participant	\$ 15,571,080	\$ 3,585,600	\$ 61,110	\$ 9,286,560	\$ 647,573	\$ 314,820
151	Total Initial Program Costs	\$ 24,904,178	\$ 4,838,027	\$ 86,378	\$ 12,467,536	\$ 1,698,529	\$ 432,034
152	Per Participant Initial Program Costs - Company	\$ 377.61	\$ 502.98	\$ 260.50	\$ 493.25	\$ 36.52	\$ 368.60
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	\$ 1,007.61	\$ 1,942.98	\$ 890.50	\$ 1,933.25	\$ 59.02	\$ 1,358.60
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	\$ 61.20	\$ 44.87
169	Total NGS Savings	\$ 3,646,998	\$ 416,484	\$ 14,457	\$ 951,590	\$ 1,761,450	\$ 14,268
170	V. Direct Cost Benefit Summary						
171	Present Value of Participant Savings	\$ 1,763.35	\$ 2,243.65	\$ 1,999.21	\$ 1,603.14	\$ 495.28	\$ 601.87
172	Present Value of Total Savings	\$ 43,583,026	\$ 5,586,693	\$ 193,924	\$ 10,338,650	\$ 14,254,601	\$ 191,395
	Present Value of Total Initial Program Costs per Annual Participant						
173	Participant	\$ 1,008	\$ 1,943	\$ 890	\$ 1,933	\$ 59	\$ 1,359
174	Present Value of Total Initial Program Costs	\$ 24,904,178	\$ 4,838,027	\$ 86,378	\$ 12,467,536	\$ 1,698,529	\$ 432,034
175	TRC	1.75	1.15	2.25	0.83	8.39	0.44
176	VI. TRC-WNY						
177	WNY Incremental Expenditures	\$ 23,053,808	\$ 4,589,722	\$ 81,369	\$ 11,836,879	\$ 1,490,168	\$ 408,795
178	WNY Expenditure Multiplier	0.46	0.46	0.46	0.46	0.49	0.46
179	WNY Expenditure Benefits	\$ 10,604,752	\$ 2,111,272	\$ 37,430	\$ 5,444,964	\$ 730,182	\$ 188,046
180	Advertising	\$ 1,850,370	\$ 248,305	\$ 5,010	\$ 630,657	\$ 208,362	\$ 23,239
181	Advertising Multiplier	0.87	0.87	0.87	0.87	0.87	0.87
182	Advertising Benefits	\$ 1,609,822	\$ 216,025	\$ 4,358	\$ 548,671	\$ 181,275	\$ 20,218
183	WNY Expenditure & Adv Benefits	\$ 12,214,573	\$ 2,327,297	\$ 41,788	\$ 5,993,636	\$ 911,457	\$ 208,263
184	Customer Net Savings	\$ 18,678,848	\$ 748,666	\$ 107,545	\$ (2,128,885)	\$ 12,556,072	\$ (240,638)
185	WNY Income Multiplier	0.49	0.49	0.49	0.49	0.49	0.49
186	WNY Customer Net Savings Benefits	\$ 9,152,636	\$ 366,846	\$ 52,697	\$ (1,043,154)	\$ 6,152,475	\$ (117,913)
187	Total WNY Benefits	\$ 21,367,209	\$ 2,694,144	\$ 94,485	\$ 4,950,482	\$ 7,063,932	\$ 90,351
188	TRC-WNY	2.61	1.71	3.34	1.23	12.55	0.65
189	VII. Societal Test						
190	Environmental						
191	Total	\$ 4,398,072	\$ 563,767	\$ 19,569	\$ 1,043,299	\$ 1,438,467	\$ 19,314
192	Other						
193	Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Total Incremental Societal Benefits	\$ 4,398,072	\$ 563,767	\$ 19,569	\$ 1,043,299	\$ 1,438,467	\$ 19,314
195	Total Benefits W/TRC-WNY	\$ 69,348,307	\$ 8,844,603	\$ 307,978	\$ 16,332,431	\$ 22,757,001	\$ 301,060
196	Societal Test	2.78	1.83	3.57	1.31	13.40	0.70

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1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		2/8/2012	
7	Quarter		
8		16	
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	\$ 3,337	\$ 3,989
31	Company Advertising Costs	\$ 127,530	\$ 152,451
32	Total Initial Program Costs - Company	\$ 643,247	\$ 768,951
33	Total Initial Program Costs - Participant	\$ 654,800	\$ 600,950
34	Total Initial Program Costs	\$ 1,298,047	\$ 1,369,901
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	\$ 1,298,047	\$ 1,369,901
58	TRC	0.79	0.92
59	VI. TRC-WNY		
60	WNY Incremental Expenditures	\$ 1,170,518	\$ 1,217,449
61	WNY Expenditure Multiplier	0.46	0.46
62	WNY Expenditure Benefits	\$ 538,438	\$ 560,027
63	Advertising	\$ 127,530	\$ 152,451
64	Advertising Multiplier	0.87	0.87
65	Advertising Benefits	\$ 110,951	\$ 132,633
66	WNY Expenditure & Adv Benefits	\$ 649,389	\$ 692,659
67	Customer Net Savings	\$ (274,572)	\$ (113,054)
68	WNY Income Multiplier	0.49	0.49
69	WNY Customer Net Savings Benefits	\$ (134,541)	\$ (55,397)
70	Total WNY Benefits	\$ 514,848	\$ 637,263
71	TRC-WNY	1.19	1.38
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	\$ 1,641,605	\$ 2,020,941
79	Societal Test	1.26	1.48

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8		16	
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)

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2	New York Division		
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5			
6		2/8/2012	
7	Quarter		
8		16	
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	\$ 3,337	\$ 3,989
148	Company Advertising Costs	\$ 127,530	\$ 152,451
149	Total Initial Program Costs - Company	\$ 643,247	\$ 768,951
150	Total Initial Program Costs - Participant	\$ 589,320	\$ 540,855
151	Total Initial Program Costs	\$ 1,232,567	\$ 1,309,806
152	Per Participant Initial Program Costs - Company	\$ 196.47	\$ 447.85
153	Per Participant Initial Program Costs - Participant	\$ 180.00	\$ 315.00
154	Total Initial Program Costs per Annual Participant	\$ 376.47	\$ 762.85
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	\$ 376	\$ 763
174	Present Value of Total Initial Program Costs	\$ 1,232,567	\$ 1,309,806
175	TRC	0.75	0.86
176	VI. TRC-WNY		
177	WNY Incremental Expenditures	\$ 1,105,038	\$ 1,157,354
178	WNY Expenditure Multiplier	0.46	0.46
179	WNY Expenditure Benefits	\$ 508,317	\$ 532,383
180	Advertising	\$ 127,530	\$ 152,451
181	Advertising Multiplier	0.87	0.87
182	Advertising Benefits	\$ 110,951	\$ 132,633
183	WNY Expenditure & Adv Benefits	\$ 619,268	\$ 665,016
184	Customer Net Savings	\$ (311,440)	\$ (178,644)
185	WNY Income Multiplier	0.49	0.49
186	WNY Customer Net Savings Benefits	\$ (152,606)	\$ (87,536)
187	Total WNY Benefits	\$ 466,663	\$ 577,480
188	TRC-WNY	1.13	1.30
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	\$ 1,480,743	\$ 1,822,790
196	Societal Test	1.20	1.39

	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		2/8/2012					
7	Quarter						
8		16					
9							
10		Resic					
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		20.20%		3.37%	100.00%	
16	Total Number of Participants		3,030		1,150	482,775	
17	Total Annual Mcf Saved	861,356	124,395	985,751	115,243	482,775	1,583,769
18	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
19	Total DTH Saved	891,503	128,749	1,020,252	119,276	499,672	1,639,201
20	Mcf Saved per Participant Base		41.05		100.21	1.00	
21	Multiple Factor for Sensitivity Analysis		0%		0%	0%	
22	Mcf Saved per Participant		41.05		100.21	1.00	
23	DTH Saved per Participant		42.49		103.72	1.04	
24	Estimated Peak Day Impact Mcf	7,866	1,136	9,002	1,052	4,409	14,464
25	Estimated Peak Day Impact DTH	8,142	1,176	9,317	1,089	4,563	14,970
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	1.78	0.26	2.04	3.38	1.00	
28	II. Program Cost Information						
29	Company Direct Costs	\$ 13,041,284	\$ 10,137,030	\$ 23,178,314	\$ 1,148,059		\$ 24,326,373
30	Company Admin Costs	\$ 84,930	\$ 1,716,196	\$ 1,801,126	\$ 104,150		\$ 1,905,276
31	Company Advertising Costs	\$ 3,245,922	\$ -	\$ 3,245,922	\$ 285,747	\$ 3,531,669	\$ 7,063,339
32	Total Initial Program Costs - Company	\$ 16,372,137	\$ 11,853,226	\$ 28,225,363	\$ 1,537,956	\$ 3,531,669	\$ 33,294,988
33	Total Initial Program Costs - Participant	\$ 33,996,575	\$ -	\$ 33,996,575	\$ 4,481,876	\$ -	\$ 38,478,451
34	Total Initial Program Costs	\$ 50,368,712	\$ 11,853,226	\$ 62,221,938	\$ 6,019,832	\$ 3,531,669	\$ 71,773,439
35	Per Participant Initial Program Costs - Company		\$ 3,911.96		\$ 1,337.35	\$ 7.32	
36	Per Participant Initial Program Costs - Participant		\$ -		\$ 3,897.28	\$ -	
37	Total Initial Program Costs per Annual Participant		\$ 3,911.96		\$ 5,234.64	\$ 7.32	
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)	19.46	25	21	17	4.00	19.4
46	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
47	PVIFA	8.6560	13.4139	12.1187	10.8646	3.5052	11.7485
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		\$ 369.49		\$ 901.90	\$ 9.00	
52	Total NGS Savings	\$ 7,752,203	\$ 1,119,557	\$ 8,871,759	\$ 1,037,185	\$ 4,344,975	\$ 14,253,920
53	V. Direct Cost Benefit Summary						
54	Present Value of Participant Savings		\$ 4,956.32		\$ 9,798.79	\$ 31.55	
55	Present Value of Total Savings	\$ 84,667,309	\$ 15,017,656	\$ 99,684,965	\$ 11,268,614	\$ 15,229,790	\$ 126,183,368
56	Present Value of Total Initial Program Costs per Annual Participant		\$ 3,912		\$ 5,235	\$ 7	
57	Present Value of Total Initial Program Costs	\$ 50,368,712	\$ 11,853,226	\$ 62,221,938	\$ 6,019,832	\$ 3,531,669	\$ 71,773,439
58	TRC	1.68	1.27	1.60	1.87	4.31	1.76
59	VI. TRC-WNY						
60	WNY Incremental Expenditures	\$ 47,122,789	\$ 11,853,226	\$ 58,976,015	\$ 5,734,084	\$ -	\$ 64,710,100
61	WNY Expenditure Multiplier		0.46		0.46	0.46	
62	WNY Expenditure Benefits	\$ 21,723,347	\$ 5,452,484	\$ 27,175,831	\$ 2,637,679	\$ -	\$ 29,813,510
63	Advertising	\$ 3,245,922	\$ -	\$ 3,245,922	\$ 285,747	\$ 3,531,669	\$ 7,063,339
64	Advertising Multiplier		0.87		0.87	0.87	
65	Advertising Benefits	\$ 2,823,952	\$ -	\$ 2,823,952	\$ 248,600	\$ 3,072,552	\$ 6,145,105
66	WNY Expenditure & Adv Benefits	\$ 24,547,299	\$ 5,452,484	\$ 29,999,783	\$ 2,886,279	\$ 3,072,552	\$ 35,958,614
67	Customer Net Savings	\$ 34,298,597	\$ 3,164,430	\$ 37,463,027	\$ 5,248,782	\$ 11,698,120	\$ 54,409,930
68	WNY Income Multiplier		0.49		0.49	0.49	
69	WNY Customer Net Savings Benefits	\$ 16,806,313	\$ 1,550,571	\$ 18,356,883	\$ 2,571,903	\$ 5,732,079	\$ 26,660,866
70	Total WNY Benefits	\$ 41,353,612	\$ 7,003,055	\$ 48,356,666	\$ 5,458,182	\$ 8,804,631	\$ 62,619,480
71	TRC-WNY	2.50	1.86	2.38	2.78	6.81	2.63
72	VII. Societal Test						
73	Environmental						
74	Total	\$ 8,543,990	\$ 1,515,469	\$ 10,059,459	\$ 1,137,144	\$ 1,536,876	\$ 12,733,479
75	Other						
76	Total						
77	Total Incremental Societal Benefits	\$ 8,543,990	\$ 1,515,469	\$ 10,059,459	\$ 1,137,144	\$ 1,536,876	\$ 12,733,479
78	Total Benefits W/ TRC WNY	\$ 134,564,911	\$ 23,536,180	\$ 158,101,090	\$ 17,863,940	\$ 25,571,297	\$ 201,536,327
79	Societal Test	2.67	1.99	2.54	2.97	7.24	2.81

	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		2/8/2012					
7	Quarter						
8		16					
9							
10		Resic					
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		3,030		1,150	482,775	
84	Adjustment to Per Participant Volume Due to Spillover		-		-	-	
85	II. Free Riders						
86	Mcf Saved per Participant		41.05		100.21	1.00	
87	Free Ridership %		0%		10%	10%	
88	Adjustment to Per Participant Volume Due to Free Riders		-		10.02	0.10	
89	III. Snapback						
90	Total Snapback Impact (Mcf)		-		-	-	
91	Total Participants		3,030		1,150	482,775	
92	Adjustment to Per Participant Volume Due to Snapback		-		-	-	
93	IV. Total Volume Adjustment						
94	Total Volume Adjustments		-		(10.02)	(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		20.20%		3.37%	100.00%	
99	Annual Number of Participants		3,030		1,150	482,775	
100	Total Mcf Adjusted		-		(11,524)	(48,278)	
101	DTH Conversion		1.035		1.035	1.035	
102	Total DTH Adjusted		-		(11,928)	(49,967)	
103	Mcf Adjusted per Participant		-		(10.02)	(0.10)	
104	DTH Adjusted per Participant		-		(10.37)	(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		\$ -		\$ (448,188)	\$ -	
111	Total Initial Program Costs		\$ -		\$ (448,188)	\$ -	
112	Per Participant Initial Program Costs - Company		\$ -		\$ -	\$ -	
113	Per Participant Initial Program Costs - Participant		\$ -		\$ (389.73)	\$ -	
114	Total Initial Program Costs per Annual Participant		\$ -		\$ (389.73)	\$ -	
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		\$ -		\$ (90.19)	\$ (0.90)	
129	Total NGS Savings		\$ -		\$ (103,719)	\$ (434,498)	

	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		2/8/2012					
7	Quarter						
8		16					
9							
10		Resic					
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		20.20%		3.37%	100.00%	
134	Total Number of Participants		3,030		1,150	482,775	
135	Total Mcf Saved	775,220	124,395	899,615	103,719	434,498	1,437,831
136	DTH Conversion	1,035	1,035		1,035	1,035	1,035
137	Total DTH Saved	802,353	128,749	931,102	107,349	449,705	1,488,156
138	Mcf Saved per Participant		41.05		90.19	0.90	
139	DTH Saved per Participant		42.49		93.35	0.93	
140							
141	Estimated Peak Day Impact Mcf	7,079.64	1,136.03	8,215.67	947.20	3,968.01	13,130.88
142	Estimated Peak Day Impact Dth	7,327.42	1,175.79	8,503.21	980.35	4,106.89	13,590.46
143	Total Average Annual Accounts	482,775	482,775	482,775		482,775	
144	Impact on Total Average Annual Usage Per Account	1.61	0.26	1.86		0.90	
145	II. Program Cost Information						
146	Company Direct Costs	\$ 13,041,284	\$ 10,137,030	\$ 23,178,314	\$ 1,148,059	\$ -	\$ 24,326,373
147	Company Admin Costs	\$ 84,930	\$ 1,716,196	\$ 1,801,126	\$ 104,150	\$ -	\$ 1,905,276
148	Company Advertising Costs	\$ 3,245,922	\$ -	\$ 3,245,922	\$ 285,747	\$ 3,531,669	\$ 7,063,339
149	Total Initial Program Costs - Company	\$ 16,372,137	\$ 11,853,226	\$ 28,225,363	\$ 1,537,956	\$ 3,531,669	\$ 33,294,988
150	Total Initial Program Costs - Participant	\$ 30,596,918	\$ -	\$ 30,596,918	\$ 4,033,688	\$ -	\$ 34,630,606
151	Total Initial Program Costs	\$ 46,969,054	\$ 11,853,226	\$ 58,822,280	\$ 5,571,644	\$ 3,531,669	\$ 67,925,594
152	Per Participant Initial Program Costs - Company	\$ 3,911.96	\$ -	\$ 3,911.96	\$ 1,337.35	\$ 7.32	\$ -
153	Per Participant Initial Program Costs - Participant	\$ -	\$ -	\$ -	\$ 3,507.56	\$ -	\$ -
154	Total Initial Program Costs per Annual Participant	\$ 3,911.96	\$ -	\$ 3,911.96	\$ 4,844.91	\$ 7.32	\$ -
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)	19.46	25	21	17	4.00	19
163	Discount Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
164	PVIFA	8.66	13.41	12.14	10.86	3.51	11.75
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		\$ 369.49		\$ 811.71	\$ 8.10	
169	Total NGS Savings	\$ 6,976,982	\$ 1,119,557	\$ 8,096,539	\$ 933,467	\$ 3,910,478	\$ 12,940,483
170	V. Direct Cost Benefit Summary						
171	Present Value of Participant Savings		\$ 4,956.32		\$ 8,818.92	\$ 28.39	
172	Present Value of Total Savings	\$ 76,200,578	\$ 15,017,656	\$ 91,218,234	\$ 10,141,752	\$ 13,706,811	\$ 115,066,797
	Present Value of Total Initial Program Costs per Annual Participant		\$ 3,912		\$ 4,845	\$ 7	
173	Participant		\$ 3,912		\$ 4,845	\$ 7	
174	Present Value of Total Initial Program Costs	\$ 46,969,054	\$ 11,853,226	\$ 58,822,280	\$ 5,571,644	\$ 3,531,669	\$ 67,925,594
175	TRC	1.62	1.27	1.55	1.82	3.88	1.69
176	VI. TRC-WNY						
177	WNY Incremental Expenditures	\$ 43,723,132	\$ 11,853,226	\$ 55,576,358	\$ 5,285,897	\$ -	\$ 60,862,255
178	WNY Expenditure Multiplier		0.46		0.46	0.46	
179	WNY Expenditure Benefits	\$ 20,157,346	\$ 5,452,484	\$ 25,609,830	\$ 2,431,513	\$ -	\$ 28,041,342
180	Advertising	\$ 3,245,922	\$ -	\$ 3,245,922	\$ 285,747	\$ 3,531,669	\$ 7,063,339
181	Advertising Multiplier		0.87		0.87	0.87	
182	Advertising Benefits	\$ 2,823,952	\$ -	\$ 2,823,952	\$ 248,600	\$ 3,072,552	\$ 6,145,105
183	WNY Expenditure & Adv Benefits	\$ 22,981,298	\$ 5,452,484	\$ 28,433,782	\$ 2,680,113	\$ 3,072,552	\$ 34,186,447
184	Customer Net Savings	\$ 29,231,524	\$ 3,164,430	\$ 32,395,954	\$ 4,570,108	\$ 10,175,141	\$ 47,141,204
185	WNY Income Multiplier		0.49		0.49	0.49	
186	WNY Customer Net Savings Benefits	\$ 14,323,447	\$ 1,550,571	\$ 15,874,017	\$ 2,239,353	\$ 4,985,819	\$ 23,099,190
187	Total WNY Benefits	\$ 37,304,745	\$ 7,003,055	\$ 44,307,799	\$ 4,919,466	\$ 8,058,372	\$ 57,285,637
188	TRC-WNY	2.42	1.86	2.30	2.70	6.16	2.54
189	VII. Societal Test						
190	Environmental						
191	Total	\$ 7,689,591	\$ 1,515,469	\$ 9,205,060	\$ 1,023,430	\$ 1,383,189	\$ 11,611,678
192	Other						
193	Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Total Incremental Societal Benefits	\$ 7,689,591	\$ 1,515,469	\$ 9,205,060	\$ 1,023,430	\$ 1,383,189	\$ 11,611,678
195	Total Benefits W/TRC-WNY	\$ 121,194,914	\$ 23,536,180	\$ 144,731,094	\$ 16,084,648	\$ 23,148,371	\$ 183,964,112
196	Societal Test	2.58	1.99	2.46	2.89	6.55	2.71

	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							
7	Quarter	2/8/2012					
8		16					
9		Pre/Post Analysis					
10		Resic					
11							
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	5.83%	6.15%	0.70%	0.37%		20.20%
16	Total Number of Participants	27,303	28,781	3,274	1,717		3,030
17	Total Annual Mcf Saved	382,515	179,306	14,242	13,547	589,610	71,023
18	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
19	Total DTH Saved	395,903	185,581	14,740	14,021	610,246	73,509
20	Mcf Saved per Participant Base	14.01	6.23	4.35	7.89		23.44
21	Multiple Factor for Sensitivity Analysis	0%	0%	0%	0%		0%
22	Mcf Saved per Participant	14.01	6.23	4.35	7.89		23.44
23	DTH Saved per Participant	14.50	6.45	4.50	8.17		24.26
24	Estimated Peak Day Impact Mcf	3,493	1,637	130	124	5,385	649
25	Estimated Peak Day Impact DTH	3,616	1,695	135	128	5,573	671
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	0.79	0.37	0.03	0.03	1.22	0.15
28	II. Program Cost Information						
29	Company Direct Costs	\$ 8,395,673	\$ 846,737	\$ 512,381	\$ 612,511	\$ 10,367,301	\$ 10,137,030
30	Company Admin Costs	\$ 54,676	\$ 5,514	\$ 3,337	\$ 3,989	\$ 67,516	\$ 1,716,196
31	Company Advertising Costs	\$ 2,089,648	\$ 210,749	\$ 127,530	\$ 152,451	\$ 2,580,379	\$ -
32	Total Initial Program Costs - Company	\$ 10,539,997	\$ 1,063,001	\$ 643,247	\$ 768,951	\$ 13,015,196	\$ 11,853,226
33	Total Initial Program Costs - Participant	\$ 19,112,100	\$ 719,525	\$ 654,800	\$ 600,950	\$ 21,087,375	\$ -
34	Total Initial Program Costs	\$ 29,652,097	\$ 1,782,526	\$ 1,298,047	\$ 1,369,901	\$ 34,102,571	\$ 11,853,226
35	Per Participant Initial Program Costs - Company	\$ 307.50	\$ 29.42	\$ 156.50	\$ 356.73	\$ -	\$ 3,911.96
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	\$ -	\$ 3,911.96
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	10.7721	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	\$ 126.09	\$ 56.07	\$ 39.15	\$ 71.01	\$ -	\$ 210.96
52	Total NGS Savings	\$ 3,442,635	\$ 1,613,751	\$ 128,177	\$ 121,924	\$ 5,306,487	\$ 639,209
53	V. Direct Cost Benefit Summary						
54	Present Value of Participant Savings	\$ 1,369.92	\$ 609.18	\$ 375.43	\$ 680.96	\$ -	\$ 2,829.80
55	Present Value of Total Savings	\$ 37,402,885	\$ 17,532,769	\$ 1,229,173	\$ 1,169,210	\$ 57,334,037	\$ 8,574,304
56	Present Value of Total Initial Program Costs per Annual Participant	\$ 1,008	\$ 54	\$ 357	\$ 707	\$ -	\$ 3,912
57	Present Value of Total Initial Program Costs	\$ 29,652,097	\$ 1,782,526	\$ 1,298,047	\$ 1,369,901	\$ 34,102,571	\$ 11,853,226
58	TRC	1.26	9.84	0.95	0.85	1.68	0.72
59	VI. TRC-WNY						
60	WNY Incremental Expenditures	\$ 27,562,448	\$ 1,571,776	\$ 1,170,518	\$ 1,217,449	\$ 31,522,192	\$ 11,853,226
61	WNY Expenditure Multiplier	0.46	0.49	0.46	0.46		0.46
62	WNY Expenditure Benefits	\$ 12,678,726	\$ 770,170	\$ 538,438	\$ 560,027	\$ 14,547,362	\$ 5,452,484
63	Advertising	\$ 2,089,648	\$ 210,749	\$ 127,530	\$ 152,451	\$ 2,580,379	\$ -
64	Advertising Multiplier	0.87	0.87	0.87	0.87		0.87
65	Advertising Benefits	\$ 1,817,994	\$ 183,352	\$ 110,951	\$ 132,633	\$ 2,244,929	\$ -
66	WNY Expenditure & Adv Benefits	\$ 14,496,720	\$ 953,522	\$ 649,389	\$ 692,659	\$ 16,792,291	\$ 5,452,484
67	Customer Net Savings	\$ 7,750,788	\$ 15,750,244	\$ (68,874)	\$ (200,691)	\$ 23,231,466	\$ (3,278,922)
68	WNY Income Multiplier	0.49	0.49	0.49	0.49		0.49
69	WNY Customer Net Savings Benefits	\$ 3,797,886	\$ 7,717,619	\$ (33,748)	\$ (98,339)	\$ 11,383,419	\$ (1,606,672)
70	Total WNY Benefits	\$ 18,294,606	\$ 8,671,142	\$ 615,641	\$ 594,321	\$ 28,175,710	\$ 3,845,812
71	TRC-WNY	1.88	14.70	1.42	1.29	2.51	1.05
72	VII. Societal Test						
73	Environmental						
74	Total	\$ 3,774,419	\$ 1,769,276	\$ 124,039	\$ 117,988	\$ 5,785,721	\$ 865,254
75	Other						
76	Total	\$ 3,774,419	\$ 1,769,276	\$ 124,039	\$ 117,988	\$ 5,785,721	\$ 865,254
77	Total Incremental Societal Benefits	\$ 3,774,419	\$ 1,769,276	\$ 124,039	\$ 117,988	\$ 5,785,721	\$ 865,254
78	Total Benefits W/ TRC WNY	\$ 59,471,910	\$ 27,973,187	\$ 1,968,853	\$ 1,881,519	\$ 91,295,468	\$ 13,285,370
79	Societal Test	2.01	15.69	1.52	1.37	2.68	1.12

	A	P	Q	R	S	T	U
1	National Fuel Gas Distribution Corporation						
2	New York Division						
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4	Program Measurement and Verification Summary						
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6		2/8/2012					
7	Quarter						
8		16					
9		Pre/Post Analysis					
10		Resic					
11							
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	27,303	28,781	3,274	1,717		3,030
84	Adjustment to Per Participant Volume Due to Spillover	-	-	-	-		-
85	II. Free Riders						
86	Mcf Saved per Participant	14.01	6.23	4.35	7.89		23.44
87	Free Ridership %	10%	10%	10%	10%		0%
88	Adjustment to Per Participant Volume Due to Free Riders	1.40	0.62	0.44	0.79		-
89	III. Snapback						
90	Total Snapback Impact (Mcf)	-	-	-	-		-
91	Total Participants	27,303	28,781	3,274	1,717		3,030
92	Adjustment to Per Participant Volume Due to Snapback	-	-	-	-		-
93	IV. Total Volume Adjustment						
94	Total Volume Adjustments	(1.40)	(0.62)	(0.44)	(0.79)		-
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	5.83%	6.15%	0.70%	0.37%		20.20%
99	Annual Number of Participants	27,303	28,781	3,274	1,717		3,030
100	Total Mcf Adjusted	(38,252)	(17,931)	(1,424)	(1,355)		-
101	DTH Conversion	1.035	1.035	1.035	1.035		1.035
102	Total DTH Adjusted	(39,590)	(18,558)	(1,474)	(1,402)		-
103	Mcf Adjusted per Participant	(1.40)	(0.62)	(0.44)	(0.79)		-
104	DTH Adjusted per Participant	(1.45)	(0.64)	(0.45)	(0.82)		-
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	\$ (1,911,210)	\$ (71,953)	\$ (65,480)	\$ (60,095)		\$ -
111	Total Initial Program Costs	\$ (1,911,210)	\$ (71,953)	\$ (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	\$ (12.61)	\$ (5.61)	\$ (3.92)	\$ (7.10)		\$ -
129	Total NGS Savings	\$ (344,264)	\$ (161,375)	\$ (12,818)	\$ (12,192)		\$ -

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6							
7	Quarter	2/8/2012					
8		16					
9		Pre/Post Analysis					
10		Resic					
11							
		Appliance Rebates - Heating Systems Residential	Appliance Rebates - Programmable 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	5.83%	6.15%	0.70%	0.37%		20.20%
134	Total Number of Participants	27,303	28,781	3,274	1,717		3,030
135	Total Mcf Saved	344,264	161,375	12,818	12,192	530,649	71,023
136	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
137	Total DTH Saved	356,313	167,023	13,266	12,619	549,221	73,509
138	Mcf Saved per Participant	12.61	5.61	3.92	7.10		23.44
139	DTH Saved per Participant	13.05	5.80	4.05	7.35		24.26
140							
141	Estimated Peak Day Impact Mcf	3,143.96	1,473.74	117.06	111.35	4,846.11	648.61
142	Estimated Peak Day Impact Dth	3,254.00	1,525.33	121.15	115.24	5,015.72	671.32
143	Total Average Annual Accounts	482,775	482,775	482,775	482,775		482,775
144	Impact on Total Average Annual Usage Per Account	0.71	0.33	0.03	0.03		0.15
145	II. Program Cost Information						
146	Company Direct Costs	\$ 8,395,673	\$ 846,737	\$ 512,381	\$ 612,511	\$ 10,367,301	\$ 10,137,030
147	Company Admin Costs	\$ 54,676	\$ 5,514	\$ 3,337	\$ 3,989	\$ 67,516	\$ 1,716,196
148	Company Advertising Costs	\$ 2,089,648	\$ 210,749	\$ 127,530	\$ 152,451	\$ 2,580,379	\$ -
149	Total Initial Program Costs - Company	\$ 10,539,997	\$ 1,063,001	\$ 643,247	\$ 768,951	\$ 13,015,196	\$ 11,853,226
150	Total Initial Program Costs - Participant	\$ 17,200,890	\$ 647,573	\$ 589,320	\$ 540,855	\$ 18,978,638	\$ -
151	Total Initial Program Costs	\$ 27,740,887	\$ 1,710,573	\$ 1,232,567	\$ 1,309,806	\$ 31,993,833	\$ 11,853,226
152	Per Participant Initial Program Costs - Company	\$ 386.04	\$ 36.93	\$ 196.47	\$ 447.85	\$ -	\$ 3,911.96
153	Per Participant Initial Program Costs - Participant	\$ 630.00	\$ 22.50	\$ 180.00	\$ 315.00	\$ -	\$ -
154	Total Initial Program Costs per Annual Participant	\$ 1,016.04	\$ 59.43	\$ 376.47	\$ 762.85	\$ -	\$ 3,911.96
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	\$ 113.48	\$ 50.46	\$ 35.24	\$ 63.91	\$ -	\$ 210.96
169	Total NGS Savings	\$ 3,098,372	\$ 1,452,376	\$ 115,359	\$ 109,732	\$ 4,775,838	\$ 639,209
170	V. Direct Cost Benefit Summary						
171	Present Value of Participant Savings	\$ 1,232.93	\$ 548.26	\$ 337.89	\$ 612.86	\$ -	\$ 2,829.80
172	Present Value of Total Savings	\$ 33,662,596	\$ 15,779,492	\$ 1,106,256	\$ 1,052,289	\$ 51,600,633	\$ 8,574,304
	Present Value of Total Initial Program Costs per Annual						
173	Participant	\$ 1,016	\$ 59	\$ 376	\$ 763	\$ -	\$ 3,912
174	Present Value of Total Initial Program Costs	\$ 27,740,887	\$ 1,710,573	\$ 1,232,567	\$ 1,309,806	\$ 31,993,833	\$ 11,853,226
175	TRC	1.21	9.22	0.90	0.80	1.61	0.72
176	VI. TRC-WNY						
177	WNY Incremental Expenditures	\$ 25,651,238	\$ 1,499,824	\$ 1,105,038	\$ 1,157,354	\$ 29,413,454	\$ 11,853,226
178	WNY Expenditure Multiplier	0.46	0.49	0.46	0.46		0.46
179	WNY Expenditure Benefits	\$ 11,799,570	\$ 734,914	\$ 508,317	\$ 532,383	\$ 13,575,184	\$ 5,452,484
180	Advertising	\$ 2,089,648	\$ 210,749	\$ 127,530	\$ 152,451	\$ 2,580,379	\$ -
181	Advertising Multiplier	0.87	0.87	0.87	0.87		0.87
182	Advertising Benefits	\$ 1,817,994	\$ 183,352	\$ 110,951	\$ 132,633	\$ 2,244,929	\$ -
183	WNY Expenditure & Adv Benefits	\$ 13,617,564	\$ 918,266	\$ 619,268	\$ 665,016	\$ 15,820,113	\$ 5,452,484
184	Customer Net Savings	\$ 5,921,709	\$ 14,068,919	\$ (126,311)	\$ (257,517)	\$ 19,606,800	\$ (3,278,922)
185	WNY Income Multiplier	0.49	0.49	0.49	0.49		0.49
186	WNY Customer Net Savings Benefits	\$ 2,901,638	\$ 6,893,770	\$ (61,893)	\$ (126,183)	\$ 9,607,332	\$ (1,606,672)
187	Total WNY Benefits	\$ 16,519,201	\$ 7,812,036	\$ 557,375	\$ 538,832	\$ 25,427,445	\$ 3,845,812
188	TRC-WNY	1.81	13.79	1.35	1.21	2.41	1.05
189	VII. Societal Test						
190	Environmental						
191	Total	\$ 3,396,977	\$ 1,592,348	\$ 111,635	\$ 106,189	\$ 5,207,149	\$ 865,254
192	Other						
193	Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Total Incremental Societal Benefits	\$ 3,396,977	\$ 1,592,348	\$ 111,635	\$ 106,189	\$ 5,207,149	\$ 865,254
195	Total Benefits W/TRC-WNY	\$ 53,578,774	\$ 25,183,876	\$ 1,775,266	\$ 1,697,310	\$ 82,235,228	\$ 13,285,370
196	Societal Test	1.93	14.72	1.44	1.30	2.57	1.12

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5							
6		2/8/2012					
7	Quarter	Year	Month				
8		16	Dec-11	49			
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 - Programmable Tstat Residential	Appliance Rebates - Indirect Heater Residential
221	Sensitivity Analysis						
222	TRC - Free Ridership Sensitivity	Adjusted Analysis - TRC					
223		1.75	1.15	2.25	0.83	8.39	0.44
224	0%	1.82	1.19	2.31	0.85	8.95	0.46
225	10%	1.75	1.15	2.25	0.83	8.39	0.44
226	20%	1.67	1.12	2.17	0.80	7.79	0.43
227	30%	1.58	1.08	2.07	0.77	7.13	0.41
228	40%	1.47	1.02	1.96	0.74	6.41	0.39
229	50%	1.35	0.96	1.82	0.69	5.61	0.36
230	60%	1.19	0.87	1.64	0.63	4.73	0.33
231	70%	1.00	0.76	1.42	0.55	3.75	0.29
232	80%	0.76	0.61	1.11	0.44	2.65	0.23
233							
234	Societal - Test Free Ridership Sensitivity	Adjusted Analysis - Societal TRC					
235		2.78	1.83	3.57	1.31	13.40	0.70
236	0%	2.89	1.88	3.67	1.34	14.28	0.71
237	10%	2.78	1.83	3.57	1.31	13.40	0.70
238	20%	2.66	1.77	3.44	1.27	12.44	0.68
239	30%	2.52	1.71	3.29	1.22	11.40	0.65
240	40%	2.35	1.62	3.12	1.17	10.25	0.62
241	50%	2.15	1.52	2.90	1.10	8.99	0.58
242	60%	1.91	1.39	2.62	1.01	7.59	0.53
243	70%	1.61	1.22	2.27	0.88	6.03	0.47
244	80%	1.23	0.98	1.79	0.72	4.28	0.38
245							
246	TRC Gas Cost Sensitivity	Adjusted Analysis - TRC					
247		1.75	1.15	2.25	0.83	8.39	0.44
248	\$ 16.00	3.11	2.05	3.99	1.47	14.92	0.79
249	\$ 15.00	2.92	1.92	3.74	1.38	13.99	0.74
250	\$ 14.00	2.72	1.80	3.49	1.29	13.05	0.69
251	\$ 13.00	2.53	1.67	3.24	1.20	12.12	0.64
252	\$ 12.00	2.33	1.54	2.99	1.11	11.19	0.59
253	\$ 11.00	2.14	1.41	2.74	1.01	10.26	0.54
254	\$ 10.00	1.94	1.28	2.49	0.92	9.32	0.49
255	\$ 9.00	1.75	1.15	2.25	0.83	8.39	0.44
256	\$ 8.00	1.56	1.03	2.00	0.74	7.46	0.39
257	\$ 7.00	1.36	0.90	1.75	0.64	6.53	0.34
258	Discount Rate Sensitivity	Adjusted Analysis - TRC					
259		1.75	1.15	2.25	0.83	8.39	0.44
260	1%	2.64	1.90	3.69	1.19	10.75	0.73
261	2%	2.39	1.68	3.27	1.09	10.15	0.64
262	3%	2.18	1.50	2.91	1.00	9.60	0.58
263	4%	1.99	1.34	2.61	0.93	9.09	0.52
264	5%	1.82	1.21	2.36	0.86	8.61	0.47
265	6%	1.68	1.10	2.14	0.80	8.18	0.42
266	7%	1.55	1.00	1.95	0.75	7.78	0.38
267							
268	Volume Savings Sensitivity	Adjusted Analysis - TRC					
269		1.75	1.15	2.25	0.83	8.39	0.44
270	50%	2.63	1.73	3.37	1.24	12.59	0.66
271	40%	2.45	1.62	3.14	1.16	11.75	0.62
272	30%	2.28	1.50	2.92	1.08	10.91	0.58
273	20%	2.10	1.39	2.69	1.00	10.07	0.53
274	10%	1.93	1.27	2.47	0.91	9.23	0.49
275	0%	1.75	1.15	2.25	0.83	8.39	0.44
276	-10%	1.58	1.04	2.02	0.75	7.55	0.40
277	-20%	1.40	0.92	1.80	0.66	6.71	0.35
278	-30%	1.23	0.81	1.57	0.58	5.87	0.31
279	-40%	1.05	0.69	1.35	0.50	5.04	0.27
280	-50%	0.88	0.58	1.12	0.41	4.20	0.22
281							

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6	2/8/2012						
7	Quarter	Year	Month				
8		16	Dec-11	49			
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		1.69	0%	10%	20%	30%	40%
285	\$	16.00	3.12	3.01	2.89	2.72	2.52
286	\$	15.00	2.92	2.82	2.71	2.55	2.37
287	\$	14.00	2.73	2.64	2.53	2.38	2.21
288	\$	13.00	2.53	2.45	2.35	2.21	2.05
289	\$	12.00	2.34	2.26	2.17	2.04	1.89
290	\$	11.00	2.14	2.07	1.99	1.87	1.73
291	\$	10.00	1.95	1.88	1.81	1.70	1.58
292	\$	9.00	1.75	1.69	1.63	1.53	1.42
293	\$	8.00	1.56	1.51	1.45	1.36	1.26
294	\$	7.00	1.36	1.32	1.26	1.19	1.10
295							
296	Gas Cost/Free Ridership Total Program TRC Sensitivity						
297	Gas Cost	Free Ridership					
298		2.71	0%	10%	20%	30%	40%
299	\$	16.00	4.83	4.67	4.49	4.22	3.92
300	\$	15.00	4.54	4.39	4.22	3.97	3.69
301	\$	14.00	4.25	4.11	3.95	3.72	3.45
302	\$	13.00	3.96	3.83	3.68	3.46	3.22
303	\$	12.00	3.67	3.55	3.41	3.21	2.98
304	\$	11.00	3.38	3.27	3.14	2.96	2.75
305	\$	10.00	3.09	2.99	2.87	2.70	2.51
306	\$	9.00	2.80	2.71	2.60	2.45	2.28
307	\$	8.00	2.51	2.43	2.33	2.20	2.04
308	\$	7.00	2.22	2.15	2.06	1.94	1.81

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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		0.75	0.86
224	0%	0.79	0.92
225	10%	0.75	0.86
226	20%	0.70	0.80
227	30%	0.65	0.74
228	40%	0.59	0.67
229	50%	0.53	0.59
230	60%	0.45	0.50
231	70%	0.37	0.40
232	80%	0.26	0.28
233			
234	Societal - Test Free Ridership Sensitivity		
235		1.20	1.39
236	0%	1.26	1.48
237	10%	1.20	1.39
238	20%	1.13	1.30
239	30%	1.05	1.20
240	40%	0.96	1.09
241	50%	0.86	0.96
242	60%	0.75	0.82
243	70%	0.61	0.67
244	80%	0.46	0.49
245			
246	TRC Gas Cost Sensitivity		
247		0.75	0.86
248	\$ 16.00	1.33	1.54
249	\$ 15.00	1.25	1.44
250	\$ 14.00	1.16	1.34
251	\$ 13.00	1.08	1.25
252	\$ 12.00	1.00	1.15
253	\$ 11.00	0.91	1.06
254	\$ 10.00	0.83	0.96
255	\$ 9.00	0.75	0.86
256	\$ 8.00	0.66	0.77
257	\$ 7.00	0.58	0.67
258	Discount Rate Sensitivity		
259		0.75	0.86
260	1%	1.13	1.30
261	2%	1.02	1.18
262	3%	0.93	1.08
263	4%	0.85	0.98
264	5%	0.78	0.90
265	6%	0.72	0.83
266	7%	0.66	0.77
267			
268	Volume Savings Sensitivity		
269		0.75	0.86
270	50%	1.12	1.30
271	40%	1.05	1.21
272	30%	0.97	1.12
273	20%	0.90	1.04
274	10%	0.82	0.95
275	0%	0.75	0.86
276	-10%	0.67	0.78
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			

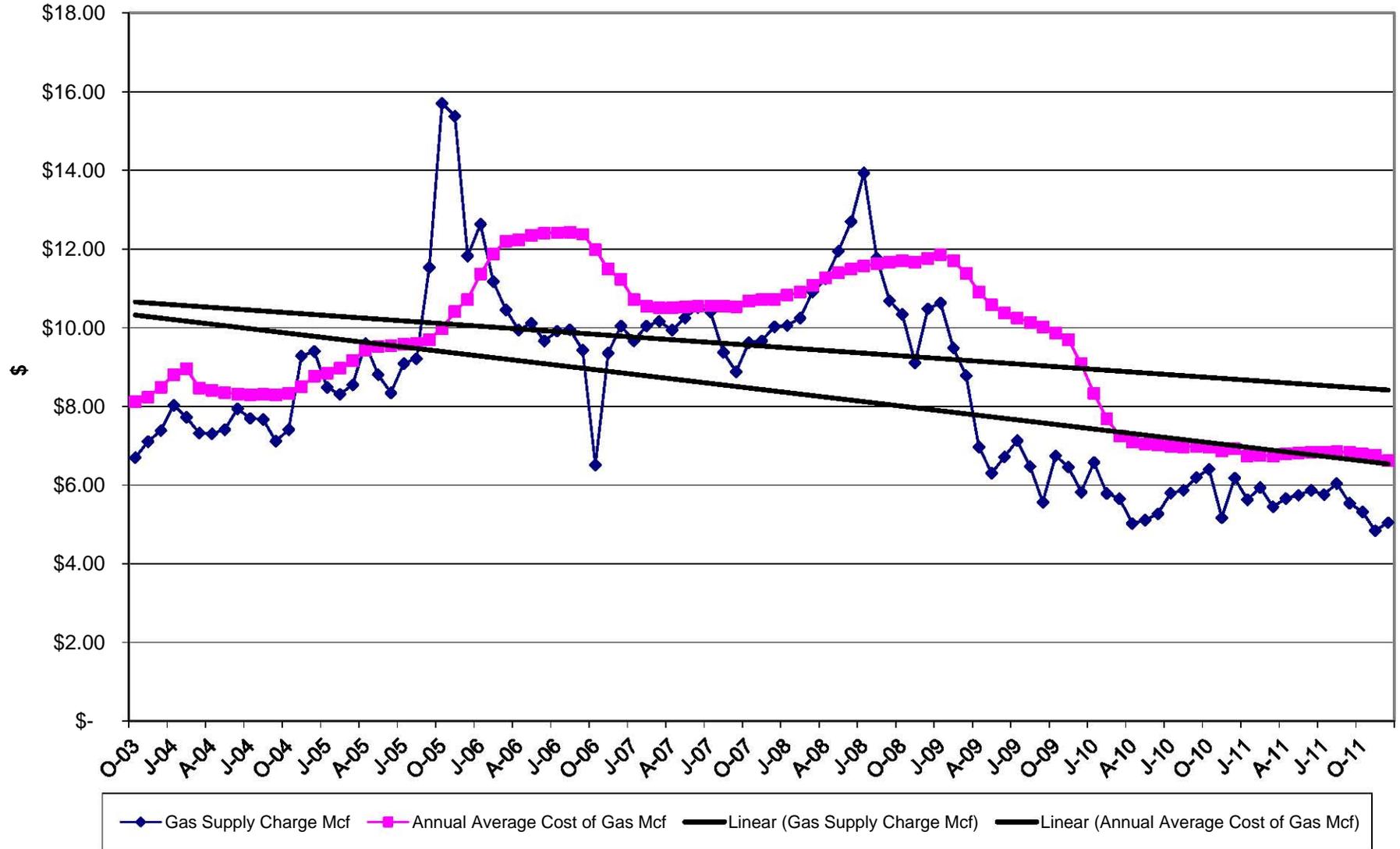
	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
4	Program Measurement and Verification Summary		
5			
6		2/8/2012	
7	Quarter		
8		16	
9			
10		Resic	
11			
		Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
282	Gas Cost/Free Ridership Total Program TRC Sensitivity		
283	Gas Cost		
284		1.69	60%
285	\$	16.00	2.06
286	\$	15.00	1.93
287	\$	14.00	1.80
288	\$	13.00	1.67
289	\$	12.00	1.54
290	\$	11.00	1.42
291	\$	10.00	1.29
292	\$	9.00	1.16
293	\$	8.00	1.03
294	\$	7.00	0.90
295			
296	Gas Cost/Free Ridership Total Program TRC Sensitivity		
297	Gas Cost		
298		2.71	60%
299	\$	16.00	3.21
300	\$	15.00	3.02
301	\$	14.00	2.83
302	\$	13.00	2.64
303	\$	12.00	2.44
304	\$	11.00	2.25
305	\$	10.00	2.06
306	\$	9.00	1.87
307	\$	8.00	1.68
308	\$	7.00	1.49

	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		2/8/2012					
7	Quarter						
8		16					
9							
10		Resic					
11							
		Total Res Rebates	LIURP	Total Res	Total Non Res Rebates	General Outreach	Total Program
221	Sensitivity Analysis						
222	TRC - Free Ridership Sensitivity						
223		1.62	1.27	1.55	1.82	3.88	1.69
224	0%	1.68	1.27	1.60	1.82	4.31	1.75
225	10%	1.62	1.27	1.55	1.82	3.88	1.69
226	20%	1.55	1.25	1.49	1.82	3.45	1.63
227	30%	1.48	1.13	1.40	1.82	3.02	1.53
228	40%	1.38	1.00	1.29	1.82	2.59	1.42
229	50%	1.27	0.87	1.17	1.82	2.16	1.30
230	60%	1.13	0.75	1.02	1.82	1.72	1.16
231	70%	0.96	0.62	0.85	1.82	1.29	1.00
232	80%	0.73	0.49	0.65	1.82	0.86	0.82
233							
234	Societal - Test Free Ridership Sensitivity						
235		2.58	1.99	2.46	2.89	6.55	2.71
236	0%	2.67	1.99	2.54	2.89	7.24	2.80
237	10%	2.58	1.99	2.46	2.89	6.55	2.71
238	20%	2.47	1.97	2.37	2.89	5.87	2.60
239	30%	2.35	1.76	2.22	2.89	5.18	2.45
240	40%	2.21	1.56	2.05	2.89	4.50	2.28
241	50%	2.03	1.36	1.85	2.89	3.81	2.09
242	60%	1.81	1.16	1.63	2.89	3.12	1.87
243	70%	1.54	0.96	1.36	2.89	2.44	1.62
244	80%	1.19	0.76	1.04	2.89	1.75	1.33
245							
246	TRC Gas Cost Sensitivity						
247		1.62	1.27	1.55	1.82	3.88	1.69
248	\$ 16.00	2.88	2.25	2.76	3.24	6.90	3.01
249	\$ 15.00	2.70	2.11	2.58	3.03	6.47	2.82
250	\$ 14.00	2.52	1.97	2.41	2.83	6.04	2.64
251	\$ 13.00	2.34	1.83	2.24	2.63	5.61	2.45
252	\$ 12.00	2.16	1.69	2.07	2.43	5.17	2.26
253	\$ 11.00	1.98	1.55	1.90	2.22	4.74	2.07
254	\$ 10.00	1.80	1.41	1.72	2.02	4.31	1.88
255	\$ 9.00	1.62	1.27	1.55	1.82	3.88	1.69
256	\$ 8.00	1.44	1.13	1.38	1.62	3.45	1.51
257	\$ 7.00	1.26	0.99	1.21	1.42	3.02	1.32
258	Discount Rate Sensitivity						
259		1.62	1.27	1.55	1.82	3.88	1.69
260	1%	2.38	2.08	2.32	2.61	4.32	2.45
261	2%	2.17	1.84	2.11	2.39	4.22	2.24
262	3%	1.99	1.64	1.92	2.21	4.12	2.06
263	4%	1.83	1.48	1.76	2.04	4.02	1.90
264	5%	1.69	1.33	1.62	1.89	3.93	1.76
265	6%	1.56	1.21	1.49	1.76	3.84	1.63
266	7%	1.45	1.10	1.38	1.64	3.75	1.52
267							
268	Volume Savings Sensitivity						
269		1.62	1.27	1.55	1.82	3.88	1.69
270	50%	2.43	1.90	2.33	2.73	5.82	2.54
271	40%	2.27	1.77	2.17	2.55	5.43	2.37
272	30%	2.11	1.65	2.02	2.37	5.05	2.20
273	20%	1.95	1.52	1.86	2.18	4.66	2.03
274	10%	1.78	1.39	1.71	2.00	4.27	1.86
275	0%	1.62	1.27	1.55	1.82	3.88	1.69
276	-10%	1.46	1.14	1.40	1.64	3.49	1.52
277	-20%	1.30	1.01	1.24	1.46	3.10	1.36
278	-30%	1.14	0.89	1.09	1.27	2.72	1.19
279	-40%	0.97	0.76	0.93	1.09	2.33	1.02
280	-50%	0.81	0.63	0.78	0.91	1.94	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		2/8/2012					
7	Quarter						
8		16					
9							
10		Resic					
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						
284		1.69	80%	90%	100%		
285	\$	16.00	1.45	1.07	0.62		
286	\$	15.00	1.36	1.00	0.58		
287	\$	14.00	1.27	0.94	0.54		
288	\$	13.00	1.18	0.87	0.50		
289	\$	12.00	1.09	0.80	0.46		
290	\$	11.00	1.00	0.73	0.43		
291	\$	10.00	0.91	0.67	0.39		
292	\$	9.00	0.82	0.60	0.35		
293	\$	8.00	0.72	0.53	0.31		
294	\$	7.00	0.63	0.47	0.27		
295							
296	Gas Cost/Free Ridership Total Program TRC Sensitivity						
297	Gas Cost						
298		2.71	80%	90%	100%		
299	\$	16.00	2.28	1.70	1.01		
300	\$	15.00	2.14	1.60	0.95		
301	\$	14.00	2.01	1.50	0.89		
302	\$	13.00	1.87	1.40	0.83		
303	\$	12.00	1.74	1.30	0.77		
304	\$	11.00	1.60	1.20	0.72		
305	\$	10.00	1.47	1.10	0.66		
306	\$	9.00	1.33	1.00	0.60		
307	\$	8.00	1.20	0.90	0.54		
308	\$	7.00	1.06	0.80	0.49		

	A	H	I
1	National Fuel Gas Distribution Corporation		
2	New York Division		
3	Conservation Incentive Program		
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5			
6		2/8/2012	
7	Quarter		
8		16	
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 DECEMBER 31, 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	
	10/31/2011	1,520,000.00	
		<u>\$11,860,000.00</u>	
Expenditures made by NYSERDA			
Audit Fee/Education			\$1,030,594.00
Insulation			6,588,823.00
Air Sealing			1,043,368.00
Heating System Repair/Replacement			696,623.00
Thermostats			31,941.00
DHW Improvements			199,459.00
Showerheads			12,384.00
Pipe Wrapping			9,255.00
Other			524,583.00
Total Through 12/31/11			<u>\$10,137,030.00</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	
	10/13/2011	52,605.00	
	10/24/2011	75,718.00	
	11/14/2011	59,287.00	
	11/30/2011	155,016.00	
	12/16/2011	122,091.50	
		<u>\$13,211,799.94</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>\$13,173,873.98</u>	

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
CIP SUMMARY THROUGH DECEMBER 31, 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 12/31/11 \$1,087,433.92

General Outreach and Education

Expenditures (In House)	<u>Cumulative</u>
Material	\$3,919.09
Transportation	191.50
Contractors	812,341.73
Office Employee	6,999.57
Print Advertising	581,083.55
Radio Advertising	457,924.03
TV Advertising	561,194.44
Brochures	70,029.06
Bill Inserts	80,295.67
Direct Mail	287,007.54
Internet	202,019.21
Billboards	349,780.16
Misc. Advertising	1,324,190.50
Website	1,205.64
Postage	2,407.41
Transfer to Austerity Bill Credit ²	800,000.00
	<u><u>\$5,540,589.10</u></u>

Low Income Outreach and Education

Expenditures (In House)	<u>Cumulative</u>
Material	\$568.07
Transportation	168.50
Contractors	345,741.12
Office Employee	3,113.28
Print Advertising	231,351.85
Radio Advertising	197,628.78
TV Advertising	260,137.70
Brochures	27,125.19
Bill Inserts	33,387.69
Direct Mail	140,908.19
Internet	92,243.55
Billboards	175,977.52
Misc. Advertising	813,492.81
Postage	905.42
	<u><u>\$2,322,749.67</u></u>

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
NEW YORK DIVISION
CIP SUMMARY THROUGH DECEMBER 31, 2011

	CIP <u>Expenditures</u>	CIP <u>Funding</u>	NYSERDA <u>Spending</u> ¹
EM&V - payments to Cadmus			
2010 payments	\$23,140.92		
2011 payments	81,320.50		
	<u>\$104,461.42</u>		
EEPS Payments to NYSERDA (Spending Assumed to be Same as Funding)			
Calendar 2010	\$5,261,392.72		
Calendar 2011 (See Page 4)	4,913,138.25		
	<u>\$10,174,530.97</u>		\$10,174,530.97
Conservation Incentive Program Surcharge (through 12/31/11)			
		<u>Cumulative</u>	
Funding of CIPs by CMR (3/7/08)		\$1,716,259.04	
Surcharge		\$44,330,420.40	
Reconciliations		<u>\$3,003,743.55</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>\$44,953,689.14</u>	<u>\$49,050,422.99</u>	<u>\$21,931,030.89</u>

1 - NYSERDA Spending updated through December 31, 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
10/31/2011	265,324.00	145,282.00	35,394.75	883,503.75	308,208.25		1,637,712.75
	<u>795,972.00</u>	<u>435,846.00</u>	<u>106,184.25</u>	<u>2,650,511.25</u>	<u>924,624.75</u>	<u>0.00</u>	<u>4,913,138.25</u>

Appendix H - Residential CIP Rebate Program Customer Survey Results Cumulative thru 12/31/2011

	Total	
Rebates Received	55,127	
Flawed Rebates	11,673	21% of 55,127 Rebates Received
Rebates Processed	43,454	79% of 55,127 Rebates Received
Randomly Selected Customers	4157	10% of 43,454 Rebates Processed
Customers Actually Contacted	3353	8% of 43,454 Rebates Processed
Responsive Customers	1959	5% of 43,454 Rebates Processed
Non-Responsive Customers (refused to participate or hung up on phone rep)	1394	3% of 43,454 Rebates Processed
Q1 - Program Awareness		
Contractor	1306	67% of Customers Responding
NFG Bill Insert	253	13% " " "
News/Newspapers	195	10% " " "
Friends/Word of Mouth	205	10% " " "
TV	159	8% " " "
NFG Website	132	7% " " "
NFG Letters	28	1% " " "
NFG Billboards	23	1% " " "
Radio	67	3% " " "
Other	13	
*Note: responses total > 1843 since many customers cited several sources	2381	
Q2 - Rebate Influence on Upgrade Decision		
Not Important	275	14% of the Customers were NOT Influenced by the NFG rebate in their purchase
Somewhat Important	721	37%
Very Important	962	49% 86% of the Customers were Influenced by the NFG rebate in their purchase
	1958	
Q3 - Received Rebate Check		
Yes	1878	96% of the Customers had received their rebate check
No	80	4%
	1958	
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	49	3%
3- Neither Dissatisfied or Satisfied	177	9%
4- Satisfied	377	20%
5- Very Satisfied	1234	66% 86% of the Customers were satisfied with the time it took to receive rebate
	1880	
N/A	82	4% of the Customers had NOT received their rebate check
	1962	
Q5 - Satisfaction with the Application Process		
1- Very Dissatisfied	39	2% 4% of the Customers were NOT satisfied with the application process
2- Dissatisfied	40	2%
3- Neither Dissatisfied or Satisfied	155	8%
4- Satisfied	435	22%
5- Very Satisfied	1287	66% 88% of the Customers were satisfied with the application process
	1956	
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	10	2%
3- Neither Dissatisfied or Satisfied	54	11%
4- Satisfied	91	18%
5- Very Satisfied	332	65% 83% of the Customers contacting EFI by phone were satisfied with EFI
	510	
N/A	1446	74% of the Customers did not contact EFI by phone
	1956	
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	41	11%
5- Very Satisfied	307	82% 93% of the Customers with inspections were satisfied with CSG
	375	
N/A	1470	80% of the Customers had no inspection done
	1845	
Q8 - Overall Satisfaction with Rebate Program		
1- Very Dissatisfied	22	1% 2% of the Customers were NOT satisfied with rebate program
2- Dissatisfied	10	1%
3- Neither Dissatisfied or Satisfied	65	3%
4- Satisfied	266	14%
5- Very Satisfied	1593	81% 95% of the Customers were satisfied with rebate program
	1956	

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-five 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. Thirty-one 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 2010	May 2009 – April 2010	June 2010–May 2011
June 2010	June 2009 – May 2010	July 2010-June 2011
July 2010	July 2009 – June 2010	August 2010 – July 2011
August 2010	August 2009 – July 2010	September 2010 – August 2011
September 2010	September 2009 – August 2010	October 2010 – September 2011

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

Table 2		
	Decrease in Consumption Per Account	
Equipment	Mcf per Account	Percent Change
Heating Systems	14.007	12.9%
Programmable Thermostats	6.234	6.1%
Heating Systems W/P.Tstats	13.479	12.9%
Storage Tank Water Heater	4.353	4.1%
Tankless Water Heater	7.894	7.8%
LIURP (Data for 25 Mths)	23.439	13.7%

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."

Month Installed	Customers	Heating System Only																							
		1 Year Prior to Installation						1 Year After Installation						Normalized Consumption (Mcf)											
		1 Year Prior Installation	1 Year After Installation	Change	% Change	Pre	Post	1 Year Prior Installation	1 Year After Installation	Change	% Change	Pre	Post	1 Year Prior Installation	1 Year After Installation	Change	% Change	Pre	Post						
November-07	320	110,869	98,392	-12,477	-11.3%	19,956.4	17,710.6	-2,245.8	-11.3%	110,869	97,081	-13,788	-12.4%	19,956.4	17,474.6	-2,481.8	-12.4%	110,869	93,057	-17,812	-16.1%	19,956.4	16,750.3	-3,206.1	-16.1%
December-07	180	112,642	98,387	-14,255	-12.7%	36,045.4	31,483.8	-4,561.6	-12.7%	112,642	95,002	-17,640	-15.7%	36,045.4	30,400.6	-5,644.8	-15.7%	112,642	92,450	-20,192	-17.9%	36,045.4	29,584.0	-6,461.4	-17.9%
January-08	190	116,891	104,855	-12,036	-10.3%	22,209.3	19,922.5	-2,286.8	-10.3%	116,891	101,317	-15,574	-13.3%	22,209.3	19,250.2	-2,959.1	-13.3%	116,891	100,306	-16,585	-14.2%	22,209.3	19,068.1	-3,141.2	-14.2%
February-08	130	114,452	101,907	-12,545	-11.0%	14,878.8	13,247.9	-1,630.9	-11.0%	114,452	100,390	-14,062	-12.3%	14,878.8	13,050.7	-1,828.1	-12.3%	114,452	99,241	-15,211	-13.3%	14,878.8	12,901.3	-1,977.5	-13.3%
March-08	102	115,978	102,054	-13,924	-12.0%	11,829.8	10,409.5	-1,420.3	-12.0%	115,978	98,296	-17,682	-15.2%	11,829.8	10,026.2	-1,803.6	-15.2%	115,978	97,415	-18,563	-16.0%	11,829.8	9,936.3	-1,893.5	-16.0%
April-08	83	108,279	96,071	-12,208	-11.3%	8,987.2	7,973.9	-1,013.3	-11.3%	108,279	92,517	-15,762	-14.6%	8,987.2	7,678.9	-1,308.3	-14.6%	108,279	94,731	-13,548	-12.5%	8,987.2	7,862.7	-1,124.5	-12.5%
May-08	89	102,836	90,629	-12,207	-11.9%	9,152.4	8,066.0	-1,086.4	-11.9%	102,836	87,359	-15,477	-15.1%	9,152.4	7,775.0	-1,377.4	-15.1%	102,836	87,904	-14,932	-14.5%	9,152.4	7,823.5	-1,328.9	-14.5%
June-08	81	109,582	98,375	-11,207	-10.2%	8,876.1	7,968.4	-907.7	-10.2%	109,582	97,736	-11,846	-10.8%	8,876.1	7,916.6	-959.5	-10.8%	109,582	98,653	-10,929	-10.0%	8,876.1	7,990.9	-885.2	-10.0%
July-08	104	100,027	90,399	-9,628	-9.6%	10,402.8	9,401.5	-1,001.3	-9.6%	100,027	88,352	-11,675	-11.7%	10,402.8	9,188.6	-2,214.2	-11.7%	100,027	90,965	-9,062	-9.1%	10,402.8	9,460.4	-942.4	-9.1%
August-08	134	106,231	91,407	-14,824	-14.0%	14,235.0	12,248.5	-1,986.5	-14.0%	106,231	90,267	-15,964	-15.0%	14,235.0	12,095.8	-2,139.2	-15.0%	106,231	106,231	-0	0.0%	14,235.0	14,235.0	0	0.0%
September-08	146	105,795	90,485	-15,310	-14.5%	15,446.1	13,210.8	-2,235.3	-14.5%	105,795	88,525	-17,270	-16.3%	15,446.1	12,924.7	-2,521.4	-16.3%	105,795	105,795	0	0.0%	15,446.1	15,446.1	0	0.0%
October-08	202	116,303	99,664	-16,639	-14.3%	23,493.2	20,132.1	-3,361.1	-14.3%	116,303	96,168	-20,135	-17.3%	23,493.2	19,425.9	-4,067.3	-17.3%	116,303	105,795	-9,508	-8.1%	23,493.2	23,493.2	0	0.0%
November-08	202	108,546	93,695	-14,851	-13.7%	21,926.3	18,926.4	-3,000.0	-13.7%	108,546	91,022	-17,524	-16.1%	21,926.3	18,386.4	-3,539.9	-16.1%	108,546	105,795	-12,751	-11.7%	21,926.3	21,926.3	0	0.0%
December-08	207	104,624	92,397	-12,227	-11.7%	21,657.2	19,126.2	-2,531.0	-11.7%	104,624	90,788	-13,836	-13.2%	21,657.2	18,793.1	-2,864.1	-13.2%	104,624	105,795	-11,171	-10.7%	21,657.2	21,657.2	0	0.0%
January-09	171	116,001	105,568	-10,433	-9.0%	19,836.2	18,052.1	-1,784.1	-9.0%	116,001	103,391	-12,610	-10.9%	19,836.2	17,679.9	-2,156.3	-10.9%	116,001	116,001	0	0.0%	19,836.2	19,836.2	0	0.0%
February-09	126	115,513	100,876	-14,637	-12.7%	14,554.6	12,710.4	-1,844.2	-12.7%	115,513	98,298	-17,215	-14.9%	14,554.6	12,385.5	-2,169.1	-14.9%	115,513	115,513	0	0.0%	14,554.6	14,554.6	0	0.0%
March-09	105	113,126	98,877	-14,249	-12.6%	11,878.2	10,382.1	-1,496.1	-12.6%	113,126	100,262	-12,864	-11.4%	11,878.2	10,527.5	-1,350.7	-11.4%	113,126	113,126	0	0.0%	11,878.2	11,878.2	0	0.0%
April-09	69	102,425	86,138	-16,287	-15.9%	7,067.3	5,943.5	-1,123.8	-15.9%	102,425	88,634	-13,791	-13.5%	7,067.3	6,115.7	-951.6	-13.5%	102,425	102,425	0	0.0%	7,067.3	7,067.3	0	0.0%
May-09	74	104,011	91,184	-12,827	-12.3%	7,696.8	6,747.6	-949.2	-12.3%	104,011	92,645	-11,366	-10.9%	7,696.8	6,855.7	-841.1	-10.9%	104,011	104,011	0	0.0%	7,696.8	7,696.8	0	0.0%
June-09	77	115,417	94,288	-21,129	-18.3%	8,887.1	7,260.2	-1,626.9	-18.3%	115,417	97,195	-18,222	-15.8%	8,887.1	7,484.0	-1,403.1	-15.8%	115,417	115,417	0	0.0%	8,887.1	8,887.1	0	0.0%
July-09	81	109,781	92,355	-17,426	-15.9%	8,892.3	7,480.8	-1,411.5	-15.9%	109,781	95,465	-14,316	-13.0%	8,892.3	7,732.7	-1,159.6	-13.0%	109,781	109,781	0	0.0%	8,892.3	8,892.3	0	0.0%
August-09	86	107,127	90,644	-16,483	-15.4%	9,212.9	7,795.4	-1,417.5	-15.4%	107,127	93,848	-13,279	-12.4%	9,212.9	8,070.9	-1,142.0	-12.4%	107,127	107,127	0	0.0%	9,212.9	9,212.9	0	0.0%
September-09	137	101,696	88,667	-13,029	-12.8%	13,932.4	12,147.4	-1,785.0	-12.8%	101,696	90,383	-11,313	-11.1%	13,932.4	12,382.5	-1,549.9	-11.1%	101,696	101,696	0	0.0%	13,932.4	13,932.4	0	0.0%
October-09	248	108,501	92,877	-15,624	-14.4%	26,908.2	23,033.5	-3,874.7	-14.4%	108,501	94,839	-13,662	-12.6%	26,908.2	23,621.8	-3,286.4	-12.6%	108,501	108,501	0	0.0%	26,908.2	26,908.2	0	0.0%
November-09	272	104,182	86,725	-17,457	-16.8%	28,337.5	23,589.2	-4,748.3	-16.8%	104,182	88,525	-15,657	-15.0%	28,337.5	23,589.2	-4,748.3	-15.0%	104,182	104,182	0	0.0%	28,337.5	28,337.5	0	0.0%
December-09	199	112,727	96,402	-16,325	-14.5%	22,432.7	19,184.0	-3,248.7	-14.5%	112,727	96,402	-16,325	-14.5%	22,432.7	19,184.0	-3,248.7	-14.5%	112,727	112,727	0	0.0%	22,432.7	22,432.7	0	0.0%
January-10	126	104,382	89,762	-14,620	-14.0%	13,152.1	11,310.0	-1,842.1	-14.0%	104,382	89,762	-14,620	-14.0%	13,152.1	11,310.0	-1,842.1	-14.0%	104,382	104,382	0	0.0%	13,152.1	13,152.1	0	0.0%
February-10	108	107,432	94,745	-12,687	-11.8%	11,602.7	10,232.5	-1,370.2	-11.8%	107,432	94,745	-12,687	-11.8%	11,602.7	10,232.5	-1,370.2	-11.8%	107,432	107,432	0	0.0%	11,602.7	11,602.7	0	0.0%
March-10	69	113,653	99,312	-14,341	-12.6%	7,842.1	6,852.5	-989.6	-12.6%	113,653	99,312	-14,341	-12.6%	7,842.1	6,852.5	-989.6	-12.6%	113,653	113,653	0	0.0%	7,842.1	7,842.1	0	0.0%
April-10	65	112,813	95,080	-17,733	-15.7%	7,332.2	6,180.2	-1,152.0	-15.7%	112,813	95,080	-17,733	-15.7%	7,332.2	6,180.2	-1,152.0	-15.7%	112,813	112,813	0	0.0%	7,332.2	7,332.2	0	0.0%
May-10	43	105,762	95,277	-10,485	-9.9%	4,547.8	4,096.9	-450.9	-9.9%	105,762	95,277	-10,485	-9.9%	4,547.8	4,096.9	-450.9	-9.9%	105,762	105,762	0	0.0%	4,547.8	4,547.8	0	0.0%
June-10	56	104,095	89,962	-14,133	-13.6%	5,829.3	5,037.9	-791.4	-13.6%	104,095	89,962	-14,133	-13.6%	5,829.3	5,037.9	-791.4	-13.6%	104,095	104,095	0	0.0%	5,829.3	5,829.3	0	0.0%
July-10	65	103,141	94,013	-9,128	-8.9%	6,704.2	6,110.8	-593.4	-8.9%	103,141	94,013	-9,128	-8.9%	6,704.2	6,110.8	-593.4	-8.9%	103,141	103,141	0	0.0%	6,704.2	6,704.2	0	0.0%
August-10	68	93,795	84,210	-9,585	-10.2%	6,378.1	5,726.3	-651.8	-10.2%	93,795	84,210	-9,585	-10.2%	6,378.1	5,726.3	-651.8	-10.2%	93,795	93,795	0	0.0%	6,378.1	6,378.1	0	0.0%
September-10	108	97,761	89,106	-8,655	-8.9%	10,558.2	9,623.4	-934.8	-8.9%	97,761	89,106	-8,655	-8.9%	10,558.2	9,623.4	-934.8	-8.9%	97,761	97,761	0	0.0%	10,558.2	10,558.2	0	0.0%
Total	4,523	108,928	94,920	-14,007	-12.9%	492,679.3	429,324.7	-63,354.6	-12.9%	110,159	94,839	-15,320	-13.9%	341,053.7	293,621.8	-47,431.9	-13.9%	110,159	110,159	-16,051	-14.5%	172,019.2	146,995.7	-25,023.5	-14.5%

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

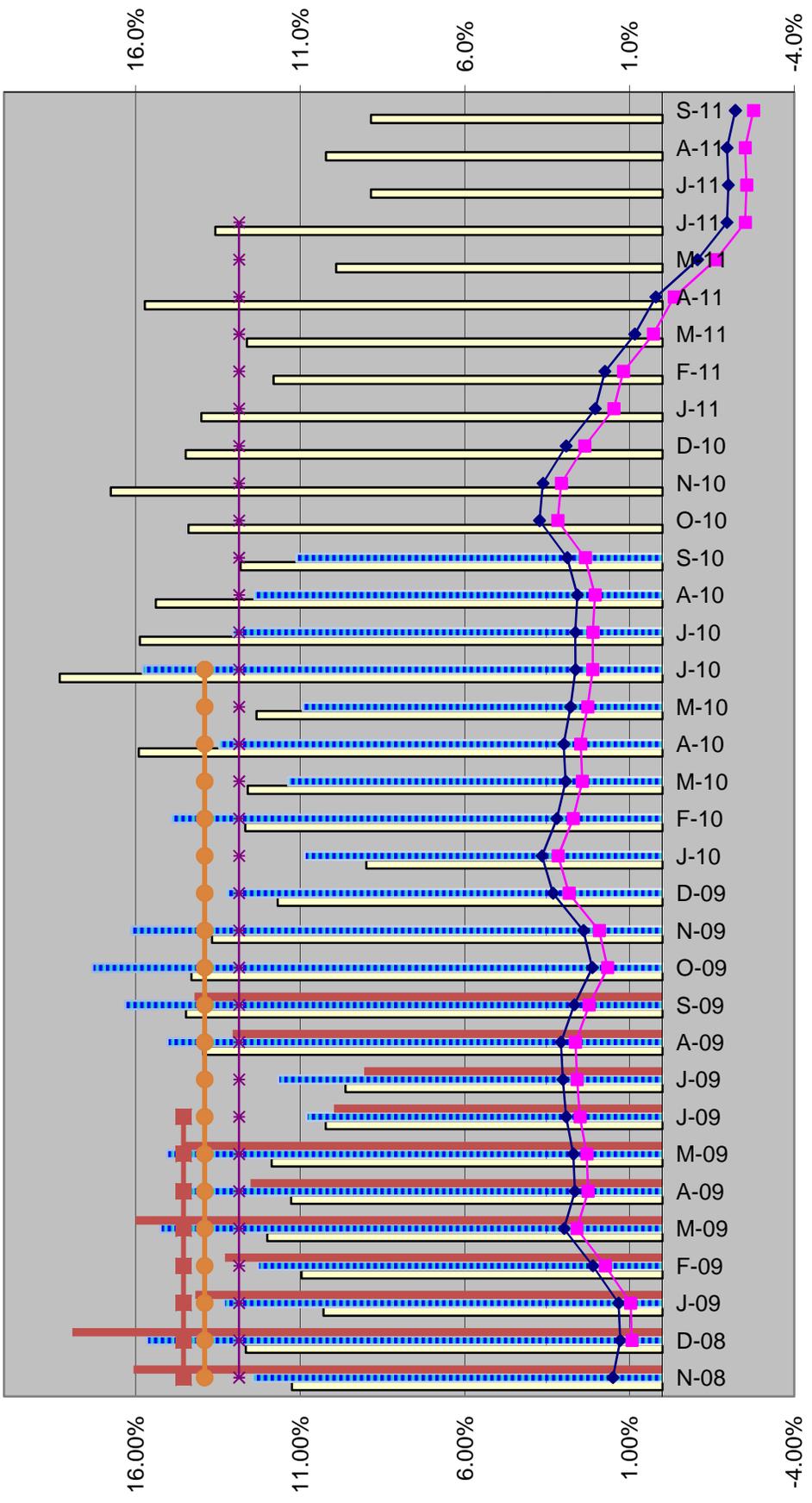
Month Unit Installed	Customers	1 Year Prior to Installation				1 Year After Installation				1 Year Prior to Installation				1 Year After Installation				1 Year Prior to Installation				1 Year After Installation							
		Installation	Post	Pre	% Change	Installation	Post	Pre	% Change	Installation	Post	Pre	% Change	Installation	Post	Pre	% Change	Installation	Post	Pre	% Change	Installation	Post	Pre	% Change	Installation	Post	Pre	% Change
November-07	38	105,977	4,027.1	3,851.2	-4.4%	101,347	4,630	4,027.1	-4.4%	105,977	3,723.8	3,723.8	-7.5%	97,995	7,982	4,027.1	-7.5%	105,977	3,723.8	4,027.1	-7.5%	97,995	7,982	4,027.1	-7.5%	105,977	3,723.8	3,723.8	-7.5%
December-07	109	101,458	11,058.9	10,915.8	-1.3%	100,145	1,313	11,058.9	-1.3%	101,458	10,459.6	10,459.6	-5.4%	95,960	5,498	11,058.9	-5.4%	101,458	10,459.6	11,058.9	-5.4%	95,960	5,498	11,058.9	-5.4%	101,458	10,459.6	10,459.6	-5.4%
January-08	86	105,515	9,074.3	8,646.2	-4.7%	100,537	4,978	9,074.3	-4.7%	105,515	8,231.2	8,231.2	-9.3%	95,712	9,803	9,074.3	-9.3%	105,515	8,231.2	9,074.3	-9.3%	95,712	9,803	9,074.3	-9.3%	105,515	8,231.2	8,231.2	-9.3%
February-08	63	104,647	6,592.8	5,971.0	-9.4%	94,777	9,870	6,592.8	-9.4%	104,647	5,950.5	5,950.5	-9.7%	94,453	10,194	6,592.8	-9.7%	104,647	5,950.5	6,592.8	-9.7%	94,453	10,194	6,592.8	-9.7%	104,647	5,950.5	5,950.5	-9.7%
March-08	66	94,754	88,565	5,845.3	-6.5%	88,565	6,189	6,253.8	-6.5%	94,754	5,623.3	5,623.3	-10.1%	85,201	9,553	6,253.8	-10.1%	94,754	5,623.3	6,253.8	-10.1%	85,201	9,553	6,253.8	-10.1%	94,754	5,623.3	5,623.3	-10.1%
April-08	47	95,137	4,471.4	4,061.2	-9.2%	86,408	8,729	4,471.4	-9.2%	95,137	4,097.5	4,097.5	-8.4%	87,181	7,956	4,471.4	-8.4%	95,137	4,097.5	4,471.4	-8.4%	87,181	7,956	4,471.4	-8.4%	95,137	4,097.5	4,097.5	-8.4%
May-08	34	97,603	3,318.5	3,104.6	-6.4%	91,312	6,291	3,318.5	-6.4%	97,603	2,954.8	2,954.8	-11.0%	86,907	10,696	3,318.5	-11.0%	97,603	2,954.8	2,954.8	-11.0%	86,907	10,696	3,318.5	-11.0%	97,603	2,954.8	2,954.8	-11.0%
June-08	35	103,389	3,618.6	3,435.8	-5.1%	98,167	5,222	3,618.6	-5.1%	103,389	3,387.0	3,387.0	-6.4%	96,770	6,619	3,618.6	-6.4%	103,389	3,387.0	3,618.6	-6.4%	96,770	6,619	3,618.6	-6.4%	103,389	3,387.0	3,387.0	-6.4%
July-08	38	93,047	3,535.8	3,438.3	-2.8%	90,482	2,565	3,535.8	-2.8%	93,047	3,330.9	3,330.9	-5.8%	87,656	5,391	3,535.8	-5.8%	93,047	3,330.9	3,535.8	-5.8%	87,656	5,391	3,535.8	-5.8%	93,047	3,330.9	3,330.9	-5.8%
August-08	30	111,190	3,335.7	3,073.7	-7.9%	102,456	8,734	3,335.7	-7.9%	111,190	2,948.1	2,948.1	-11.6%	98,270	12,920	3,335.7	-11.6%	111,190	2,948.1	3,335.7	-11.6%	98,270	12,920	3,335.7	-11.6%	111,190	2,948.1	2,948.1	-11.6%
September-08	25	90,950	2,273.8	2,201.3	-3.2%	88,050	2,900	2,273.8	-3.2%	90,950	2,109.5	2,109.5	-7.2%	84,378	6,572	2,273.8	-7.2%	90,950	2,109.5	2,273.8	-7.2%	84,378	6,572	2,273.8	-7.2%	90,950	2,109.5	2,109.5	-7.2%
October-08	81	103,986	8,422.9	7,651.4	-9.2%	94,462	9,524	8,422.9	-9.2%	103,986	7,341.6	7,341.6	-12.8%	90,637	13,349	8,422.9	-12.8%	103,986	7,341.6	8,422.9	-12.8%	90,637	13,349	8,422.9	-12.8%	103,986	7,341.6	7,341.6	-12.8%
November-08	127	113,598	14,426.9	13,458.8	-6.7%	105,975	7,623	14,426.9	-6.7%	113,598	13,045.3	13,045.3	-9.6%	102,719	10,879	14,426.9	-9.6%	113,598	13,045.3	14,426.9	-9.6%	102,719	10,879	13,045.3	-9.6%	113,598	13,045.3	13,045.3	-9.6%
December-08	95	104,523	9,929.7	9,242.0	-6.9%	97,284	7,239	9,929.7	-6.9%	104,523	8,814	8,814	-8.4%	95,709	8,814	9,929.7	-8.4%	104,523	8,814	9,929.7	-8.4%	95,709	8,814	8,814	-8.4%	104,523	8,814	8,814	-8.4%
January-09	61	111,057	6,774.5	6,281.9	-7.3%	102,982	8,075	6,774.5	-7.3%	111,057	6,351.0	6,351.0	-6.3%	104,114	6,943	6,774.5	-6.3%	111,057	6,351.0	6,774.5	-6.3%	104,114	6,943	6,351.0	-6.3%	111,057	6,351.0	6,351.0	-6.3%
February-09	53	102,242	5,418.8	5,101.4	-5.9%	96,253	5,989	5,418.8	-5.9%	102,242	5,061.0	5,061.0	-6.6%	95,491	6,751	5,418.8	-6.6%	102,242	5,061.0	5,418.8	-6.6%	95,491	6,751	5,061.0	-6.6%	102,242	5,061.0	5,061.0	-6.6%
March-09	45	106,934	4,812.0	4,402.5	-8.5%	97,834	9,100	4,812.0	-8.5%	106,934	4,400.6	4,400.6	-8.6%	97,791	9,143	4,812.0	-8.6%	106,934	4,400.6	4,812.0	-8.6%	97,791	9,143	4,400.6	-8.6%	106,934	4,400.6	4,400.6	-8.6%
April-09	31	100,496	3,115.4	2,949.6	-5.3%	95,148	5,348	3,115.4	-5.3%	100,496	2,974.0	2,974.0	-4.5%	95,934	4,562	3,115.4	-4.5%	100,496	2,974.0	3,115.4	-4.5%	95,934	4,562	2,974.0	-4.5%	100,496	2,974.0	2,974.0	-4.5%
May-09	24	105,117	2,522.8	2,298.1	-8.9%	95,754	9,363	2,522.8	-8.9%	105,117	2,361.0	2,361.0	-6.4%	98,377	6,740	2,522.8	-6.4%	105,117	2,361.0	2,522.8	-6.4%	98,377	6,740	2,361.0	-6.4%	105,117	2,361.0	2,361.0	-6.4%
June-09	27	111,174	3,001.7	2,957.9	-1.5%	109,550	1,624	3,001.7	-1.5%	111,174	3,009.6	3,009.6	0.3%	111,467	0,293	3,001.7	0.3%	111,174	3,009.6	3,001.7	0.3%	111,467	0,293	3,001.7	0.3%	111,174	3,009.6	3,009.6	0.3%
July-09	37	99,425	3,678.7	3,441.1	-6.5%	93,004	6,421	3,678.7	-6.5%	99,425	3,488.7	3,488.7	-5.2%	94,288	5,137	3,678.7	-5.2%	99,425	3,488.7	3,678.7	-5.2%	94,288	5,137	3,488.7	-5.2%	99,425	3,488.7	3,488.7	-5.2%
August-09	34	93,869	3,191.5	3,133.1	-1.8%	92,149	1,720	3,191.5	-1.8%	93,869	3,125.6	3,125.6	-2.1%	91,928	1,941	3,191.5	-2.1%	93,869	3,125.6	3,191.5	-2.1%	91,928	1,941	3,125.6	-2.1%	93,869	3,125.6	3,125.6	-2.1%
September-09	28	98,411	2,755.5	2,635.6	-4.4%	94,130	4,281	2,755.5	-4.4%	98,411	2,755.5	2,755.5	-3.1%	95,379	3,032	2,755.5	-3.1%	98,411	2,755.5	2,755.5	-3.1%	95,379	3,032	2,755.5	-3.1%	98,411	2,755.5	2,670.6	-2.9%
October-09	113	97,577	11,026.2	10,211.4	-7.4%	90,366	7,211	11,026.2	-7.4%	97,577	11,026.2	11,026.2	-7.0%	91,928	6,743	11,026.2	-7.0%	97,577	11,026.2	11,026.2	-7.0%	91,928	6,743	11,026.2	-7.0%	97,577	11,026.2	10,211.4	-7.4%
November-09	189	96,626	89,883	16,987.9	-7.0%	89,883	6,743	89,883	-7.0%	96,626	16,987.9	16,987.9	-7.0%	91,928	6,743	16,987.9	-7.0%	96,626	16,987.9	16,987.9	-7.0%	91,928	6,743	16,987.9	-7.0%	96,626	16,987.9	16,987.9	-7.0%
December-09	57	98,697	5,625.7	5,421.6	-3.6%	95,115	3,582	5,625.7	-3.6%	98,697	5,421.6	5,421.6	-3.6%	95,115	3,582	5,625.7	-3.6%	98,697	5,421.6	5,625.7	-3.6%	95,115	3,582	5,421.6	-3.6%	98,697	5,421.6	5,421.6	-3.6%
Total	1,573	102,050	160,525.4	150,718.5	-6.1%	95,816	6,234	160,525.4	-6.1%	102,050	115,737.5	115,737.5	-7.9%	95,336	8,133	160,525.4	-7.9%	102,050	115,737.5	160,525.4	-7.9%	95,336	8,133	115,737.5	-7.9%	102,050	115,737.5	115,737.5	-7.9%
		100,807	91,674	91,674	-9.1%	91,674	9,133	91,674	-9.1%	100,807	57,560.7	57,560.7	-9.1%	91,674	2,273.8	57,560.7	-9.1%	100,807	57,560.7	57,560.7	-9.1%	91,674	2,273.8	57,560.7	-9.1%	100,807	57,560.7	57,560.7	-9.1%

Month Unit Installed	Customers	Heating System and Programmable Thermostat Only										Normalized Consumption (Mcf)		Weighted Annual Consumption		Weighted Annual Consumption		Weighted Annual Consumption							
		1 Year Prior to Installation		1 Year After Installation		Change		% Change		1 Year Prior to Installation		2nd Year After Installation		Change		% Change		1 Year Prior to Installation		3rd Year After Installation		Change		% Change	
		104.332	89.119	-15.213	-14.6%	15,858.5	13,548.1	-2,310.4	-14.6%	104.332	87.425	-16.907	-16.2%	15,858.5	13,288.6	-2,569.9	-16.2%	104.332	84.218	-20.114	-19.3%	15,858.5	12,801.1	-3,057.4	-19.3%
November-07	152	109.773	93.538	-16.235	-14.8%	31,175.5	26,564.8	-4,610.7	-14.8%	109.773	90.116	-19.657	-17.9%	31,175.5	25,592.9	-5,582.6	-17.9%	109.773	87.557	-22.216	-20.2%	31,175.5	24,866.2	-6,309.3	-20.2%
December-07	284	115.055	98.680	-16.375	-14.2%	24,391.7	20,920.2	-3,471.5	-14.2%	115.055	94.221	-20.834	-18.1%	24,391.7	19,974.9	-4,416.8	-18.1%	115.055	91.704	-23.351	-20.3%	24,391.7	19,441.2	-4,950.5	-20.3%
January-08	212	108.714	93.220	-15.494	-14.3%	15,328.7	13,144.0	-2,184.7	-14.3%	108.714	89.560	-19.154	-17.6%	15,328.7	12,628.0	-2,700.7	-17.6%	108.714	88.084	-20.630	-19.0%	15,328.7	12,419.8	-2,908.9	-19.0%
February-08	141	110.241	96.652	-13.589	-12.3%	18,410.2	16,140.9	-2,269.3	-12.3%	110.241	94.380	-15.861	-14.4%	18,410.2	15,761.5	-2,648.7	-14.4%	110.241	93.394	-16.847	-15.3%	18,410.2	15,596.8	-2,813.4	-15.3%
March-08	167	109.859	94.201	-15.658	-14.3%	20,873.2	17,898.2	-2,975.0	-14.3%	109.859	91.984	-17.875	-16.3%	20,873.2	17,477.0	-3,396.2	-16.3%	109.859	92.527	-17.332	-15.8%	20,873.2	17,580.1	-3,293.1	-15.8%
April-08	190	101.863	86.376	-15.487	-15.2%	16,196.2	13,733.8	-2,462.4	-15.2%	101.863	84.728	-17.135	-16.8%	16,196.2	13,471.8	-2,724.4	-16.8%	101.863	85.859	-16.004	-15.7%	16,196.2	13,651.6	-2,544.6	-15.7%
May-08	159	96.677	84.732	-11.945	-12.4%	17,498.5	15,335.5	-2,163.0	-12.4%	96.677	82.739	-13.938	-14.4%	17,498.5	14,975.8	-2,522.7	-14.4%	96.677	84.815	-11.862	-12.3%	17,498.5	15,351.5	-2,147.0	-12.3%
June-08	181	109.156	96.164	-12.992	-11.9%	21,176.3	18,655.8	-2,520.5	-11.9%	109.156	93.120	-16.036	-14.7%	21,176.3	18,065.3	-3,111.0	-14.7%	109.156	95.809	-13.347	-12.2%	21,176.3	18,586.9	-2,589.4	-12.2%
July-08	194	105.769	90.651	-15.118	-14.3%	19,038.4	16,317.2	-2,721.2	-14.3%	105.769	88.645	-17.124	-16.2%	19,038.4	15,956.1	-3,082.3	-16.2%	105.769	91.014	-14.755	-14.0%	19,038.4	16,382.5	-2,655.9	-14.0%
August-08	180	108.669	94.888	-13.781	-12.7%	28,906.0	25,240.2	-3,665.8	-12.7%	108.669	91.532	-17.137	-15.8%	28,906.0	24,347.5	-4,558.5	-15.8%	108.669	94.175	-14.494	-13.3%	28,906.0	25,050.6	-3,855.4	-13.3%
September-08	266	110.151	94.667	-15.484	-14.1%	46,043.1	39,570.8	-6,472.3	-14.1%	110.151	90.818	-19.333	-17.6%	46,043.1	37,961.9	-8,081.2	-17.6%	110.151	90.818	-19.333	-17.6%	46,043.1	37,961.9	-8,081.2	-17.6%
October-08	418	105.275	90.864	-14.411	-13.7%	49,795.1	42,978.7	-6,816.4	-13.7%	105.275	88.374	-16.901	-16.1%	49,795.1	41,800.9	-7,994.2	-16.1%	105.275	88.374	-16.901	-16.1%	49,795.1	41,800.9	-7,994.2	-16.1%
November-08	473	107.440	93.267	-14.173	-13.2%	35,992.4	31,244.4	-4,748.0	-13.2%	107.440	91.555	-15.885	-14.8%	35,992.4	30,670.9	-5,321.5	-14.8%	107.440	91.555	-15.885	-14.8%	35,992.4	30,670.9	-5,321.5	-14.8%
December-08	335	110.811	93.998	-16.813	-15.2%	28,700.0	24,345.5	-4,354.5	-15.2%	110.811	91.904	-18.907	-17.1%	28,700.0	23,803.1	-4,896.9	-17.1%	110.811	91.904	-18.907	-17.1%	28,700.0	23,803.1	-4,896.9	-17.1%
January-09	259	99.476	86.548	-12.928	-13.0%	25,863.8	22,502.5	-3,361.3	-13.0%	99.476	85.917	-13.559	-13.6%	25,863.8	22,338.4	-3,525.4	-13.6%	99.476	85.917	-13.559	-13.6%	25,863.8	22,338.4	-3,525.4	-13.6%
February-09	260	110.223	94.751	-15.472	-14.0%	24,138.8	20,750.5	-3,388.3	-14.0%	110.223	94.170	-16.053	-14.6%	24,138.8	20,623.2	-3,515.6	-14.6%	110.223	94.170	-16.053	-14.6%	24,138.8	20,623.2	-3,515.6	-14.6%
March-09	219	104.694	91.770	-12.924	-12.3%	21,881.0	19,179.9	-2,701.1	-12.3%	104.694	91.943	-12.751	-12.2%	21,881.0	19,216.1	-2,664.9	-12.2%	104.694	91.943	-12.751	-12.2%	21,881.0	19,216.1	-2,664.9	-12.2%
April-09	209	105.501	91.669	-13.832	-13.1%	23,737.7	20,625.5	-3,112.2	-13.1%	105.501	92.414	-13.087	-12.4%	23,737.7	20,793.2	-2,944.5	-12.4%	105.501	92.414	-13.087	-12.4%	23,737.7	20,793.2	-2,944.5	-12.4%
May-09	225	102.729	89.570	-13.159	-12.8%	25,990.4	22,661.2	-3,329.2	-12.8%	102.729	90.898	-11.831	-11.5%	25,990.4	22,997.2	-2,993.2	-11.5%	102.729	90.898	-11.831	-11.5%	25,990.4	22,997.2	-2,993.2	-11.5%
June-09	253	105.628	92.009	-13.619	-12.9%	25,984.5	22,634.2	-3,350.3	-12.9%	105.628	94.115	-11.513	-10.9%	25,984.5	23,152.3	-2,832.2	-10.9%	105.628	94.115	-11.513	-10.9%	25,984.5	23,152.3	-2,832.2	-10.9%
July-09	246	104.356	90.002	-14.354	-13.8%	29,011.0	25,020.6	-3,990.4	-13.8%	104.356	92.469	-11.887	-11.4%	29,011.0	25,706.4	-3,304.6	-11.4%	104.356	92.469	-11.887	-11.4%	29,011.0	25,706.4	-3,304.6	-11.4%
August-09	278	103.600	88.153	-15.447	-14.9%	37,296.0	31,735.1	-5,560.9	-14.9%	103.600	89.624	-13.976	-13.5%	37,296.0	32,264.6	-5,031.4	-13.5%	103.600	89.624	-13.976	-13.5%	37,296.0	32,264.6	-5,031.4	-13.5%
September-09	360	103.979	88.981	-14.998	-14.4%	60,203.8	51,520.0	-8,683.8	-14.4%	103.979	88.624	-15.353	-14.8%	60,203.8	51,520.0	-8,683.8	-14.8%	103.979	88.624	-15.353	-14.8%	60,203.8	51,520.0	-8,683.8	-14.8%
October-09	579	105.335	89.164	-16.171	-15.4%	65,097.0	55,103.4	-9,993.6	-15.4%	105.335	89.164	-16.171	-15.4%	65,097.0	55,103.4	-9,993.6	-15.4%	105.335	89.164	-16.171	-15.4%	65,097.0	55,103.4	-9,993.6	-15.4%
November-09	618	106.098	91.146	-14.952	-14.1%	62,916.1	54,049.6	-8,866.5	-14.1%	106.098	91.146	-14.952	-14.1%	62,916.1	54,049.6	-8,866.5	-14.1%	106.098	91.146	-14.952	-14.1%	62,916.1	54,049.6	-8,866.5	-14.1%
December-09	593	106.683	95.866	-10.817	-10.1%	45,660.3	41,030.6	-4,629.7	-10.1%	106.683	95.866	-10.817	-10.1%	45,660.3	41,030.6	-4,629.7	-10.1%	106.683	95.866	-10.817	-10.1%	45,660.3	41,030.6	-4,629.7	-10.1%
January-10	428	105.350	93.444	-11.906	-11.3%	30,340.8	26,911.9	-3,428.9	-11.3%	105.350	93.444	-11.906	-11.3%	30,340.8	26,911.9	-3,428.9	-11.3%	105.350	93.444	-11.906	-11.3%	30,340.8	26,911.9	-3,428.9	-11.3%
February-10	288	103.464	93.058	-10.406	-10.1%	26,279.9	23,636.7	-2,643.2	-10.1%	103.464	93.058	-10.406	-10.1%	26,279.9	23,636.7	-2,643.2	-10.1%	103.464	93.058	-10.406	-10.1%	26,279.9	23,636.7	-2,643.2	-10.1%
March-10	254	97.779	88.726	-9.053	-9.3%	21,413.6	19,431.0	-1,982.6	-9.3%	97.779	88.726	-9.053	-9.3%	21,413.6	19,431.0	-1,982.6	-9.3%	97.779	88.726	-9.053	-9.3%	21,413.6	19,431.0	-1,982.6	-9.3%
April-10	219	96.753	86.754	-7.999	-8.3%	18,092.8	16,597.0	-1,495.8	-8.3%	96.753	86.754	-7.999	-8.3%	18,092.8	16,597.0	-1,495.8	-8.3%	96.753	86.754	-7.999	-8.3%	18,092.8	16,597.0	-1,495.8	-8.3%
May-10	187	100.667	92.502	-8.165	-8.1%	25,066.1	23,033.0	-2,033.1	-8.1%	100.667	92.502	-8.165	-8.1%	25,066.1	23,033.0	-2,033.1	-8.1%	100.667	92.502	-8.165	-8.1%	25,066.1	23,033.0	-2,033.1	-8.1%
June-10	249	100.194	91.104	-9.090	-9.1%	26,952.2	24,507.0	-2,445.2	-9.1%	100.194	91.104	-9.090	-9.1%	26,952.2	24,507.0	-2,445.2	-9.1%	100.194	91.104	-9.090	-9.1%	26,952.2	24,507.0	-2,445.2	-9.1%
July-10	269	96.085	87.346	-8.739	-9.1%	33,725.8	30,658.4	-3,067.4	-9.1%	96.085	87.346	-8.739	-9.1%	33,725.8	30,658.4	-3,067.4	-9.1%	96.085	87.346	-8.739	-9.1%	33,725.8	30,658.4	-3,067.4	-9.1%
August-10	351	99.585	88.953	-10.632	-10.7%	39,236.5	35,047.5	-4,189.0	-10.7%	99.585	88.953	-10.632	-10.7%	39,236.5	35,047.5	-4,189.0	-10.7%	99.585	88.953	-10.632	-10.7%	39,236.5	35,047.5	-4,189.0	-10.7%
September-10	394	104.883	91.405	-13.479	-12.9%	1,058,272.1	922,272.6	-135,999.5	-12.9%	104.883	91.405	-13.479	-12.9%	1,058,272.1	922,272.6	-135,999.5	-12.9%	104.883	91.405	-13.479	-12.9%	1,058,272.1	922,272.6	-135,999.5	-12.9%
Total	10,090					603,287.1	512,867.5	-90,419.6	-15.0%	106,569	90,597	-15,972	-15.0%	603,287.1	512,867.5	-90,419.6	-15.0%	107,645	90,183	-17,462	-16.2%	228,853.2	191,728.5	-37,124.7	-16.2%

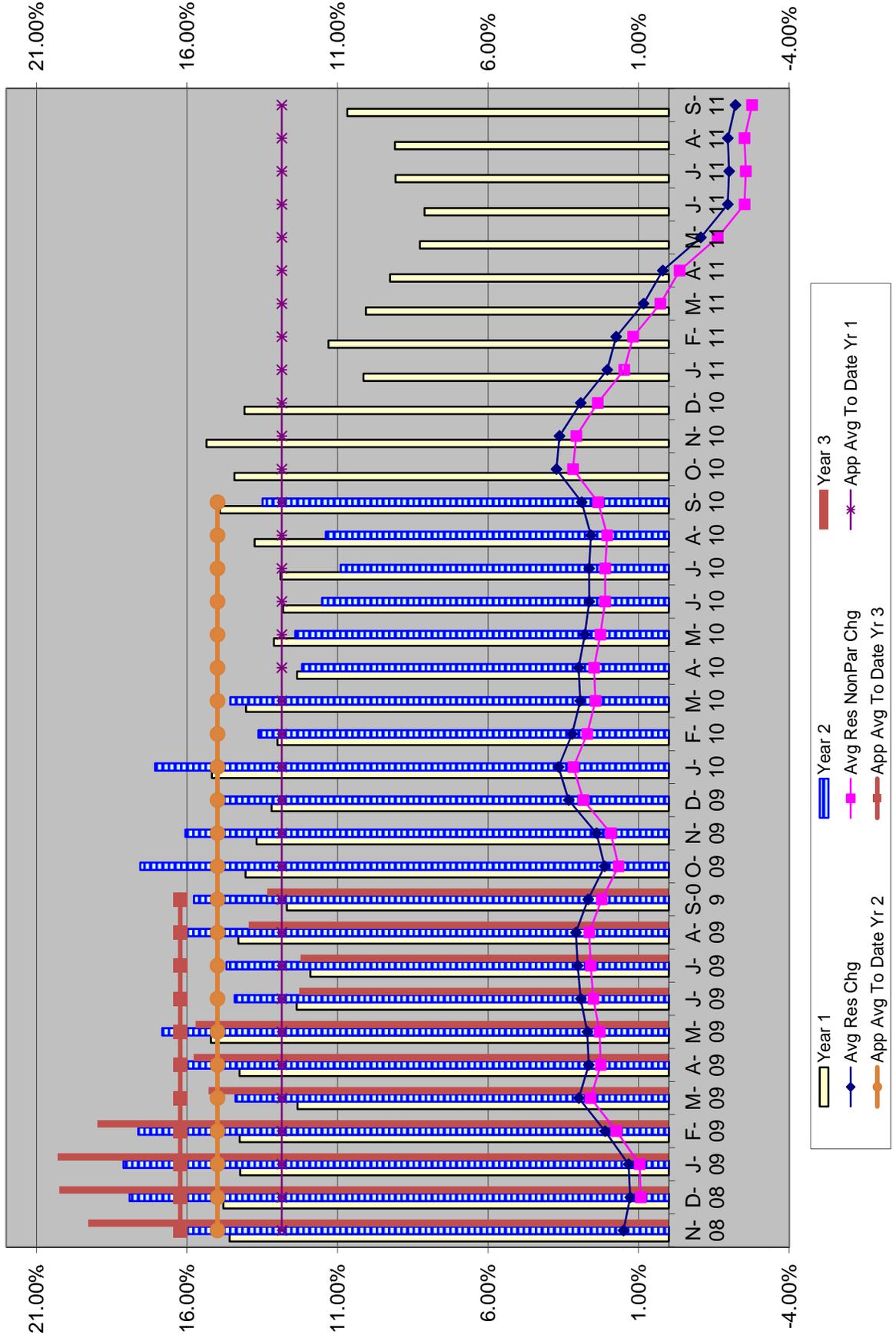
National Fuel Gas Distribution Corporation
New York Division
Conservation Incentive Program
Residential Appliance Rebate Program
Pre and Post Installation Consumption Analysis

Month Installed	Customers	LIURP																					
		1 Year Prior						2nd Year						3rd Year									
		Installation	1 Year After	Change	% Change	Pre	Post	Installation	After	Change	% Change	Pre	Post	Installation	After	Change	% Change	Pre	Post				
March-08	2	225,583	207,221	-18,362	-8.1%	451.2	414.4	208,972	-16,611	-7.4%	451.2	417.9	197,036	-28,547	-12.7%	451.2	394.1	225,583	197,036	-28,547	-12.7%	451.2	394.1
April-08	14	216,962	197,512	-19,450	-9.0%	3,037.5	2,765.2	181,110	-35,852	-16.5%	3,037.5	2,535.5	178,182	-38,780	-17.9%	3,037.5	2,494.5	216,962	178,182	-38,780	-17.9%	3,037.5	2,494.5
May-08	19	193,675	156,460	-37,215	-19.2%	3,679.8	2,972.7	184,840	-8,835	-4.6%	3,679.8	3,512.0	179,944	-13,731	-7.1%	3,679.8	3,418.9	193,675	179,944	-13,731	-7.1%	3,679.8	3,418.9
June-08	13	183,283	173,136	-10,147	-5.5%	2,382.7	2,250.8	170,507	-12,776	-7.0%	2,382.7	2,216.6	146,03	-37,253	-20.3%	2,382.7	1,898.4	183,283	146,03	-37,253	-20.3%	2,382.7	1,898.4
July-08	10	182,309	170,260	-12,049	-6.6%	1,823.1	1,702.6	158,149	-24,160	-13.3%	1,823.1	1,581.5	154,362	-27,947	-15.3%	1,823.1	1,543.6	182,309	154,362	-27,947	-15.3%	1,823.1	1,543.6
August-08	22	200,738	177,723	-23,015	-11.5%	4,416.2	3,909.9	166,312	-34,426	-17.1%	4,416.2	3,658.9	171,298	-29,440	-14.7%	4,416.2	3,768.6	200,738	171,298	-29,440	-14.7%	4,416.2	3,768.6
September-08	24	210,487	180,675	-29,812	-14.2%	5,051.7	4,336.2	169,820	-40,667	-19.3%	5,051.7	4,075.7	171,696	-38,791	-18.4%	5,051.7	4,120.7	210,487	171,696	-38,791	-18.4%	5,051.7	4,120.7
October-08	29	187,726	173,139	-14,587	-7.8%	5,444.1	5,021.0	168,416	-19,310	-10.3%	5,444.1	4,884.1						187,726	168,416	-19,310	-10.3%	5,444.1	4,884.1
November-08	50	199,137	172,215	-26,922	-13.5%	9,956.9	8,610.8	168,197	-30,940	-15.5%	9,956.9	8,409.9						199,137	168,197	-30,940	-15.5%	9,956.9	8,409.9
December-08	23	200,259	171,849	-28,410	-14.2%	4,606.0	3,952.5	158,540	-41,719	-20.8%	4,606.0	3,646.4						200,259	158,540	-41,719	-20.8%	4,606.0	3,646.4
January-09	41	200,979	173,387	-27,592	-13.7%	8,240.1	7,108.9	162,679	-38,300	-19.1%	8,240.1	6,689.8						200,979	162,679	-38,300	-19.1%	8,240.1	6,689.8
February-09	56	180,212	152,333	-27,879	-15.5%	10,091.9	8,525.0	152,265	-27,947	-15.5%	10,091.9	8,526.8						180,212	152,265	-27,947	-15.5%	10,091.9	8,526.8
March-09	90	176,934	149,026	-27,908	-15.8%	15,924.1	13,412.3	148,400	-28,534	-16.1%	15,924.1	13,356.0						176,934	148,400	-28,534	-16.1%	15,924.1	13,356.0
April-09	73	184,232	152,633	-31,599	-17.2%	13,448.9	11,142.2	151,056	-33,176	-18.0%	13,448.9	11,027.1						184,232	151,056	-33,176	-18.0%	13,448.9	11,027.1
May-09	34	164,331	141,718	-22,613	-13.8%	5,587.3	4,818.4	140,250	-24,081	-14.7%	5,587.3	4,768.5						164,331	140,250	-24,081	-14.7%	5,587.3	4,768.5
June-09	43	142,241	130,742	-11,499	-8.1%	6,116.4	5,621.9	131,131	-11,110	-7.8%	6,116.4	5,638.6						142,241	131,131	-11,110	-7.8%	6,116.4	5,638.6
July-09	62	147,496	124,610	-22,886	-15.5%	9,144.8	7,725.8	127,430	-20,066	-13.6%	9,144.8	7,900.7						147,496	127,430	-20,066	-13.6%	9,144.8	7,900.7
August-09	102	154,331	131,598	-22,733	-14.7%	15,741.8	13,423.0	135,140	-19,191	-12.4%	15,741.8	13,784.3						154,331	135,140	-19,191	-12.4%	15,741.8	13,784.3
September-09	99	160,895	139,565	-21,330	-13.3%	15,928.6	13,816.9	141,987	-18,908	-11.8%	15,928.6	14,056.7						160,895	141,987	-18,908	-11.8%	15,928.6	14,056.7
October-09	96	159,896	140,197	-19,699	-12.3%	15,350.0	13,458.9				15,350.0	13,458.9						159,896				15,350.0	13,458.9
November-09	36	161,765	140,330	-21,435	-13.3%	5,823.5	5,051.9				5,823.5	5,051.9						161,765				5,823.5	5,051.9
December-09	2	144,841	139,750	-5,091	-3.5%	289.7	279.5				289.7	279.5						144,841				289.7	279.5
January-10	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
March-10	3	141,846	112,618	-29,228	-20.6%	425.5	337.9				425.5	337.9						141,846				425.5	337.9
April-10	14	142,219	118,642	-23,577	-16.6%	1,991.1	1,661.0				1,991.1	1,661.0						142,219				1,991.1	1,661.0
May-10	9	137,491	122,870	-14,621	-10.6%	1,237.4	1,105.8				1,237.4	1,105.8						137,491				1,237.4	1,105.8
June-10	8	161,949	134,891	-27,058	-16.7%	1,295.6	1,079.1				1,295.6	1,079.1						161,949				1,295.6	1,079.1
July-10	9	155,283	139,992	-15,291	-9.8%	1,397.5	1,259.9				1,397.5	1,259.9						155,283				1,397.5	1,259.9
August-10	7	164,122	145,644	-18,478	-11.3%	1,148.9	1,019.5				1,148.9	1,019.5						164,122				1,148.9	1,019.5
September-10	5	157,656	142,827	-14,829	-9.4%	788.3	714.1				788.3	714.1						157,656				788.3	714.1
Total	995	171,679	148,240	-23,439	-13.7%	170,820.3	147,498.3	149,711	-25,317	-14.5%	141,072.8	120,667.0	169,604,096	-30,801	-15.4%	20,842.2	17,638.8	200,405,308	169,604,096	-30,801	-15.4%	20,842.2	17,638.8

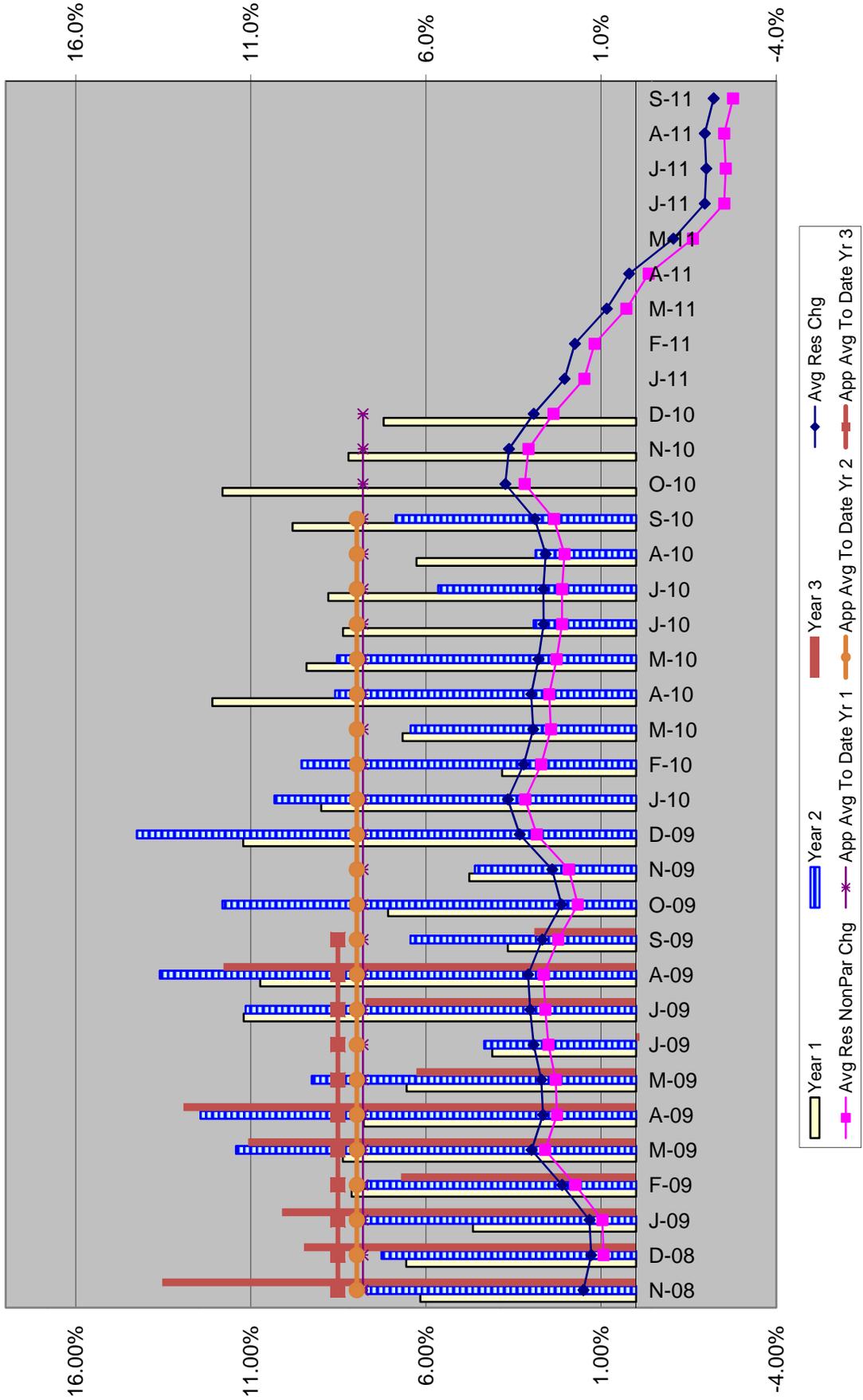
Pre Post Savings
 Heating Systems Only



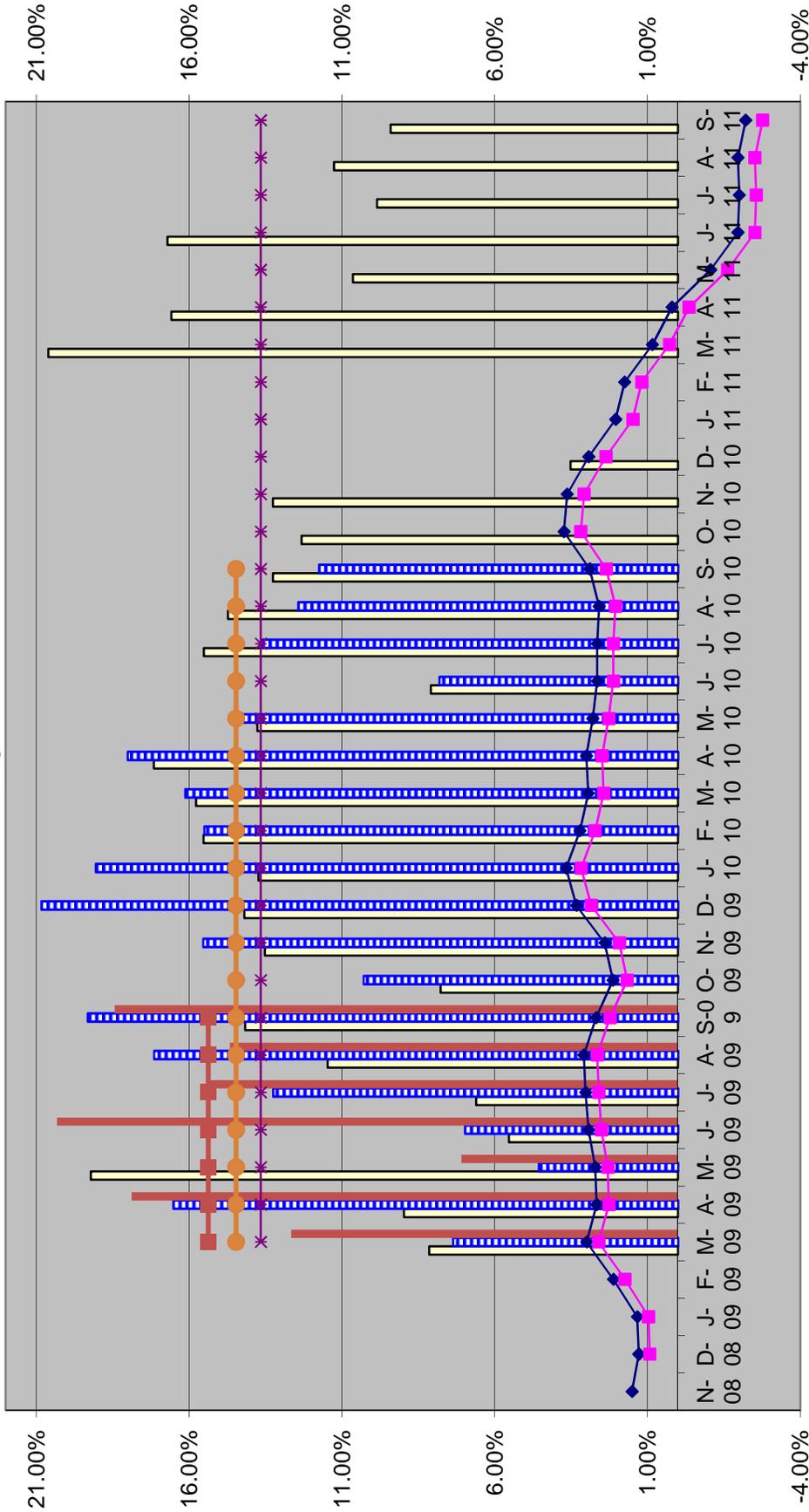
Pre Post Savings Heating Systems & Programmable Thermostats



**Pre Post Savings
 Tankless Water Heaters**



Pre Post Savings
 LIURP



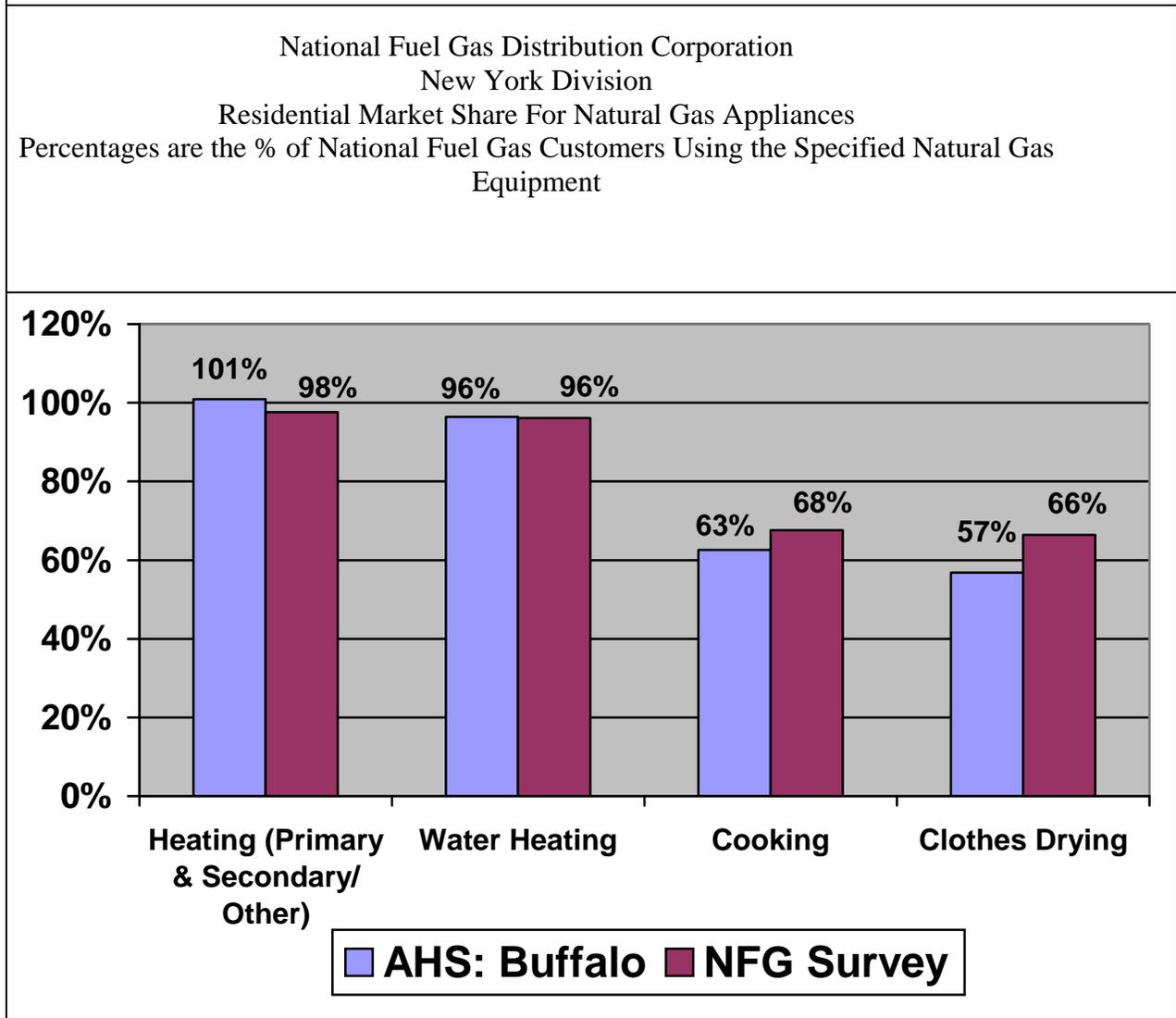
Control Group for Measuring Significance of Residential Customer Rebate Program and
Low Income Usage Reduction Program (“LIURP”) Participant Savings.

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, December 2010, and December 2011. 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	99.5	-2.9%	1.4	100.9	-2.4%
December 2011	103.4	3.9%	1.8	105.2	-4.3%

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 (2) 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	48,121,873	663,468	48,785,340	483,530	99.5	100.9	1.4
2011	50,144,664	894,667	51,039,331	484,944	103.4	105.2	1.8

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	111.56	98.770	-12.79	-11.5%	11,267.6	9,975.8	101.53	91.540	-9.990	-9.8%	13,402.0	12,083.3	-9.8%
March-08	130	118.935	105.797	-13.138	-11.0%	15,461.6	13,753.6	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%
April-08	107	112.705	101.647	-11.058	-9.8%	12,059.4	10,876.2	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%
May-08	111	105.553	91.731	-13.822	-13.1%	11,716.4	10,182.1	107.320	96.990	-10.330	-9.6%	27,259.3	24,635.5	114.890	106.590	-8.300	-7.2%	23,437.6	21,744.4	-7.2%
June-08	101	112.002	98.726	-13.276	-11.9%	11,312.2	9,971.3	112.090	98.840	-13.250	-11.8%	17,710.2	15,616.7	124.370	112.490	-11.880	-9.6%	16,168.1	14,623.7	-9.6%
July-08	132	101.358	92.617	-8.741	-8.6%	13,379.3	12,225.4	113.171	99.998	-13.173	-11.6%	354,904.3	313,594.6	101.53	91.540	-9.990	-9.8%	13,402.0	12,083.3	-9.8%
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	107.260	93.620	-13.640	-12.7%	28,844.1	25,089.8	107.260	93.620	-13.640	-12.7%	25,635.1	22,375.2	-12.7%
November-08	239	108.180	93.651	-14.529	-13.4%	25,855.0	22,382.6	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%
December-08	254	107.668	96.327	-11.341	-10.5%	27,347.7	24,467.1	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%
January-09	204	115.470	106.126	-9.344	-8.1%	23,555.9	21,649.7	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%
February-09	158	113.160	98.811	-14.349	-12.7%	17,879.3	15,612.1	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%
March-09	130	125.574	111.948	-13.626	-10.9%	16,324.6	14,553.2	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%
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 - Prism			1 Year After Installation - Prism			Weighted Annual Consumption	
		Installation	Change	% Change	Installation	Change	% Change	Installation	Change	% Change	Installation	Change	% Change	Pre	Post
March-08	2	224,434	-17,698	-7.9%	206,736	-17,698	-7.9%	448.9	413.5	223.73	206.19	-17.54	-7.8%	447.5	412.4
April-08	16	207,584	-19,206	-9.3%	188,378	-19,206	-9.3%	3,321.3	3,014.0	210.83	187.12	-23.71	-11.2%	3,373.3	2,993.9
May-08	21	191,983	-19,126	-10.0%	172,857	-19,126	-10.0%	4,031.6	3,630.0	193.26	172.55	-20.71	-10.7%	4,058.5	3,623.6
June-08	17	191,124	-13,318	-7.0%	177,806	-13,318	-7.0%	3,249.1	3,022.7	190.33	177.19	-13.14	-6.9%	3,235.6	3,012.2
July-08	12	182,788	-16,478	-9.0%	166,310	-16,478	-9.0%	2,193.5	1,995.7	180.68	166.8	-13.88	-7.7%	2,168.2	2,001.6
August-08	23	199,974	-23,375	-11.7%	176,599	-23,375	-11.7%	4,599.4	4,061.8	199.15	176.14	-23.01	-11.6%	4,580.5	4,051.2
September-08	27	212,308	-26,940	-12.7%	185,368	-26,940	-12.7%	5,732.3	5,004.9	213.95	185.05	-28.9	-13.5%	5,776.7	4,996.4
October-08	36	189,81	-17,819	-9.4%	171,991	-17,819	-9.4%	6,833.2	6,191.7	190.48	171.15	-19.33	-10.1%	6,857.3	6,161.4
November-08	59	198,374	-25,580	-12.9%	172,794	-25,580	-12.9%	11,704.1	10,194.8	197.48	172.43	-25.05	-12.7%	11,651.3	10,173.4
December-08	31	205,462	-29,174	-14.2%	176,288	-29,174	-14.2%	6,369.3	5,464.9	205.07	176.59	-28.48	-13.9%	6,357.2	5,474.3
January-09	48	196,928	-25,826	-13.1%	171,102	-25,826	-13.1%	9,452.5	8,212.9	195.76	170.89	-24.87	-12.7%	9,396.5	8,202.7
February-09	64	180,461	-27,312	-15.1%	153,149	-27,312	-15.1%	11,549.5	9,801.5	179.39	153.4	-25.99	-14.5%	11,481.0	9,817.6
March-09	113	178,642	-28,883	-16.2%	149,759	-28,883	-16.2%	20,186.5	16,922.8	177.6	149.98	-27.62	-15.6%	20,068.8	16,947.7
Total	469	191,197	-25,032	-13.1%	166,165	-25,032	-13.1%	89,671.3	77,931.3	190,729	166,031	-24,699	-12.9%	89,452.1	77,868.4



Draft

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

Prepared for
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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

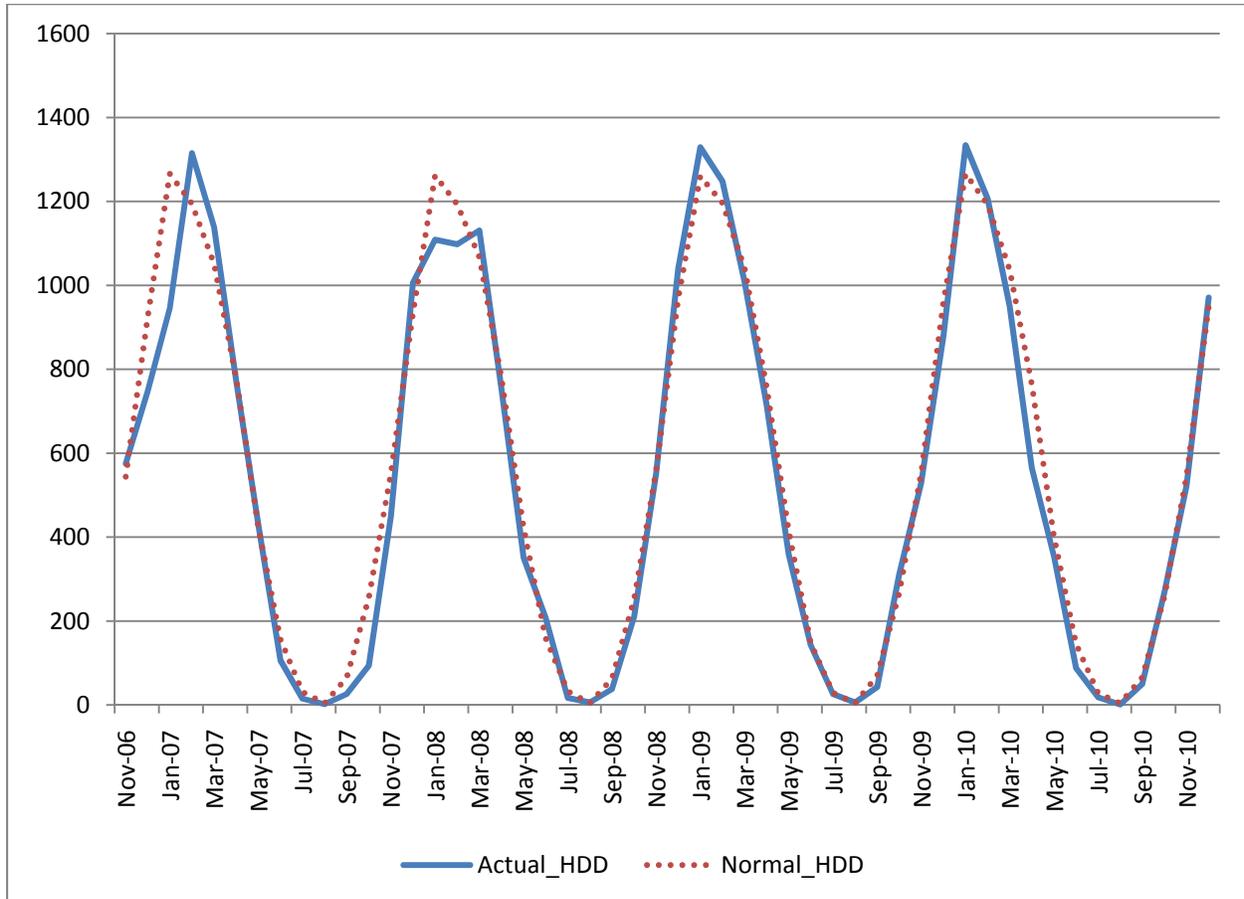
As mentioned above, National Fuel uses a pre-post weather normalization method for each single measure installation in each measure group billing analysis. The Company's approach addresses all of the PRISM shortcomings described above.

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.

National Fuel Gas Distribution Corporation
New York Division
Completed LIURP Projects by Zip Code
December 1, 2007 - December 31, 2011
Program Years 1 - 4

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	6	\$17,785.97	\$2,964.33
14004	Alden	16	\$48,208.45	\$3,013.03
14006	Angola	24	\$60,639.99	\$2,526.67
14009	Arcade	3	\$13,134.89	\$4,378.30
14011	Attica	8	\$31,942.39	\$3,992.80
14020	Batavia	21	\$51,743.24	\$2,463.96
14024	Bliss	6	\$13,675.67	\$2,279.28
14025	Boston	3	\$13,375.65	\$4,458.55
14026	Bowmansville	3	\$11,055.96	\$3,685.32
14030	Chaffee	3	\$9,288.50	\$3,096.17
14031	Clarence	7	\$21,875.88	\$3,125.13
14032	Clarence Center	2	\$3,996.77	\$1,998.39
14033	Colden	3	\$10,103.72	\$3,367.91
14034	Collins	7	\$16,919.28	\$2,417.04
14035	Collins Center	1	\$4,054.92	\$4,054.92
14036	Corfu	7	\$15,597.58	\$2,228.23
14037	Cowlesville	4	\$5,783.60	\$1,445.90
14040	Darien Center	5	\$21,296.04	\$4,259.21
14042	Delevan	6	\$22,138.55	\$3,689.76
14043	Depew	21	\$64,525.64	\$3,072.65
14047	Derby	6	\$17,115.85	\$2,852.64
14048	Dunkirk	75	\$330,195.55	\$4,402.61
14051	East Amherst	9	\$30,445.70	\$3,382.86
14052	East Aurora	10	\$20,241.25	\$2,024.13
14055	East Concord	1	\$293.29	\$293.29
14056	East Pembroke	2	\$7,357.36	\$3,678.68
14057	Eden	9	\$24,021.25	\$2,669.03
14058	Elba	1	\$3,985.73	\$3,985.73
14059	Elma	14	\$38,181.91	\$2,727.28
14061	Farnham	2	\$749.55	\$374.78
14062	Forestville	8	\$35,977.65	\$4,497.21
14063	Fredonia	24	\$111,663.77	\$4,652.66
14066	Gainesville	2	\$1,518.67	\$759.34
14068	Getzville	4	\$9,607.21	\$2,401.80

National Fuel Gas Distribution Corporation
New York Division
Completed LIURP Projects by Zip Code
December 1, 2007 - December 31, 2011
Program Years 1 - 4

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14070	Gowanda	8	\$34,012.30	\$4,251.54
14072	Grand Island	20	\$59,311.80	\$2,965.59
14075	Hamburg	23	\$46,525.63	\$2,022.85
14080	Holland	6	\$17,969.69	\$2,994.95
14081	Irving	4	\$16,934.71	\$4,233.68
14083	Java Village	1	\$5,491.30	\$5,491.30
14085	Lake View	5	\$10,333.30	\$2,066.66
14086	Lancaster	35	\$113,771.97	\$3,250.63
14091	Lawtons	2	\$4,425.42	\$2,212.71
14092	Lewiston	4	\$11,517.30	\$2,879.33
14101	Machias	5	\$22,084.01	\$4,416.80
14102	Marilla	2	\$4,907.60	\$2,453.80
14110	North Boston	1	\$5,924.50	\$5,924.50
14111	North Collins	8	\$25,282.06	\$3,160.26
14113	North Java	2	\$12,227.04	\$6,113.52
14120	North Tonawanda	35	\$109,512.65	\$3,128.93
14127	Orchard Park	17	\$47,521.80	\$2,795.40
14129	Perrysburg	2	\$3,231.98	\$1,615.99
14131	Ransomville	2	\$7,589.04	\$3,794.52
14132	Sanborn	5	\$15,377.18	\$3,075.44
14134	Sardinia	2	\$5,018.34	\$2,509.17
14136	Silver Creek	24	\$88,069.91	\$3,669.58
14139	South Wales	1	\$3,604.71	\$3,604.71
14141	Springville	6	\$26,313.54	\$4,385.59
14150	Tonawanda	42	\$142,038.64	\$3,381.87
14169	Wales Center	1	\$4,657.49	\$4,657.49
14170	West Falls	6	\$13,040.79	\$2,173.47
14171	West Valley	4	\$12,365.46	\$3,091.37
14172	Wilson	4	\$11,730.14	\$2,932.54
14174	Youngstown	2	\$3,842.16	\$1,921.08
14201	Buffalo	27	\$87,408.48	\$3,237.35
14202	Buffalo	1	\$1,529.44	\$1,529.44
14204	Buffalo	52	\$119,538.12	\$2,298.81
14205	Buffalo	1	\$2,457.40	\$2,457.40

National Fuel Gas Distribution Corporation
New York Division
Completed LIURP Projects by Zip Code
December 1, 2007 - December 31, 2011
Program Years 1 - 4

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14206	Buffalo	101	\$323,801.19	\$3,205.95
14207	Buffalo	61	\$221,260.04	\$3,627.21
14208	Buffalo	152	\$444,586.41	\$2,924.91
14209	Buffalo	44	\$126,567.49	\$2,876.53
14210	Buffalo	72	\$233,053.53	\$3,236.85
14211	Buffalo	306	\$951,336.71	\$3,108.94
14212	Buffalo	86	\$296,921.58	\$3,452.58
14213	Buffalo	140	\$438,050.50	\$3,128.93
14214	Buffalo	85	\$277,242.64	\$3,261.68
14215	Buffalo	371	\$1,227,993.58	\$3,309.96
14216	Buffalo	54	\$155,145.06	\$2,873.06
14217	Buffalo	34	\$113,486.43	\$3,337.84
14218	Buffalo	67	\$192,499.37	\$2,873.12
14219	Buffalo	11	\$17,271.74	\$1,570.16
14220	Buffalo	53	\$173,851.00	\$3,280.21
14221	Buffalo	70	\$262,411.92	\$3,748.74
14222	Buffalo	18	\$55,321.77	\$3,073.43
14223	Buffalo	20	\$65,847.24	\$3,292.36
14224	Buffalo	33	\$103,835.83	\$3,146.54
14225	Buffalo	57	\$195,132.16	\$3,423.37
14226	Buffalo	24	\$62,233.04	\$2,593.04
14227	Buffalo	24	\$82,310.59	\$3,429.61
14228	Buffalo	4	\$15,072.98	\$3,768.25
14301	Niagara Falls	48	\$153,655.91	\$3,201.16
14303	Niagara Falls	23	\$71,006.36	\$3,087.23
14304	Niagara Falls	33	\$95,788.69	\$2,902.69
14305	Niagara Falls	55	\$181,514.70	\$3,300.27
14427	Castile	1	\$820.76	\$820.76
14469	Bloomfield	5	\$16,663.25	\$3,332.65
14471	Honeoye	2	\$7,942.39	\$3,971.20
14472	Honeoye Falls	3	\$13,900.53	\$4,633.51
14485	Lima	3	\$11,804.89	\$3,934.96
14525	Pavilion	1	\$3,790.12	\$3,790.12
14550	Silver Springs	2	\$12,137.21	\$6,068.61

National Fuel Gas Distribution Corporation
New York Division
Completed LIURP Projects by Zip Code
December 1, 2007 - December 31, 2011
Program Years 1 - 4

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14585	West Bloomfield	1	\$338.56	\$338.56
14591	Wyoming	1	\$5,212.06	\$5,212.06
14701	Jamestown	73	\$311,990.50	\$4,273.84
14707	Allentown	2	\$1,985.32	\$992.66
14708	Alma	1	\$4,119.14	\$4,119.14
14709	Angelica	3	\$6,446.93	\$2,148.98
14710	Ashville	6	\$20,826.09	\$3,471.02
14711	Belfast	8	\$26,783.92	\$3,347.99
14712	Bemus Point	2	\$3,865.20	\$1,932.60
14715	Bolivar	15	\$61,970.59	\$4,131.37
14716	Brocton	6	\$26,944.14	\$4,490.69
14717	Caneadea	1	\$4,460.81	\$4,460.81
14718	Cassadaga	5	\$23,345.20	\$4,669.04
14719	Cattaraugus	5	\$17,752.35	\$3,550.47
14724	Clymer	1	\$3,450.23	\$3,450.23
14727	Cuba	9	\$40,084.89	\$4,453.88
14728	Dewittville	1	\$5,428.00	\$5,428.00
14729	East Otto	2	\$7,597.96	\$3,798.98
14730	East Randolph	1	\$2,454.77	\$2,454.77
14731	Ellicottville	1	\$4,934.85	\$4,934.85
14733	Falconer	9	\$35,110.05	\$3,901.12
14737	Franklinville	12	\$44,474.86	\$3,706.24
14738	Frewsburg	2	\$12,456.41	\$6,228.21
14739	Friendship	9	\$37,861.12	\$4,206.79
14740	Gerry	1	\$2,147.67	\$2,147.67
14741	Great Valley	1	\$5,071.06	\$5,071.06
14744	Houghton	1	\$4,365.16	\$4,365.16
14747	Kennedy	5	\$19,746.48	\$3,949.30
14748	Kill Buck	1	\$4,816.33	\$4,816.33
14750	Lakewood	11	\$42,792.60	\$3,890.24
14752	Lily Dale	4	\$17,258.82	\$4,314.71
14755	Little Valley	2	\$7,192.65	\$3,596.33
14757	Mayville	3	\$7,942.28	\$2,647.43
14760	Olean	12	\$53,357.74	\$4,446.48

National Fuel Gas Distribution Corporation
New York Division
Completed LIURP Projects by Zip Code
December 1, 2007 - December 31, 2011
Program Years 1 - 4

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14767	Panama	4	\$15,631.62	\$3,907.91
14769	Portland	2	\$6,959.97	\$3,479.99
14770	Portville	3	\$18,403.51	\$6,134.50
14772	Randolph	7	\$12,271.24	\$1,753.03
14775	Ripley	11	\$54,466.05	\$4,951.46
14779	Salamanca	9	\$51,742.97	\$5,749.22
14781	Sherman	5	\$17,487.47	\$3,497.49
14784	Stockton	2	\$5,845.99	\$2,923.00
14787	Westfield	9	\$31,522.52	\$3,502.50
14802	Alfred	1	\$3,831.26	\$3,831.26
14803	Alfred Station	2	\$7,292.00	\$3,646.00
14804	Almond	1	\$4,203.50	\$4,203.50
14806	Andover	3	\$11,691.10	\$3,897.03
14807	Arkport	2	\$9,957.09	\$4,978.55
14813	Belmont	5	\$21,604.35	\$4,320.87
14823	Canisteo	12	\$37,242.76	\$3,103.56
14839	Greenwood	1	\$3,460.00	\$3,460.00
14843	Hornell	35	\$83,407.10	\$2,383.06
14877	Rexville	1	\$1,389.50	\$1,389.50
14880	Scio	3	\$12,154.38	\$4,051.46
14895	Wellsville	15	\$59,827.14	\$3,988.48
Total		3096	\$10,133,297.20	\$3,273.03

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air Furnace

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	109	\$31,850.00	\$292.20
14004	Alden	170	\$49,900.00	\$293.53
14005	Alexander	13	\$3,850.00	\$296.15
14006	Angola	140	\$41,000.00	\$292.86
14009	Arcade	13	\$3,650.00	\$280.77
14011	Attica	36	\$10,700.00	\$297.22
14020	Batavia	293	\$86,350.00	\$294.71
14025	Boston	54	\$15,800.00	\$292.59
14026	Bowmansville	22	\$6,400.00	\$290.91
14027	Brant	1	\$300.00	\$300.00
14030	Chaffee	7	\$2,050.00	\$292.86
14031	Clarence	278	\$81,850.00	\$294.42
14032	Clarence Center	136	\$39,650.00	\$291.54
14033	Colden	38	\$10,900.00	\$286.84
14034	Collins	14	\$4,150.00	\$296.43
14035	Collins Center	1	\$300.00	\$300.00
14036	Corfu	48	\$14,100.00	\$293.75
14037	Cowlesville	12	\$3,600.00	\$300.00
14038	Crittenden	2	\$600.00	\$300.00
14040	Darien Center	8	\$2,350.00	\$293.75
14042	Delevan	19	\$5,600.00	\$294.74
14043	Depew	759	\$223,200.00	\$294.07
14047	Derby	131	\$38,450.00	\$293.51
14048	Dunkirk	166	\$48,100.00	\$289.76
14051	East Amherst	728	\$214,300.00	\$294.37
14052	East Aurora	418	\$123,000.00	\$294.26
14054	East Bethany	9	\$2,700.00	\$300.00
14055	East Concord	10	\$2,950.00	\$295.00
14056	East Pembroke	4	\$1,200.00	\$300.00
14057	Eden	120	\$35,550.00	\$296.25
14058	Elba	11	\$3,300.00	\$300.00
14059	Elma	195	\$57,450.00	\$294.62
14061	Farnham	3	\$900.00	\$300.00
14062	Forestville	23	\$6,850.00	\$297.83
14063	Fredonia	133	\$39,200.00	\$294.74
14066	Gainesville	5	\$1,400.00	\$280.00
14068	Getzville	236	\$69,900.00	\$296.19

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air Furnace

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14069	Glenwood	29	\$8,550.00	\$294.83
14070	Gowanda	91	\$27,050.00	\$297.25
14072	Grand Island	447	\$131,000.00	\$293.06
14075	Hamburg	1,130	\$331,250.00	\$293.14
14080	Holland	34	\$9,950.00	\$292.65
14081	Irving	19	\$5,450.00	\$286.84
14082	Java Center	1	\$300.00	\$300.00
14083	Java Village	4	\$1,100.00	\$275.00
14085	Lake View	163	\$48,000.00	\$294.48
14086	Lancaster	782	\$228,450.00	\$292.14
14091	Lawtons	9	\$2,650.00	\$294.44
14092	Lewiston	281	\$82,350.00	\$293.06
14094	Lockport	7	\$2,100.00	\$300.00
14101	Machias	9	\$2,700.00	\$300.00
14102	Marilla	27	\$8,050.00	\$298.15
14111	North Collins	29	\$8,550.00	\$294.83
14112	North Evans	2	\$600.00	\$300.00
14113	North Java	8	\$2,400.00	\$300.00
14120	North Tonawanda	954	\$280,050.00	\$293.55
14125	Oakfield	34	\$10,150.00	\$298.53
14127	Orchard Park	939	\$275,800.00	\$293.72
14129	Perrysburg	14	\$4,050.00	\$289.29
14131	Ransomville	31	\$9,150.00	\$295.16
14132	Sanborn	95	\$28,150.00	\$296.32
14134	Sardinia	4	\$1,200.00	\$300.00
14135	Sheridan	5	\$1,500.00	\$300.00
14136	Silver Creek	82	\$24,400.00	\$297.56
14138	South Dayton	1	\$300.00	\$300.00
14139	South Wales	32	\$9,450.00	\$295.31
14140	Spring Brook	1	\$300.00	\$300.00
14141	Springville	82	\$24,350.00	\$296.95
14145	Strykersville	10	\$3,000.00	\$300.00
14150	Tonawanda	1,323	\$388,650.00	\$293.76
14167	Varysburg	4	\$1,200.00	\$300.00
14168	Versailles	1	\$300.00	\$300.00
14169	Wales Center	2	\$550.00	\$275.00
14170	West Falls	60	\$17,450.00	\$290.83

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air Furnace

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14171	West Valley	4	\$1,150.00	\$287.50
14172	Wilson	32	\$9,450.00	\$295.31
14173	Yorkshire	2	\$600.00	\$300.00
14174	Youngstown	77	\$22,750.00	\$295.45
14201	Buffalo	85	\$25,100.00	\$295.29
14202	Buffalo	25	\$7,450.00	\$298.00
14203	Buffalo	1	\$300.00	\$300.00
14204	Buffalo	34	\$10,050.00	\$295.59
14206	Buffalo	309	\$90,350.00	\$292.39
14207	Buffalo	198	\$58,050.00	\$293.18
14208	Buffalo	67	\$19,700.00	\$294.03
14209	Buffalo	53	\$15,650.00	\$295.28
14210	Buffalo	158	\$45,950.00	\$290.82
14211	Buffalo	134	\$39,050.00	\$291.42
14212	Buffalo	94	\$27,800.00	\$295.74
14213	Buffalo	202	\$59,650.00	\$295.30
14214	Buffalo	203	\$59,450.00	\$292.86
14215	Buffalo	324	\$94,500.00	\$291.67
14216	Buffalo	410	\$119,950.00	\$292.56
14217	Buffalo	684	\$200,850.00	\$293.64
14218	Buffalo	347	\$101,400.00	\$292.22
14219	Buffalo	272	\$79,100.00	\$290.81
14220	Buffalo	590	\$171,700.00	\$291.02
14221	Buffalo	1,455	\$428,650.00	\$294.60
14222	Buffalo	268	\$79,450.00	\$296.46
14223	Buffalo	756	\$220,900.00	\$292.20
14224	Buffalo	1,167	\$341,650.00	\$292.76
14225	Buffalo	921	\$270,550.00	\$293.76
14226	Buffalo	803	\$236,400.00	\$294.40
14227	Buffalo	678	\$198,600.00	\$292.92
14228	Buffalo	358	\$104,900.00	\$293.02
14301	Niagara Falls	216	\$63,400.00	\$293.52
14303	Niagara Falls	72	\$20,800.00	\$288.89
14304	Niagara Falls	730	\$213,350.00	\$292.26
14305	Niagara Falls	293	\$85,500.00	\$291.81
14424	Canandaigua	2	\$550.00	\$275.00
14427	Castile	14	\$4,150.00	\$296.43

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air Furnace

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14443	East Bloomfield	1	\$300.00	\$300.00
14469	Bloomfield	23	\$6,800.00	\$295.65
14471	Honeoye	8	\$2,350.00	\$293.75
14472	Honeoye Falls	40	\$11,800.00	\$295.00
14482	Le Roy	1	\$300.00	\$300.00
14485	Lima	20	\$6,000.00	\$300.00
14525	Pavilion	3	\$900.00	\$300.00
14550	Silver Springs	13	\$3,800.00	\$292.31
14585	West Bloomfield	3	\$850.00	\$283.33
14591	Wyoming	10	\$2,900.00	\$290.00
14701	Jamestown	489	\$143,500.00	\$293.46
14709	Angelica	8	\$2,400.00	\$300.00
14710	Ashville	29	\$8,600.00	\$296.55
14711	Belfast	5	\$1,500.00	\$300.00
14712	Bemus Point	44	\$12,950.00	\$294.32
14715	Bolivar	21	\$6,200.00	\$295.24
14716	Brocton	13	\$3,800.00	\$292.31
14718	Cassadaga	15	\$4,500.00	\$300.00
14719	Cattaraugus	17	\$4,850.00	\$285.29
14720	Celoron	3	\$850.00	\$283.33
14722	Chautauqua	21	\$6,150.00	\$292.86
14724	Clymer	17	\$5,000.00	\$294.12
14727	Cuba	25	\$7,300.00	\$292.00
14728	Dewittville	11	\$3,150.00	\$286.36
14729	East Otto	4	\$1,200.00	\$300.00
14730	East Randolph	2	\$600.00	\$300.00
14731	Ellicottville	33	\$9,700.00	\$293.94
14733	Falconer	44	\$12,950.00	\$294.32
14737	Franklinville	15	\$4,450.00	\$296.67
14738	Frewsburg	38	\$11,150.00	\$293.42
14739	Friendship	19	\$5,600.00	\$294.74
14740	Gerry	8	\$2,400.00	\$300.00
14741	Great Valley	17	\$5,050.00	\$297.06
14742	Greenhurst	5	\$1,500.00	\$300.00
14744	Houghton	7	\$2,050.00	\$292.86
14747	Kennedy	7	\$2,100.00	\$300.00
14748	Kill Buck	1	\$300.00	\$300.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air Furnace

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14750	Lakewood	90	\$26,350.00	\$292.78
14752	Lily Dale	4	\$1,150.00	\$287.50
14754	Little Genesee	5	\$1,500.00	\$300.00
14755	Little Valley	20	\$5,950.00	\$297.50
14756	Maple Springs	1	\$300.00	\$300.00
14757	Mayville	45	\$13,150.00	\$292.22
14760	Olean	60	\$17,850.00	\$297.50
14767	Panama	11	\$3,100.00	\$281.82
14769	Portland	5	\$1,450.00	\$290.00
14770	Portville	15	\$4,350.00	\$290.00
14772	Randolph	15	\$4,500.00	\$300.00
14775	Ripley	13	\$3,900.00	\$300.00
14779	Salamanca	57	\$16,700.00	\$292.98
14781	Sherman	3	\$900.00	\$300.00
14782	Sinclairville	13	\$3,800.00	\$292.31
14784	Stockton	7	\$2,100.00	\$300.00
14787	Westfield	39	\$11,550.00	\$296.15
14788	Westons Mills	3	\$850.00	\$283.33
14802	Alfred	4	\$1,150.00	\$287.50
14803	Alfred Station	7	\$2,050.00	\$292.86
14804	Almond	13	\$3,850.00	\$296.15
14806	Andover	6	\$1,800.00	\$300.00
14807	Arkport	18	\$5,250.00	\$291.67
14813	Belmont	6	\$1,800.00	\$300.00
14823	Canisteo	40	\$11,750.00	\$293.75
14839	Greenwood	3	\$850.00	\$283.33
14843	Hornell	161	\$47,500.00	\$295.03
14877	Rexville	1	\$250.00	\$250.00
14880	Scio	4	\$1,200.00	\$300.00
14895	Wellsville	77	\$22,800.00	\$296.10
14897	Whitesville	4	\$1,150.00	\$287.50
Total		24,939	\$7,319,400.00	\$293.49

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Hot Water Boiler

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	16	\$6,250.00	\$390.63
14004	Alden	25	\$9,800.00	\$392.00
14005	Alexander	2	\$800.00	\$400.00
14006	Angola	48	\$19,050.00	\$396.88
14009	Arcade	4	\$1,550.00	\$387.50
14011	Attica	4	\$1,600.00	\$400.00
14020	Batavia	29	\$11,350.00	\$391.38
14024	Bliss	2	\$800.00	\$400.00
14025	Boston	6	\$2,400.00	\$400.00
14027	Brant	1	\$400.00	\$400.00
14031	Clarence	31	\$12,300.00	\$396.77
14032	Clarence Center	18	\$6,900.00	\$383.33
14033	Colden	10	\$3,950.00	\$395.00
14034	Collins	2	\$800.00	\$400.00
14036	Corfu	13	\$5,100.00	\$392.31
14037	Cowlesville	4	\$1,600.00	\$400.00
14042	Delevan	7	\$2,750.00	\$392.86
14043	Depew	36	\$14,300.00	\$397.22
14047	Derby	15	\$5,950.00	\$396.67
14048	Dunkirk	44	\$17,300.00	\$393.18
14051	East Amherst	26	\$10,250.00	\$394.23
14052	East Aurora	99	\$39,000.00	\$393.94
14057	Eden	35	\$13,800.00	\$394.29
14059	Elma	45	\$17,750.00	\$394.44
14062	Forestville	5	\$2,000.00	\$400.00
14063	Fredonia	38	\$15,000.00	\$394.74
14066	Gainesville	2	\$800.00	\$400.00
14068	Getzville	4	\$1,600.00	\$400.00
14069	Glenwood	1	\$400.00	\$400.00
14070	Gowanda	15	\$5,850.00	\$390.00
14072	Grand Island	58	\$22,750.00	\$392.24
14075	Hamburg	114	\$44,750.00	\$392.54
14080	Holland	19	\$7,500.00	\$394.74
14081	Irving	7	\$2,800.00	\$400.00
14082	Java Center	3	\$1,200.00	\$400.00
14085	Lake View	20	\$7,850.00	\$392.50
14086	Lancaster	51	\$20,300.00	\$398.04

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Hot Water Boiler

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14091	Lawtons	2	\$800.00	\$400.00
14092	Lewiston	31	\$12,150.00	\$391.94
14101	Machias	1	\$350.00	\$350.00
14102	Marilla	7	\$2,800.00	\$400.00
14111	North Collins	8	\$3,100.00	\$387.50
14113	North Java	1	\$400.00	\$400.00
14120	North Tonawanda	97	\$38,350.00	\$395.36
14125	Oakfield	5	\$1,950.00	\$390.00
14127	Orchard Park	86	\$33,850.00	\$393.60
14129	Perrysburg	6	\$2,400.00	\$400.00
14131	Ransomville	9	\$3,550.00	\$394.44
14132	Sanborn	13	\$5,150.00	\$396.15
14134	Sardinia	5	\$2,000.00	\$400.00
14135	Sheridan	1	\$400.00	\$400.00
14136	Silver Creek	24	\$9,500.00	\$395.83
14139	South Wales	1	\$400.00	\$400.00
14141	Springville	16	\$6,300.00	\$393.75
14145	Strykersville	13	\$5,050.00	\$388.46
14150	Tonawanda	54	\$21,150.00	\$391.67
14166	Van Buren Point	1	\$400.00	\$400.00
14167	Varysburg	2	\$800.00	\$400.00
14170	West Falls	15	\$6,000.00	\$400.00
14171	West Valley	4	\$1,550.00	\$387.50
14172	Wilson	3	\$1,200.00	\$400.00
14174	Youngstown	13	\$5,150.00	\$396.15
14201	Buffalo	10	\$3,900.00	\$390.00
14202	Buffalo	3	\$1,200.00	\$400.00
14204	Buffalo	1	\$400.00	\$400.00
14206	Buffalo	19	\$7,400.00	\$389.47
14207	Buffalo	12	\$4,700.00	\$391.67
14209	Buffalo	17	\$6,750.00	\$397.06
14210	Buffalo	12	\$4,600.00	\$383.33
14211	Buffalo	11	\$4,350.00	\$395.45
14212	Buffalo	14	\$5,500.00	\$392.86
14213	Buffalo	24	\$9,500.00	\$395.83
14214	Buffalo	48	\$18,800.00	\$391.67
14215	Buffalo	9	\$3,550.00	\$394.44

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Hot Water Boiler

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14216	Buffalo	52	\$20,550.00	\$395.19
14217	Buffalo	31	\$12,100.00	\$390.32
14218	Buffalo	17	\$6,700.00	\$394.12
14219	Buffalo	12	\$4,700.00	\$391.67
14220	Buffalo	18	\$7,100.00	\$394.44
14221	Buffalo	122	\$48,100.00	\$394.26
14222	Buffalo	49	\$19,400.00	\$395.92
14223	Buffalo	29	\$11,200.00	\$386.21
14224	Buffalo	77	\$30,200.00	\$392.21
14225	Buffalo	33	\$12,950.00	\$392.42
14226	Buffalo	58	\$22,750.00	\$392.24
14227	Buffalo	17	\$6,600.00	\$388.24
14228	Buffalo	30	\$11,850.00	\$395.00
14301	Niagara Falls	6	\$2,350.00	\$391.67
14303	Niagara Falls	1	\$350.00	\$350.00
14304	Niagara Falls	32	\$12,400.00	\$387.50
14305	Niagara Falls	11	\$4,300.00	\$390.91
14427	Castile	3	\$1,200.00	\$400.00
14469	Bloomfield	5	\$1,900.00	\$380.00
14471	Honeoye	5	\$1,950.00	\$390.00
14472	Honeoye Falls	2	\$800.00	\$400.00
14482	Le Roy	1	\$400.00	\$400.00
14485	Lima	1	\$400.00	\$400.00
14550	Silver Springs	4	\$1,550.00	\$387.50
14585	West Bloomfield	1	\$400.00	\$400.00
14591	Wyoming	5	\$1,950.00	\$390.00
14701	Jamestown	73	\$28,750.00	\$393.84
14709	Angelica	2	\$800.00	\$400.00
14710	Ashville	7	\$2,750.00	\$392.86
14711	Belfast	1	\$350.00	\$350.00
14712	Bemus Point	15	\$6,000.00	\$400.00
14715	Bolivar	6	\$2,300.00	\$383.33
14716	Brocton	1	\$350.00	\$350.00
14718	Cassadaga	4	\$1,600.00	\$400.00
14719	Cattaraugus	5	\$2,000.00	\$400.00
14722	Chautauqua	5	\$1,950.00	\$390.00
14724	Clymer	3	\$1,200.00	\$400.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Hot Water Boiler

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14727	Cuba	20	\$7,900.00	\$395.00
14728	Dewittville	2	\$800.00	\$400.00
14729	East Otto	1	\$400.00	\$400.00
14731	Ellicottville	8	\$3,100.00	\$387.50
14733	Falconer	5	\$2,000.00	\$400.00
14738	Frewsburg	7	\$2,750.00	\$392.86
14739	Friendship	3	\$1,200.00	\$400.00
14740	Gerry	2	\$800.00	\$400.00
14741	Great Valley	2	\$800.00	\$400.00
14742	Greenhurst	1	\$350.00	\$350.00
14744	Houghton	5	\$1,950.00	\$390.00
14747	Kennedy	2	\$750.00	\$375.00
14748	Kill Buck	2	\$750.00	\$375.00
14750	Lakewood	22	\$8,650.00	\$393.18
14754	Little Genesee	2	\$800.00	\$400.00
14755	Little Valley	5	\$1,950.00	\$390.00
14757	Mayville	11	\$4,300.00	\$390.91
14760	Olean	18	\$7,050.00	\$391.67
14767	Panama	1	\$400.00	\$400.00
14769	Portland	1	\$400.00	\$400.00
14770	Portville	8	\$3,150.00	\$393.75
14772	Randolph	3	\$1,150.00	\$383.33
14774	Richburg	1	\$400.00	\$400.00
14779	Salamanca	11	\$4,250.00	\$386.36
14781	Sherman	1	\$400.00	\$400.00
14782	Sinclairville	1	\$350.00	\$350.00
14786	West Clarksville	1	\$400.00	\$400.00
14787	Westfield	5	\$2,000.00	\$400.00
14802	Alfred	9	\$3,550.00	\$394.44
14803	Alfred Station	7	\$2,750.00	\$392.86
14804	Almond	9	\$3,450.00	\$383.33
14806	Andover	9	\$3,550.00	\$394.44
14807	Arkport	6	\$2,400.00	\$400.00
14813	Belmont	1	\$400.00	\$400.00
14823	Canisteo	17	\$6,550.00	\$385.29
14839	Greenwood	4	\$1,550.00	\$387.50
14843	Hornell	64	\$25,000.00	\$390.63

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Hot Water Boiler

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14880	Scio	5	\$1,950.00	\$390.00
14895	Wellsville	45	\$17,650.00	\$392.22
Total		2,528	\$994,150.00	\$393.26

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Steam Boiler

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14031	Clarence	1	\$200.00	\$200.00
14043	Depew	1	\$200.00	\$200.00
14048	Dunkirk	3	\$600.00	\$200.00
14052	East Aurora	1	\$200.00	\$200.00
14063	Fredonia	1	\$200.00	\$200.00
14072	Grand Island	1	\$200.00	\$200.00
14075	Hamburg	2	\$400.00	\$200.00
14086	Lancaster	1	\$200.00	\$200.00
14092	Lewiston	1	\$200.00	\$200.00
14136	Silver Creek	1	\$200.00	\$200.00
14150	Tonawanda	1	\$200.00	\$200.00
14201	Buffalo	1	\$200.00	\$200.00
14208	Buffalo	1	\$200.00	\$200.00
14209	Buffalo	6	\$1,200.00	\$200.00
14210	Buffalo	1	\$200.00	\$200.00
14211	Buffalo	2	\$400.00	\$200.00
14214	Buffalo	13	\$2,600.00	\$200.00
14215	Buffalo	1	\$200.00	\$200.00
14216	Buffalo	23	\$4,600.00	\$200.00
14217	Buffalo	13	\$2,600.00	\$200.00
14220	Buffalo	3	\$600.00	\$200.00
14222	Buffalo	4	\$800.00	\$200.00
14223	Buffalo	3	\$600.00	\$200.00
14226	Buffalo	5	\$1,000.00	\$200.00
14301	Niagara Falls	1	\$200.00	\$200.00
14303	Niagara Falls	2	\$400.00	\$200.00
14469	Bloomfield	1	\$200.00	\$200.00
14750	Lakewood	1	\$200.00	\$200.00
14787	Westfield	1	\$200.00	\$200.00
14895	Wellsville	1	\$200.00	\$200.00
Total		97	\$19,400.00	\$200.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Thermostats

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	126	\$3,149.96	\$25.00
14004	Alden	222	\$5,541.97	\$24.96
14005	Alexander	17	\$425.00	\$25.00
14006	Angola	237	\$5,915.92	\$24.96
14009	Arcade	14	\$350.00	\$25.00
14011	Attica	40	\$1,000.00	\$25.00
14020	Batavia	313	\$7,819.95	\$24.98
14024	Bliss	1	\$25.00	\$25.00
14025	Boston	71	\$1,775.00	\$25.00
14026	Bowmansville	25	\$625.00	\$25.00
14027	Brant	3	\$75.00	\$25.00
14030	Chaffee	9	\$225.00	\$25.00
14031	Clarence	300	\$7,494.92	\$24.98
14032	Clarence Center	152	\$3,794.94	\$24.97
14033	Colden	71	\$1,764.94	\$24.86
14034	Collins	23	\$575.00	\$25.00
14035	Collins Center	2	\$50.00	\$25.00
14036	Corfu	50	\$1,250.00	\$25.00
14037	Cowlesville	18	\$450.00	\$25.00
14038	Crittenden	1	\$25.00	\$25.00
14040	Darien Center	10	\$250.00	\$25.00
14042	Delevan	22	\$550.00	\$25.00
14043	Depew	910	\$22,736.76	\$24.99
14047	Derby	170	\$4,248.00	\$24.99
14048	Dunkirk	151	\$3,770.91	\$24.97
14051	East Amherst	815	\$20,354.88	\$24.98
14052	East Aurora	643	\$16,073.74	\$25.00
14054	East Bethany	9	\$224.92	\$24.99
14055	East Concord	11	\$275.00	\$25.00
14056	East Pembroke	6	\$150.00	\$25.00
14057	Eden	209	\$5,199.15	\$24.88
14058	Elba	15	\$375.00	\$25.00
14059	Elma	354	\$8,833.98	\$24.95
14061	Farnham	3	\$75.00	\$25.00
14062	Forestville	13	\$321.00	\$24.69
14063	Fredonia	152	\$3,789.00	\$24.93
14066	Gainesville	4	\$100.00	\$25.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Thermostats

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14068	Getzville	277	\$6,924.97	\$25.00
14069	Glenwood	28	\$700.00	\$25.00
14070	Gowanda	84	\$2,098.09	\$24.98
14072	Grand Island	578	\$14,430.28	\$24.97
14075	Hamburg	1,493	\$37,288.19	\$24.98
14080	Holland	49	\$1,224.92	\$25.00
14081	Irving	21	\$525.00	\$25.00
14082	Java Center	4	\$100.00	\$25.00
14083	Java Village	3	\$75.00	\$25.00
14085	Lake View	211	\$5,275.00	\$25.00
14086	Lancaster	974	\$24,323.16	\$24.97
14091	Lawtons	18	\$450.00	\$25.00
14092	Lewiston	371	\$9,234.97	\$24.89
14094	Lockport	7	\$175.00	\$25.00
14101	Machias	9	\$225.00	\$25.00
14102	Marilla	33	\$825.00	\$25.00
14110	North Boston	1	\$25.00	\$25.00
14111	North Collins	39	\$974.99	\$25.00
14112	North Evans	1	\$25.00	\$25.00
14113	North Java	5	\$125.00	\$25.00
14120	North Tonawanda	1,094	\$27,336.49	\$24.99
14125	Oakfield	45	\$1,125.00	\$25.00
14127	Orchard Park	1,339	\$33,466.53	\$24.99
14129	Perrysburg	13	\$325.00	\$25.00
14131	Ransomville	41	\$1,025.00	\$25.00
14132	Sanborn	155	\$3,874.98	\$25.00
14134	Sardinia	6	\$150.00	\$25.00
14135	Sheridan	3	\$75.00	\$25.00
14136	Silver Creek	78	\$1,949.97	\$25.00
14139	South Wales	33	\$825.00	\$25.00
14140	Spring Brook	1	\$25.00	\$25.00
14141	Springville	112	\$2,800.00	\$25.00
14145	Strykersville	14	\$350.00	\$25.00
14150	Tonawanda	1,444	\$36,071.73	\$24.98
14167	Varysburg	5	\$125.00	\$25.00
14169	Wales Center	1	\$25.00	\$25.00
14170	West Falls	95	\$2,375.00	\$25.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
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Thermostats

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14171	West Valley	9	\$225.00	\$25.00
14172	Wilson	26	\$650.00	\$25.00
14173	Yorkshire	1	\$25.00	\$25.00
14174	Youngstown	111	\$2,775.00	\$25.00
14201	Buffalo	94	\$2,346.96	\$24.97
14202	Buffalo	36	\$900.00	\$25.00
14203	Buffalo	2	\$50.00	\$25.00
14204	Buffalo	33	\$825.00	\$25.00
14206	Buffalo	359	\$8,973.97	\$25.00
14207	Buffalo	189	\$4,724.00	\$24.99
14208	Buffalo	71	\$1,775.00	\$25.00
14209	Buffalo	84	\$2,100.00	\$25.00
14210	Buffalo	181	\$4,521.90	\$24.98
14211	Buffalo	121	\$3,024.98	\$25.00
14212	Buffalo	113	\$2,824.93	\$25.00
14213	Buffalo	208	\$5,200.00	\$25.00
14214	Buffalo	275	\$6,862.44	\$24.95
14215	Buffalo	324	\$8,097.98	\$24.99
14216	Buffalo	524	\$13,088.80	\$24.98
14217	Buffalo	716	\$17,894.51	\$24.99
14218	Buffalo	393	\$9,815.92	\$24.98
14219	Buffalo	315	\$7,874.97	\$25.00
14220	Buffalo	579	\$14,466.90	\$24.99
14221	Buffalo	1,942	\$48,532.63	\$24.99
14222	Buffalo	299	\$7,469.99	\$24.98
14223	Buffalo	886	\$22,129.58	\$24.98
14224	Buffalo	1,459	\$36,460.83	\$24.99
14225	Buffalo	963	\$24,068.20	\$24.99
14226	Buffalo	987	\$24,654.91	\$24.98
14227	Buffalo	703	\$17,568.90	\$24.99
14228	Buffalo	475	\$11,857.88	\$24.96
14301	Niagara Falls	135	\$3,369.95	\$24.96
14303	Niagara Falls	56	\$1,394.95	\$24.91
14304	Niagara Falls	688	\$17,197.89	\$25.00
14305	Niagara Falls	245	\$6,124.90	\$25.00
14424	Canandaigua	1	\$25.00	\$25.00
14427	Castile	7	\$175.00	\$25.00

National Fuel Gas Distribution Corporation
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Thermostats

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14469	Bloomfield	26	\$650.00	\$25.00
14471	Honeoye	5	\$125.00	\$25.00
14472	Honeoye Falls	49	\$1,225.00	\$25.00
14482	Le Roy	3	\$75.00	\$25.00
14485	Lima	25	\$624.00	\$24.96
14525	Pavilion	2	\$50.00	\$25.00
14550	Silver Springs	8	\$200.00	\$25.00
14585	West Bloomfield	4	\$100.00	\$25.00
14591	Wyoming	4	\$100.00	\$25.00
14701	Jamestown	424	\$10,573.28	\$24.94
14708	Alma	1	\$25.00	\$25.00
14709	Angelica	6	\$150.00	\$25.00
14710	Ashville	26	\$648.00	\$24.92
14711	Belfast	4	\$100.00	\$25.00
14712	Bemus Point	47	\$1,173.96	\$24.98
14715	Bolivar	15	\$374.92	\$24.99
14716	Brocton	13	\$325.00	\$25.00
14718	Cassadaga	8	\$200.00	\$25.00
14719	Cattaraugus	14	\$338.00	\$24.14
14720	Celoron	1	\$25.00	\$25.00
14722	Chautauqua	13	\$325.00	\$25.00
14724	Clymer	12	\$300.00	\$25.00
14727	Cuba	30	\$750.00	\$25.00
14728	Dewittville	7	\$175.00	\$25.00
14729	East Otto	4	\$100.00	\$25.00
14730	East Randolph	1	\$25.00	\$25.00
14731	Ellicottville	19	\$475.00	\$25.00
14733	Falconer	46	\$1,149.98	\$25.00
14737	Franklinville	13	\$319.00	\$24.54
14738	Frewsburg	31	\$774.85	\$25.00
14739	Friendship	3	\$75.00	\$25.00
14740	Gerry	12	\$300.00	\$25.00
14741	Great Valley	5	\$125.00	\$25.00
14742	Greenhurst	1	\$25.00	\$25.00
14744	Houghton	23	\$575.00	\$25.00
14747	Kennedy	4	\$100.00	\$25.00
14748	Kill Buck	1	\$25.00	\$25.00

National Fuel Gas Distribution Corporation
New York Division
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Thermostats

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14750	Lakewood	101	\$2,524.98	\$25.00
14752	Lily Dale	2	\$50.00	\$25.00
14754	Little Genesee	5	\$125.00	\$25.00
14755	Little Valley	8	\$200.00	\$25.00
14756	Maple Springs	1	\$25.00	\$25.00
14757	Mayville	38	\$950.00	\$25.00
14760	Olean	56	\$1,397.00	\$24.95
14766	Otto	2	\$50.00	\$25.00
14767	Panama	6	\$150.00	\$25.00
14769	Portland	6	\$150.00	\$25.00
14770	Portville	24	\$600.00	\$25.00
14772	Randolph	13	\$325.00	\$25.00
14774	Richburg	1	\$25.00	\$25.00
14775	Ripley	3	\$75.00	\$25.00
14779	Salamanca	37	\$925.00	\$25.00
14781	Sherman	5	\$125.00	\$25.00
14782	Sinclairville	5	\$125.00	\$25.00
14784	Stockton	2	\$50.00	\$25.00
14786	West Clarksville	1	\$25.00	\$25.00
14787	Westfield	22	\$544.92	\$24.77
14802	Alfred	12	\$299.97	\$25.00
14803	Alfred Station	11	\$275.00	\$25.00
14804	Almond	16	\$400.00	\$25.00
14806	Andover	10	\$250.00	\$25.00
14807	Arkport	17	\$422.00	\$24.82
14813	Belmont	13	\$323.00	\$24.85
14823	Canisteo	65	\$1,625.00	\$25.00
14839	Greenwood	4	\$100.00	\$25.00
14843	Hornell	181	\$4,513.00	\$24.93
14880	Scio	7	\$175.00	\$25.00
14895	Wellsville	126	\$3,146.00	\$24.97
14897	Whitesville	4	\$100.00	\$25.00
Total		29,201	\$729,454.94	\$24.98

National Fuel Gas Distribution Corporation
New York Division
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Storage Tank Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	15	\$2,250.00	\$150.00
14004	Alden	36	\$5,400.00	\$150.00
14005	Alexander	5	\$750.00	\$150.00
14006	Angola	16	\$2,400.00	\$150.00
14011	Attica	7	\$1,050.00	\$150.00
14020	Batavia	42	\$6,300.00	\$150.00
14024	Bliss	1	\$150.00	\$150.00
14025	Boston	14	\$2,100.00	\$150.00
14026	Bowmansville	3	\$450.00	\$150.00
14030	Chaffee	1	\$150.00	\$150.00
14031	Clarence	40	\$6,000.00	\$150.00
14032	Clarence Center	28	\$4,200.00	\$150.00
14033	Colden	10	\$1,500.00	\$150.00
14034	Collins	6	\$900.00	\$150.00
14035	Collins Center	2	\$300.00	\$150.00
14036	Corfu	3	\$450.00	\$150.00
14037	Cowlesville	1	\$150.00	\$150.00
14040	Darien Center	2	\$300.00	\$150.00
14043	Depew	85	\$12,750.00	\$150.00
14047	Derby	14	\$2,100.00	\$150.00
14048	Dunkirk	18	\$2,700.00	\$150.00
14051	East Amherst	121	\$18,150.00	\$150.00
14052	East Aurora	86	\$12,900.00	\$150.00
14055	East Concord	1	\$150.00	\$150.00
14057	Eden	29	\$4,350.00	\$150.00
14058	Elba	2	\$300.00	\$150.00
14059	Elma	37	\$5,550.00	\$150.00
14062	Forestville	6	\$900.00	\$150.00
14063	Fredonia	33	\$4,950.00	\$150.00
14068	Getzville	30	\$4,500.00	\$150.00
14069	Glenwood	6	\$900.00	\$150.00
14070	Gowanda	28	\$4,200.00	\$150.00
14072	Grand Island	63	\$9,450.00	\$150.00
14075	Hamburg	217	\$32,550.00	\$150.00
14080	Holland	9	\$1,350.00	\$150.00
14081	Irving	5	\$750.00	\$150.00
14083	Java Village	1	\$150.00	\$150.00

National Fuel Gas Distribution Corporation
New York Division
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December 1, 2007 - December 31, 2011
Storage Tank Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14085	Lake View	22	\$3,300.00	\$150.00
14086	Lancaster	116	\$17,400.00	\$150.00
14091	Lawtons	5	\$750.00	\$150.00
14092	Lewiston	19	\$2,850.00	\$150.00
14101	Machias	5	\$750.00	\$150.00
14102	Marilla	4	\$600.00	\$150.00
14111	North Collins	5	\$750.00	\$150.00
14113	North Java	2	\$300.00	\$150.00
14120	North Tonawanda	142	\$21,300.00	\$150.00
14125	Oakfield	1	\$150.00	\$150.00
14127	Orchard Park	182	\$27,300.00	\$150.00
14129	Perrysburg	1	\$150.00	\$150.00
14131	Ransomville	5	\$750.00	\$150.00
14132	Sanborn	11	\$1,650.00	\$150.00
14136	Silver Creek	15	\$2,250.00	\$150.00
14139	South Wales	4	\$600.00	\$150.00
14141	Springville	17	\$2,550.00	\$150.00
14150	Tonawanda	181	\$27,150.00	\$150.00
14170	West Falls	6	\$900.00	\$150.00
14171	West Valley	1	\$150.00	\$150.00
14172	Wilson	1	\$150.00	\$150.00
14174	Youngstown	7	\$1,050.00	\$150.00
14201	Buffalo	15	\$2,250.00	\$150.00
14202	Buffalo	2	\$300.00	\$150.00
14204	Buffalo	2	\$300.00	\$150.00
14206	Buffalo	22	\$3,300.00	\$150.00
14207	Buffalo	13	\$1,950.00	\$150.00
14208	Buffalo	2	\$300.00	\$150.00
14209	Buffalo	9	\$1,350.00	\$150.00
14210	Buffalo	18	\$2,700.00	\$150.00
14211	Buffalo	11	\$1,650.00	\$150.00
14212	Buffalo	18	\$2,700.00	\$150.00
14213	Buffalo	15	\$2,250.00	\$150.00
14214	Buffalo	32	\$4,800.00	\$150.00
14215	Buffalo	33	\$4,950.00	\$150.00
14216	Buffalo	45	\$6,750.00	\$150.00
14217	Buffalo	83	\$12,450.00	\$150.00

National Fuel Gas Distribution Corporation
New York Division
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Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14218	Buffalo	42	\$6,300.00	\$150.00
14219	Buffalo	35	\$5,250.00	\$150.00
14220	Buffalo	39	\$5,850.00	\$150.00
14221	Buffalo	264	\$39,600.00	\$150.00
14222	Buffalo	29	\$4,350.00	\$150.00
14223	Buffalo	87	\$13,050.00	\$150.00
14224	Buffalo	169	\$25,350.00	\$150.00
14225	Buffalo	90	\$13,500.00	\$150.00
14226	Buffalo	102	\$15,300.00	\$150.00
14227	Buffalo	65	\$9,750.00	\$150.00
14228	Buffalo	69	\$10,350.00	\$150.00
14301	Niagara Falls	5	\$750.00	\$150.00
14303	Niagara Falls	2	\$300.00	\$150.00
14304	Niagara Falls	42	\$6,300.00	\$150.00
14305	Niagara Falls	10	\$1,500.00	\$150.00
14469	Bloomfield	4	\$600.00	\$150.00
14472	Honeoye Falls	4	\$600.00	\$150.00
14485	Lima	5	\$750.00	\$150.00
14550	Silver Springs	1	\$150.00	\$150.00
14591	Wyoming	1	\$150.00	\$150.00
14701	Jamestown	38	\$5,700.00	\$150.00
14710	Ashville	6	\$900.00	\$150.00
14712	Bemus Point	5	\$750.00	\$150.00
14718	Cassadaga	3	\$450.00	\$150.00
14719	Cattaraugus	2	\$300.00	\$150.00
14722	Chautauqua	1	\$150.00	\$150.00
14724	Clymer	2	\$300.00	\$150.00
14727	Cuba	2	\$300.00	\$150.00
14728	Dewittville	3	\$450.00	\$150.00
14731	Ellicottville	3	\$450.00	\$150.00
14733	Falconer	4	\$600.00	\$150.00
14737	Franklinville	1	\$150.00	\$150.00
14738	Frewsburg	4	\$600.00	\$150.00
14740	Gerry	1	\$150.00	\$150.00
14747	Kennedy	1	\$150.00	\$150.00
14750	Lakewood	13	\$1,950.00	\$150.00
14752	Lily Dale	1	\$150.00	\$150.00

National Fuel Gas Distribution Corporation
New York Division
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December 1, 2007 - December 31, 2011
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Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14757	Mayville	3	\$450.00	\$150.00
14760	Olean	6	\$900.00	\$150.00
14767	Panama	2	\$300.00	\$150.00
14769	Portland	3	\$450.00	\$150.00
14770	Portville	1	\$150.00	\$150.00
14772	Randolph	1	\$150.00	\$150.00
14775	Ripley	1	\$150.00	\$150.00
14779	Salamanca	1	\$150.00	\$150.00
14781	Sherman	1	\$150.00	\$150.00
14787	Westfield	2	\$300.00	\$150.00
14803	Alfred Station	1	\$150.00	\$150.00
14804	Almond	2	\$300.00	\$150.00
14807	Arkport	2	\$300.00	\$150.00
14813	Belmont	2	\$300.00	\$150.00
14823	Canisteo	2	\$300.00	\$150.00
14843	Hornell	14	\$2,100.00	\$150.00
14880	Scio	1	\$150.00	\$150.00
14895	Wellsville	3	\$450.00	\$150.00
Total		3,298	\$494,700.00	\$150.00

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New York Division
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Tankless Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	12	\$4,200.00	\$350.00
14004	Alden	34	\$11,900.00	\$350.00
14005	Alexander	4	\$1,400.00	\$350.00
14006	Angola	30	\$10,500.00	\$350.00
14009	Arcade	3	\$1,050.00	\$350.00
14011	Attica	3	\$1,050.00	\$350.00
14020	Batavia	26	\$9,100.00	\$350.00
14025	Boston	4	\$1,400.00	\$350.00
14026	Bowmansville	2	\$700.00	\$350.00
14031	Clarence	31	\$10,850.00	\$350.00
14032	Clarence Center	14	\$4,900.00	\$350.00
14033	Colden	7	\$2,450.00	\$350.00
14036	Corfu	4	\$1,400.00	\$350.00
14037	Cowlesville	2	\$700.00	\$350.00
14038	Crittenden	2	\$700.00	\$350.00
14040	Darien Center	1	\$350.00	\$350.00
14042	Delevan	3	\$1,050.00	\$350.00
14043	Depew	45	\$15,750.00	\$350.00
14047	Derby	10	\$3,500.00	\$350.00
14048	Dunkirk	15	\$5,250.00	\$350.00
14051	East Amherst	28	\$9,800.00	\$350.00
14052	East Aurora	34	\$11,900.00	\$350.00
14055	East Concord	1	\$350.00	\$350.00
14057	Eden	19	\$6,650.00	\$350.00
14058	Elba	2	\$700.00	\$350.00
14059	Elma	34	\$11,900.00	\$350.00
14061	Farnham	1	\$350.00	\$350.00
14062	Forestville	2	\$700.00	\$350.00
14063	Fredonia	10	\$3,500.00	\$350.00
14068	Getzville	11	\$3,850.00	\$350.00
14069	Glenwood	1	\$350.00	\$350.00
14070	Gowanda	7	\$2,450.00	\$350.00
14072	Grand Island	47	\$16,450.00	\$350.00
14075	Hamburg	89	\$31,150.00	\$350.00
14080	Holland	2	\$700.00	\$350.00
14081	Irving	12	\$4,200.00	\$350.00
14083	Java Village	1	\$350.00	\$350.00

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New York Division
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Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14085	Lake View	22	\$7,700.00	\$350.00
14086	Lancaster	61	\$21,350.00	\$350.00
14092	Lewiston	30	\$10,500.00	\$350.00
14094	Lockport	3	\$1,050.00	\$350.00
14102	Marilla	3	\$1,050.00	\$350.00
14111	North Collins	4	\$1,400.00	\$350.00
14113	North Java	1	\$350.00	\$350.00
14120	North Tonawanda	69	\$24,150.00	\$350.00
14125	Oakfield	1	\$350.00	\$350.00
14127	Orchard Park	77	\$26,950.00	\$350.00
14129	Perrysburg	1	\$350.00	\$350.00
14131	Ransomville	7	\$2,450.00	\$350.00
14132	Sanborn	10	\$3,500.00	\$350.00
14135	Sheridan	1	\$350.00	\$350.00
14136	Silver Creek	9	\$3,150.00	\$350.00
14139	South Wales	1	\$350.00	\$350.00
14141	Springville	3	\$1,050.00	\$350.00
14150	Tonawanda	70	\$24,500.00	\$350.00
14170	West Falls	7	\$2,450.00	\$350.00
14172	Wilson	7	\$2,450.00	\$350.00
14174	Youngstown	17	\$5,950.00	\$350.00
14201	Buffalo	7	\$2,450.00	\$350.00
14202	Buffalo	11	\$3,850.00	\$350.00
14204	Buffalo	2	\$700.00	\$350.00
14206	Buffalo	12	\$4,200.00	\$350.00
14207	Buffalo	7	\$2,450.00	\$350.00
14209	Buffalo	7	\$2,450.00	\$350.00
14210	Buffalo	11	\$3,850.00	\$350.00
14211	Buffalo	5	\$1,750.00	\$350.00
14212	Buffalo	1	\$350.00	\$350.00
14213	Buffalo	8	\$2,800.00	\$350.00
14214	Buffalo	15	\$5,250.00	\$350.00
14215	Buffalo	7	\$2,450.00	\$350.00
14216	Buffalo	24	\$8,400.00	\$350.00
14217	Buffalo	37	\$12,950.00	\$350.00
14218	Buffalo	21	\$7,350.00	\$350.00
14219	Buffalo	15	\$5,250.00	\$350.00

National Fuel Gas Distribution Corporation
New York Division
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December 1, 2007 - December 31, 2011
Tankless Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14220	Buffalo	27	\$9,450.00	\$350.00
14221	Buffalo	79	\$27,650.00	\$350.00
14222	Buffalo	11	\$3,850.00	\$350.00
14223	Buffalo	36	\$12,600.00	\$350.00
14224	Buffalo	59	\$20,650.00	\$350.00
14225	Buffalo	27	\$9,450.00	\$350.00
14226	Buffalo	37	\$12,950.00	\$350.00
14227	Buffalo	27	\$9,450.00	\$350.00
14228	Buffalo	20	\$7,000.00	\$350.00
14301	Niagara Falls	5	\$1,750.00	\$350.00
14304	Niagara Falls	42	\$14,700.00	\$350.00
14305	Niagara Falls	15	\$5,250.00	\$350.00
14427	Castile	2	\$700.00	\$350.00
14469	Bloomfield	2	\$700.00	\$350.00
14471	Honeoye	1	\$350.00	\$350.00
14472	Honeoye Falls	7	\$2,450.00	\$350.00
14485	Lima	2	\$700.00	\$350.00
14487	Livonia	1	\$350.00	\$350.00
14591	Wyoming	1	\$350.00	\$350.00
14701	Jamestown	44	\$15,400.00	\$350.00
14710	Ashville	5	\$1,750.00	\$350.00
14712	Bemus Point	8	\$2,800.00	\$350.00
14715	Bolivar	1	\$350.00	\$350.00
14718	Cassadaga	2	\$700.00	\$350.00
14719	Cattaraugus	3	\$1,050.00	\$350.00
14722	Chautauqua	3	\$1,050.00	\$350.00
14724	Clymer	1	\$350.00	\$350.00
14727	Cuba	3	\$1,050.00	\$350.00
14728	Dewittville	3	\$1,050.00	\$350.00
14731	Ellicottville	6	\$2,100.00	\$350.00
14733	Falconer	4	\$1,400.00	\$350.00
14737	Franklinville	1	\$350.00	\$350.00
14738	Frewsburg	1	\$350.00	\$350.00
14741	Great Valley	2	\$700.00	\$350.00
14742	Greenhurst	1	\$350.00	\$350.00
14747	Kennedy	3	\$1,050.00	\$350.00
14750	Lakewood	16	\$5,600.00	\$350.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Tankless Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14756	Maple Springs	1	\$350.00	\$350.00
14757	Mayville	8	\$2,800.00	\$350.00
14760	Olean	1	\$350.00	\$350.00
14767	Panama	2	\$700.00	\$350.00
14769	Portland	1	\$350.00	\$350.00
14770	Portville	1	\$350.00	\$350.00
14772	Randolph	1	\$350.00	\$350.00
14775	Ripley	3	\$1,050.00	\$350.00
14779	Salamanca	7	\$2,450.00	\$350.00
14781	Sherman	2	\$700.00	\$350.00
14782	Sinclairville	1	\$350.00	\$350.00
14787	Westfield	2	\$700.00	\$350.00
14802	Alfred	2	\$700.00	\$350.00
14803	Alfred Station	2	\$700.00	\$350.00
14804	Almond	1	\$350.00	\$350.00
14806	Andover	2	\$700.00	\$350.00
14807	Arkport	1	\$350.00	\$350.00
14823	Canisteo	6	\$2,100.00	\$350.00
14843	Hornell	28	\$9,800.00	\$350.00
14880	Scio	2	\$700.00	\$350.00
14895	Wellsville	4	\$1,400.00	\$350.00
Total		1,733	\$606,550.00	\$350.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air w/ECM

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	26	\$10,200.00	\$392.31
14004	Alden	59	\$23,050.00	\$390.68
14005	Alexander	6	\$2,300.00	\$383.33
14006	Angola	24	\$9,300.00	\$387.50
14009	Arcade	2	\$700.00	\$350.00
14011	Attica	7	\$2,650.00	\$378.57
14020	Batavia	83	\$31,350.00	\$377.71
14024	Bliss	1	\$400.00	\$400.00
14025	Boston	18	\$7,000.00	\$388.89
14026	Bowmansville	5	\$1,850.00	\$370.00
14027	Brant	1	\$350.00	\$350.00
14029	Centerville	1	\$350.00	\$350.00
14030	Chaffee	4	\$1,550.00	\$387.50
14031	Clarence	61	\$23,350.00	\$382.79
14032	Clarence Center	55	\$21,250.00	\$386.36
14033	Colden	19	\$7,300.00	\$384.21
14034	Collins	8	\$3,050.00	\$381.25
14035	Collins Center	1	\$350.00	\$350.00
14036	Corfu	5	\$1,800.00	\$360.00
14037	Cowlesville	2	\$800.00	\$400.00
14040	Darien Center	2	\$700.00	\$350.00
14042	Delevan	6	\$2,350.00	\$391.67
14043	Depew	191	\$73,650.00	\$385.60
14047	Derby	20	\$7,600.00	\$380.00
14048	Dunkirk	46	\$17,650.00	\$383.70
14051	East Amherst	287	\$110,750.00	\$385.89
14052	East Aurora	154	\$58,950.00	\$382.79
14054	East Bethany	2	\$800.00	\$400.00
14055	East Concord	2	\$800.00	\$400.00
14056	East Pembroke	2	\$750.00	\$375.00
14057	Eden	34	\$13,100.00	\$385.29
14058	Elba	9	\$3,300.00	\$366.67
14059	Elma	102	\$39,050.00	\$382.84
14062	Forestville	4	\$1,500.00	\$375.00
14063	Fredonia	43	\$16,250.00	\$377.91
14066	Gainesville	1	\$350.00	\$350.00
14068	Getzville	93	\$35,800.00	\$384.95

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air w/ECM

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14069	Glenwood	6	\$2,300.00	\$383.33
14070	Gowanda	16	\$6,250.00	\$390.63
14072	Grand Island	136	\$52,550.00	\$386.40
14075	Hamburg	336	\$129,250.00	\$384.67
14080	Holland	3	\$1,100.00	\$366.67
14081	Irving	2	\$750.00	\$375.00
14085	Lake View	39	\$14,900.00	\$382.05
14086	Lancaster	241	\$91,950.00	\$381.54
14091	Lawtons	1	\$350.00	\$350.00
14092	Lewiston	123	\$47,000.00	\$382.11
14094	Lockport	1	\$400.00	\$400.00
14101	Machias	3	\$1,100.00	\$366.67
14102	Marilla	13	\$4,950.00	\$380.77
14110	North Boston	1	\$400.00	\$400.00
14111	North Collins	4	\$1,450.00	\$362.50
14120	North Tonawanda	253	\$96,950.00	\$383.20
14125	Oakfield	10	\$3,850.00	\$385.00
14127	Orchard Park	367	\$141,300.00	\$385.01
14129	Perrysburg	1	\$350.00	\$350.00
14131	Ransomville	14	\$5,450.00	\$389.29
14132	Sanborn	18	\$6,950.00	\$386.11
14135	Sheridan	1	\$350.00	\$350.00
14136	Silver Creek	20	\$7,600.00	\$380.00
14139	South Wales	6	\$2,350.00	\$391.67
14140	Spring Brook	1	\$350.00	\$350.00
14141	Springville	29	\$10,900.00	\$375.86
14145	Strykersville	3	\$1,150.00	\$383.33
14150	Tonawanda	309	\$116,900.00	\$378.32
14167	Varysburg	1	\$400.00	\$400.00
14170	West Falls	22	\$8,250.00	\$375.00
14171	West Valley	2	\$800.00	\$400.00
14172	Wilson	10	\$3,800.00	\$380.00
14174	Youngstown	38	\$14,350.00	\$377.63
14201	Buffalo	13	\$5,050.00	\$388.46
14202	Buffalo	12	\$4,600.00	\$383.33
14203	Buffalo	1	\$350.00	\$350.00
14204	Buffalo	5	\$1,900.00	\$380.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air w/ECM

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14206	Buffalo	53	\$20,350.00	\$383.96
14207	Buffalo	20	\$7,650.00	\$382.50
14208	Buffalo	11	\$4,250.00	\$386.36
14209	Buffalo	14	\$5,450.00	\$389.29
14210	Buffalo	28	\$10,750.00	\$383.93
14211	Buffalo	19	\$7,250.00	\$381.58
14212	Buffalo	16	\$6,100.00	\$381.25
14213	Buffalo	26	\$10,100.00	\$388.46
14214	Buffalo	44	\$16,700.00	\$379.55
14215	Buffalo	57	\$21,750.00	\$381.58
14216	Buffalo	87	\$33,750.00	\$387.93
14217	Buffalo	124	\$47,400.00	\$382.26
14218	Buffalo	58	\$22,000.00	\$379.31
14219	Buffalo	56	\$21,650.00	\$386.61
14220	Buffalo	83	\$32,350.00	\$389.76
14221	Buffalo	531	\$203,550.00	\$383.33
14222	Buffalo	43	\$16,450.00	\$382.56
14223	Buffalo	200	\$77,000.00	\$385.00
14224	Buffalo	303	\$116,100.00	\$383.17
14225	Buffalo	187	\$71,350.00	\$381.55
14226	Buffalo	221	\$85,150.00	\$385.29
14227	Buffalo	132	\$50,850.00	\$385.23
14228	Buffalo	109	\$41,600.00	\$381.65
14301	Niagara Falls	13	\$4,950.00	\$380.77
14303	Niagara Falls	9	\$3,500.00	\$388.89
14304	Niagara Falls	148	\$56,750.00	\$383.45
14305	Niagara Falls	55	\$20,850.00	\$379.09
14424	Canandaigua	1	\$400.00	\$400.00
14427	Castile	3	\$1,200.00	\$400.00
14443	East Bloomfield	1	\$350.00	\$350.00
14469	Bloomfield	11	\$4,200.00	\$381.82
14471	Honeoye	3	\$1,200.00	\$400.00
14472	Honeoye Falls	21	\$8,100.00	\$385.71
14485	Lima	18	\$6,850.00	\$380.56
14525	Pavilion	1	\$350.00	\$350.00
14550	Silver Springs	2	\$800.00	\$400.00
14585	West Bloomfield	1	\$400.00	\$400.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air w/ECM

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14591	Wyoming	2	\$800.00	\$400.00
14701	Jamestown	106	\$40,850.00	\$385.38
14708	Alma	1	\$350.00	\$350.00
14710	Ashville	5	\$1,950.00	\$390.00
14711	Belfast	1	\$400.00	\$400.00
14712	Bemus Point	13	\$5,050.00	\$388.46
14715	Bolivar	1	\$350.00	\$350.00
14716	Brocton	2	\$800.00	\$400.00
14718	Cassadaga	5	\$1,900.00	\$380.00
14719	Cattaraugus	4	\$1,450.00	\$362.50
14722	Chautauqua	1	\$400.00	\$400.00
14727	Cuba	2	\$800.00	\$400.00
14728	Dewittville	3	\$1,100.00	\$366.67
14731	Ellicottville	6	\$2,400.00	\$400.00
14733	Falconer	11	\$4,200.00	\$381.82
14737	Franklinville	2	\$800.00	\$400.00
14738	Frewsburg	6	\$2,200.00	\$366.67
14739	Friendship	1	\$400.00	\$400.00
14740	Gerry	3	\$1,150.00	\$383.33
14741	Great Valley	1	\$350.00	\$350.00
14744	Houghton	3	\$1,200.00	\$400.00
14747	Kennedy	1	\$350.00	\$350.00
14748	Kill Buck	1	\$350.00	\$350.00
14750	Lakewood	24	\$9,050.00	\$377.08
14752	Lily Dale	1	\$400.00	\$400.00
14754	Little Genesee	1	\$400.00	\$400.00
14755	Little Valley	1	\$400.00	\$400.00
14757	Mayville	10	\$3,850.00	\$385.00
14760	Olean	17	\$6,550.00	\$385.29
14766	Otto	1	\$400.00	\$400.00
14767	Panama	4	\$1,450.00	\$362.50
14769	Portland	3	\$1,150.00	\$383.33
14770	Portville	4	\$1,600.00	\$400.00
14772	Randolph	2	\$700.00	\$350.00
14775	Ripley	2	\$800.00	\$400.00
14779	Salamanca	18	\$6,950.00	\$386.11
14782	Sinclairville	2	\$800.00	\$400.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Forced Air w/ECM

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14787	Westfield	6	\$2,300.00	\$383.33
14802	Alfred	1	\$400.00	\$400.00
14803	Alfred Station	3	\$1,150.00	\$383.33
14804	Almond	3	\$1,150.00	\$383.33
14807	Arkport	4	\$1,550.00	\$387.50
14813	Belmont	5	\$1,950.00	\$390.00
14823	Canisteo	5	\$1,950.00	\$390.00
14843	Hornell	31	\$12,050.00	\$388.71
14880	Scio	2	\$750.00	\$375.00
14895	Wellsville	26	\$10,000.00	\$384.62
14897	Whitesville	1	\$350.00	\$350.00
Total		6,514	\$2,498,100.00	\$383.50

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Indirect Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14001	Akron	1	\$250.00	\$250.00
14004	Alden	5	\$1,400.00	\$280.00
14006	Angola	7	\$1,950.00	\$278.57
14020	Batavia	1	\$300.00	\$300.00
14025	Boston	1	\$300.00	\$300.00
14027	Brant	1	\$300.00	\$300.00
14031	Clarence	4	\$1,150.00	\$287.50
14032	Clarence Center	2	\$550.00	\$275.00
14036	Corfu	2	\$600.00	\$300.00
14037	Cowlesville	3	\$900.00	\$300.00
14042	Delevan	1	\$300.00	\$300.00
14043	Depew	4	\$1,200.00	\$300.00
14047	Derby	1	\$300.00	\$300.00
14048	Dunkirk	2	\$550.00	\$275.00
14051	East Amherst	3	\$850.00	\$283.33
14052	East Aurora	12	\$3,450.00	\$287.50
14057	Eden	8	\$2,400.00	\$300.00
14059	Elma	11	\$3,150.00	\$286.36
14062	Forestville	1	\$300.00	\$300.00
14063	Fredonia	4	\$1,200.00	\$300.00
14070	Gowanda	1	\$300.00	\$300.00
14072	Grand Island	15	\$4,350.00	\$290.00
14075	Hamburg	19	\$5,450.00	\$286.84
14080	Holland	3	\$850.00	\$283.33
14082	Java Center	1	\$300.00	\$300.00
14085	Lake View	4	\$1,100.00	\$275.00
14086	Lancaster	4	\$1,150.00	\$287.50
14092	Lewiston	5	\$1,400.00	\$280.00
14094	Lockport	1	\$300.00	\$300.00
14101	Machias	1	\$250.00	\$250.00
14102	Marilla	1	\$300.00	\$300.00
14111	North Collins	1	\$300.00	\$300.00
14120	North Tonawanda	11	\$3,150.00	\$286.36
14125	Oakfield	1	\$250.00	\$250.00
14127	Orchard Park	17	\$4,950.00	\$291.18
14129	Perrysburg	2	\$600.00	\$300.00
14131	Ransomville	2	\$550.00	\$275.00

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Indirect Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14132	Sanborn	1	\$300.00	\$300.00
14136	Silver Creek	2	\$550.00	\$275.00
14139	South Wales	1	\$300.00	\$300.00
14141	Springville	1	\$300.00	\$300.00
14145	Strykersville	3	\$800.00	\$266.67
14150	Tonawanda	3	\$850.00	\$283.33
14170	West Falls	2	\$600.00	\$300.00
14171	West Valley	2	\$550.00	\$275.00
14172	Wilson	1	\$300.00	\$300.00
14174	Youngstown	2	\$600.00	\$300.00
14201	Buffalo	2	\$550.00	\$275.00
14202	Buffalo	1	\$300.00	\$300.00
14206	Buffalo	4	\$1,100.00	\$275.00
14207	Buffalo	1	\$300.00	\$300.00
14209	Buffalo	2	\$550.00	\$275.00
14213	Buffalo	2	\$550.00	\$275.00
14214	Buffalo	4	\$1,050.00	\$262.50
14216	Buffalo	6	\$1,750.00	\$291.67
14217	Buffalo	4	\$1,150.00	\$287.50
14218	Buffalo	2	\$500.00	\$250.00
14219	Buffalo	1	\$300.00	\$300.00
14220	Buffalo	2	\$600.00	\$300.00
14221	Buffalo	13	\$3,700.00	\$284.62
14222	Buffalo	7	\$2,050.00	\$292.86
14223	Buffalo	5	\$1,300.00	\$260.00
14224	Buffalo	9	\$2,650.00	\$294.44
14225	Buffalo	3	\$900.00	\$300.00
14226	Buffalo	13	\$3,700.00	\$284.62
14227	Buffalo	2	\$550.00	\$275.00
14228	Buffalo	1	\$300.00	\$300.00
14301	Niagara Falls	1	\$250.00	\$250.00
14304	Niagara Falls	5	\$1,450.00	\$290.00
14305	Niagara Falls	1	\$300.00	\$300.00
14427	Castile	2	\$600.00	\$300.00
14469	Bloomfield	1	\$250.00	\$250.00
14471	Honeoye	1	\$300.00	\$300.00
14701	Jamestown	6	\$1,700.00	\$283.33

National Fuel Gas Distribution Corporation
New York Division
Completed EFI Projects by Zipcode
December 1, 2007 - December 31, 2011
Indirect Water Heater

Zip Code	City/ Town	No. of Completed Projects	Total Cost of Projects	Average Cost of Projects
14710	Ashville	1	\$250.00	\$250.00
14728	Dewittville	2	\$600.00	\$300.00
14731	Ellicottville	1	\$250.00	\$250.00
14733	Falconer	1	\$300.00	\$300.00
14737	Franklinville	1	\$300.00	\$300.00
14738	Frewsburg	1	\$300.00	\$300.00
14744	Houghton	3	\$900.00	\$300.00
14750	Lakewood	3	\$850.00	\$283.33
14755	Little Valley	1	\$300.00	\$300.00
14760	Olean	2	\$600.00	\$300.00
14766	Otto	1	\$250.00	\$250.00
14767	Panama	1	\$300.00	\$300.00
14770	Portville	2	\$600.00	\$300.00
14774	Richburg	1	\$300.00	\$300.00
14779	Salamanca	2	\$550.00	\$275.00
14802	Alfred	1	\$300.00	\$300.00
14803	Alfred Station	1	\$300.00	\$300.00
14813	Belmont	1	\$300.00	\$300.00
14823	Canisteo	2	\$600.00	\$300.00
14843	Hornell	5	\$1,500.00	\$300.00
14895	Wellsville	3	\$850.00	\$283.33
Total		318	\$91,300.00	\$287.11

National Fuel Gas Distribution Corporation New York Division Completed NRCIP Projects by Zipcode December 1, 2007 - December 31, 2011			
		Count	NYSERDA Incentive Dollars
14001	Akron	2	\$525.00
14004	Alden	8	\$5,000.00
14005	Alexander	2	\$1,575.00
14006	Angola	5	\$2,075.00
14009	Arcade	3	\$1,025.00
14010	Athol Spring	2	\$1,100.00
14011	Attica	3	\$2,025.00
14020	Batavia	19	\$13,820.50
14024	Bliss	1	\$500.00
14025	Boston	7	\$1,675.00
14031	Clarence	8	\$6,825.00
14032	Clarence Ce	5	\$3,900.00
14033	Colden	1	\$1,000.00
14034	Collins	2	\$1,025.00
14038	Crittenden	1	\$500.00
14043	Depew	24	\$58,321.00
14047	Derby	2	\$525.00
14048	Dunkirk	4	\$4,550.00
14051	Clarence	4	\$2,575.00
14052	East Aurora	12	\$7,500.00
14057	Eden	7	\$18,998.00
14059	Elma	6	\$6,075.00
14062	Forestville	3	\$7,350.00
14063	Fredonia	10	\$5,125.00
14069	Glenwood	3	\$15,767.00
14070	Gowanda	5	\$4,000.00
14072	Grand Island	4	\$3,025.00
14075	Hamburg	42	\$48,475.00
14080	East Aurora	2	\$525.00
14081	Irving	3	\$1,550.00
14082	Java Center	1	\$1,500.00
14086	Lancaster	9	\$26,410.00
14092	Lewiston	4	\$1,650.00
14094	Lockport	7	\$11,775.00
14102	Marilla	1	\$500.00
14108	Newfane	2	\$1,050.00
14120	North Tonaw	25	\$16,642.00
14125	Oakfield	4	\$1,375.00
14127	Orchard Par	33	\$53,450.00
14132	Sanborn	1	\$500.00

National Fuel Gas Distribution Corporation New York Division Completed NRCIP Projects by Zipcode December 1, 2007 - December 31, 2011			
		Count	NYSERDA Incentive Dollars
14134	Sardinia	1	\$2,000.00
14136	Silver Creek	8	\$12,350.00
14140	Springbrook	2	\$525.00
14141	Springville	3	\$1,575.00
14145	Strykersville	2	\$2,100.00
14150	Tonawanda	40	\$114,185.00
14169	Wales Cent	1	\$1,000.00
14170	West Falls	3	\$1,200.00
14173	Yorkshire	1	\$500.00
14174	Youngstown	1	\$2,500.00
14201	Buffalo	4	\$13,850.00
14202	Buffalo	7	\$10,315.00
14203	Buffalo	8	\$29,387.00
14204	Buffalo	4	\$7,869.65
14206	Buffalo	19	\$8,400.00
14207	Buffalo	10	\$29,450.00
14208	Buffalo	4	\$7,825.00
14209	Buffalo	3	\$7,504.00
14210	Buffalo	10	\$5,650.00
14211	Buffalo	2	\$6,708.00
14212	Buffalo	5	\$1,425.00
14213	Buffalo	8	\$4,450.00
14214	Buffalo	1	\$500.00
14215	Buffalo	12	\$5,100.00
14216	Buffalo	4	\$5,050.00
14217	Kenmore	9	\$33,166.00
14218	Lackawanna	11	\$34,549.00
14220	Buffalo	6	\$6,300.00
14221	Buffalo	38	\$25,882.00
14222	Buffalo	19	\$45,782.00
14223	Buffalo	10	\$32,850.00
14224	West Senec	30	\$38,374.97
14225	Cheektowag	24	\$52,600.00
14226	Buffalo	15	\$24,526.40
14227	Cheektowag	15	\$8,350.00
14228	Buffalo	9	\$23,768.40
14231	Williamsville	1	\$2,500.00
14260	Buffalo	1	\$2,000.00
14301	Niagara Fall	4	\$2,025.00
14302	Niagara Fall	2	\$1,000.00

