CONSERVATION INCENTIVE PROGRAM Quarterly Program Status Report Case 07-G-0141 Submitted to the New York State Department of Public Service November 25, 2009

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National Fuel Gas Distribution Corporation New York Division Case 07-G-0141

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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. This report is submitted in compliance with the October 1, 2007, timeline.

B. Report Overview

This report summarizes the status of the Company's CIP as of September 30, 2009. Included in this report is an update of the status of the M & V plan. As explained in the initial report and this November 2009 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.²

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

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.³

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
 - b. Data Summary including:
 - i. Cost Measurement

³ Cases 03-E-0640 and 06-G-0746, <u>RDM Proceeding</u>, Order Requiring Proposals for Revenue Decoupling Mechanisms (issued and effective April 20, 2007).

- 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
- c. Savings Calculation Approach
 - i. Account Specific
 - ii. Sampling
 - iii. Base Line
- d. Net Impact Evaluation
 - i. Free Ridership
 - ii. Spillover
 - iii. Snapback
- e. Avoided Emissions Calculation

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

IV. M&V Plans

A. General Description of M&V Plans

This report provides a preliminary estimate of the cost and benefits of the Company's CIP to date. This report reflects the first fifteen months of operation of the Company's CIP. This report also will present a pre and post equipment installation consumption analysis for residential customer rebates.

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								
	TotalResidentialNon ResidentialOutreach							
Base								
TRC	2.52	2.39	1.76	5.19				
TRC-WNY	3.78	3.57	2.61	8.12				
Societal Test	3.97	3.75	2.75	8.51				
Adjusted								
TRC	2.26	2.15	1.71	4.21				
TRC-WNY	3.39	3.21	2.55	6.65				
Societal Test	3.56	3.37	2.68	6.97				

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.

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 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. 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. Appendix I provides a summary of the pre and post equipment installation analysis.

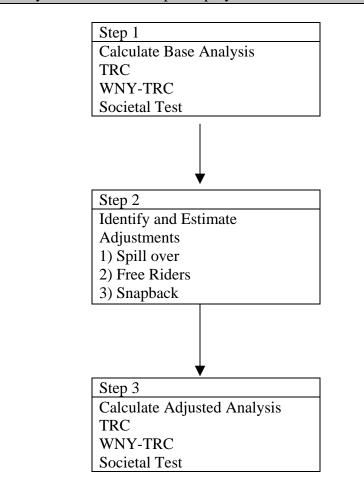


Figure 1 – Summary of the General Steps Employed in the M&V Analysis

The Company utilized a projection of the average natural gas supply costs for the upcoming year of approximately \$12.00 per Mcf. As has been demonstrated during the past 12 months, the market prices of natural gas can be extremely volatile. Long range projections of natural gas prices can be dramatically off base. The \$12.00 per Mcf price of natural gas utilized in this study is equal to the trend of natural gas prices experienced by customers from July 2004 through September 2009. This trend is represented on the graph included in the last page of Appendix E. The potential volatility of key variables utilized in the M&V analysis highlights the importance of sensitivity analysis to gauge the robustness of program results over a reasonable range of values for key variables in the analysis.

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

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 of 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 revenue decoupling mechanism ("RDM") approved by the Commission in the Company's last base rate case. This information is summarized in the table below.⁴

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 CIPs Program 12 ME 12/2007	107.837	404.17				
Consumption 12 ME 9/2009	104.79	415.15				
* SC 3 actual data adjusted for actual TC 1.1 and 2.0 migrations to date.						

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.

⁴ 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.

The Company has incorporated the measure life estimates from this report into its demand savings analysis for this quarter.⁵

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

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

4. Sensitivity Analysis on Key Variables

As mentioned previously, the potential volatility of key variables utilized in the M&V analysis highlights the importance of sensitivity analysis to gauge the robustness of program results over a reasonable range of values for key variables in the analysis. Pages 10 through 14 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

⁵ New York Standard Approach for Estimating Savings from Energy Efficiency Programs, Selected Residential & Small Commercial Gas Measures, March 25, 2009

Prepared for New York Department of Public Service by TecMarket Works Table 1. Measure Life Estimates, pp. 3-4. 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 contactors 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 Director's 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 workscopes.
- NYSERDA will modify energy efficiency and financial management workshops currently provided in Distribution service territory to include information related to Distribution 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:
 - o LICAAP
 - HEAP status/consumption report
 - o 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 and 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 multifamily 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
 - National Fuel 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 workscope 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 workscopes 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, Contactor 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 process contractor and vendor invoices, arrange payment, and resolve payment issues.
 - NYSERDA tracks program expenditures and maintains payment records. Accounts payable forms and invoice 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 workscope write-up.
 - Certificate of Completion.
 - Required permissions.

- NYSERDA QA Contractor (currently CSG Services) will perform independent third-party QA field inspections on approximately 20% of completed jobs and phone QA interviews on an additional 15% of completed jobs. QA will be completed within one month of completion of work.
 - 4. Reporting
 - a. Internal

As of September 30, 2009, a total of 10,461customers have been referred to the contractor for LIURP services. Of these, 8,210 have been sent a letter/application, and 3,270 applications have been returned. This has resulted in 1,885 customers referred for services, 387 applications on hold and 998 customers deemed ineligible. Of the 1,885 currently active program participants, 1,411 jobs have been completed, with 185 jobs in process and another 156 energy audits in process. The 1,411 completed jobs consisted of insulation measures for 1,131 customers, air sealing measures for 1,160 customers, heating system repairs/replacements for 526 customers and low flow showerheads for 387 customers. The total cost of all the measures to date is \$4,698,109, with an average cost per measure of \$3,330.

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

b. External

As of September 30, 2009, the Company estimates that the 1,411 completed conservation measure jobs will result in 62,724 Mcf of annual energy savings, which equates to \$846,775 annually in energy bill savings.

5. M&V Analysis

Appendix E, Pages 4 through 6, Column I, 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				
TRC Base Analysis	2.21			
Base Societal Test w/WNY Benefits	3.43			
TRC Adjusted	2.17			
Adjusted Societal Test w/WNY Benefits	3.37			

The Mcf saved per participant, Row 20, on Appendix E, is the deemed LIURP program savings assumed when the CIP program was established. It is anticipated that actual savings information on a "before and after" basis will be provided after 12 months of actual information is available.

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. An assumed level of "Snapback" consumption was provided in the analysis based on Company surveys of the propensity of the average residential customer to turn up their thermostats based on assumed bill reductions.

- 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 track⁶ proposal as offering one of the greatest potentials for cost effective natural gas energy efficiency initiatives.

3. Program Information

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

For residential customers in Distribution's New York service area, rebates are available on the purchase of the following items:

⁶ Case 07-M-0548, Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard; New York State Department of Public Service, Staff Preliminary Proposal for Energy Efficiency Program Design and Delivery; August 28, 2007, p. 101.

	Required Minimum Efficiency	Rebate Amount
Space Heating		
Hot Air Furnace	90% AFUE ⁷	\$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 ⁸	\$150
Tankless Heater	0.78 EF	\$350

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	Paid invoice or receipt(s) indicating the retailer/contractor name,
Heaters	business address, phone and Federal ID (tax) number.
	Itemized description of each product, including:
	1. Manufacturer, and complete model number.
	2. EF for natural gas water heaters.
	3. AFUE (efficiency) rating for natural gas furnace or
	boiler.
	Product installation date.

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

- 4. Reporting
 - a. Internal

As of September 30, 2009, a total of 29,610 rebates were processed by EFI, for a total rebate amount of \$5,286,948. This represents approximately 177% of the estimated total annual budget of \$2,980,677 for this program, in the first twenty-two months since

⁷ 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.

⁸ 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.

becoming effective. As of September 30, 2009, EFI was paid \$382,577 to administer this program per Distribution's contract with them. This represents approximately 132% 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	13,589	\$4,165,900
Water Heating	5,783	\$1,312,388	3,766	\$815,100
Thermostat	16,390	\$409,755	12,255	\$305,948
Total Rebate	26,025	\$2,980,677	29,610	\$5,286,948
General Admin.				\$44,000
Processing				\$175,974
Inspections			1,869	\$162,603
Total Admin.		\$289,050		\$382,577
Total Program		\$3,269,727		\$5,669,525

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 recently 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."

Now that the initial influx of requests has been processed, EFI is in the process of conducting two additional quality control aspects of the program. First, they are working with Conservation Services Group (CSG) to conduct random monthly on-site inspections of equipment installations to verify that the equipment receiving a rebate was actually installed. As of September 30, 2009, 1,869 of these inspections have been completed, which represents a 6% sample of the total rebate population of 29,610 rebates, and no fraudulent claims were discovered. Second, EFI conducted a phone survey to a random sample of 1,055 customers (approximately 5% of the 21,632 customers receiving a rebate through September 2009), 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 3 sources of program information to rebate customers were contractors (67%), National Fuel bill inserts (18%) and newspaper articles (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 3, Columns B through G, provide the preliminary M&V results for each of the residential rebate programs. Appendix E, Pages 4 through 6, Column H, provide the preliminary M&V results for the total of the residential rebate programs.

Residential Rebates M&V Summary Based on a Deemed Savings Analysis							
	Total		HW	Steam		HW	Tankless
	Res	Furnace	Boiler	Boiler	T Stats	Tank	HW
TRC Base Analysis	2.45	2.63	1.16	2.45	4.89	1.51	1.48
Base Societal Test							
w/WNY Benefits	3.84	4.13	1.81	3.83	7.71	2.39	2.35
TRC Adjusted	2.14	2.30	1.03	2.15	4.28	1.35	1.31
Adjusted Societal Test							
w/WNY Benefits	3.37	3.61	1.61	3.37	6.76	2.14	2.07

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

The Mcf saved per participant, Row 20, on Appendix E, are the deemed rebate program savings assumed when the CIP program was established.

In developing the adjusted analysis a 19% free ridership value is assumed. This assumed level of free ridership was based on the recently completed customer survey results explained in section V.B.4.a. Sensitivity analysis for the free ridership variable is provided in the free ridership section of Appendix E. An assumed level of "Snapback" consumption was provided in the analysis based on Company surveys of the propensity of the average residential customer to turn up their thermostats based on assumed bill reductions.

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 6 through 9, 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							
		Heating		HW	Tankless		
	Total Res	Systems	T Stats	Tank	HW		
TRC Base Analysis	1.84	1.56	9.29	1.06	0.96		
Base Societal Test w/WNY							
Benefits	2.89	2.45	14.59	1.67	1.56		
TRC Adjusted	1.68	1.44	8.12	0.94	0.85		
Adjusted Societal Test							
w/WNY Benefits	2.64	2.26	12.77	1.50	1.38		

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 eleven 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. However, custom incentives are set on a case-by-case basis, based upon the incremental installed cost of the new equipment and the estimated resulting gas energy savings. A technical engineering analysis must first be performed to confirm energy savings. The rebate amount will be up to 50% of the incremental cost, with a cap of \$25,000. The Company has contracted with NYSERDA to administer the day-to-day project management of this program.

2. Goals

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

3. Program Information

- a. Administrative Tasks Related to Start-Up
- NYSERDA has modified existing Energy Efficiency Technical Assistance ("TA") contracts, including statements of work to include activities related to NRCIP.
- NYSERDA has modified the on-line tracking system, Buildings Portal, to accommodate changes required for the tracking of Distribution energy projects.
- NYSERDA has modified current Enhanced Commercial/Industrial Performance Program opportunity notices and Tier II forms to accommodate Distribution energy projects.
 - b. Ongoing Administrative Tasks
- NYSERDA will monitor program progress and expenditure levels to ensure that program objectives are met within budget allocations.
- NYSERDA will discuss by teleconference as needed with NYSERDA's TA Contractors, to ensure that contractors understand and are following program procedures, and to elicit feedback regarding the program.
- NYSERDA will conduct periodic reviews of the database to ensure quality of data entry and will provide Distribution with project data obtained on the application.
- NYSERDA will promote Distribution programs in any upcoming energy efficiency workshops /seminars/conferences provided in Distribution service territory.
- At Distribution's request, NYSERDA shall permit Distribution personnel to monitor and participate in these administrative tasks.
 - 4. Process
- NYSERDA Application In-Take and Review:
 - Upon receipt of a completed Application (includes application and Technical Engineering Study) NYSERDA assigns the gas energy project and send 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 siteinspection of the energy project to verify that the energy project is completed and the same equipment and efficiency ratings that was specified in the Application was installed.
 - NYSERDA's TA Contractor will provide NYSERDA with correspondence in writing with a recommendation of the potential gas energy savings and financial incentives and notify any changes to the project.
 - NYSERDA will request Distribution to provide the customer with correspondence in writing indicating the amount of financial incentive that the customer can invoice. In the alternative, NYSERDA may send such correspondence on letterhead supplied to NYSERDA by Distribution.
 - NYSERDA will update the data of the project in the Buildings Portal database.
- Invoice Processing:
 - NYSERDA will review all invoices for accuracy, and if acceptable NYSERDA will process the invoice for payment following NYSERDA prompt payment policy.
 - 5. Reporting
 - a. Internal

As of September 30, 2009, a total of 539 rebates were processed by EFI and NYSERDA, for a total rebate amount of \$425,865. This represents approximately 32% of

the estimated total annual budget of \$1,319,860 for this program, since commencement of rebate processing on December 1, 2007, (for equipment purchases and installations completed on or after November 1, 2007). As of September 30, 2009, EFI and NYSERDA were paid a total of \$28,353 to administer this program per Distribution's contract with them. This represents approximately 22% 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:

	- Estimate	ed Annual-	- Actual Cumulative-		
	Rebates	Rebate \$	Rebates	Rebate \$	
Space Heating	N/A	N/A	254	\$391,030	
Water Heating	N/A	N/A	36	\$21,085	
Cooking	N/A	N/A	1	\$500	
Process Heating	N/A	N/A	0	\$0	
Thermostat	N/A	N/A	248	\$13,249	
Total Rebate	N/A	\$1,319,860	539	\$425,865	
General Admin.				\$23,707	
Processing				\$2,297	
Inspections			52	\$2,349	
Total Admin.		\$127,993		\$28,353	
Total Program		\$1,447,853		\$454,218	

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 the Company conducted in February and March of 2008. Program inquiries to NYSERDA have been fairly steady since the direct mail campaign. 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 two years of the program, we have seen greater activity on the customized rebate design front. Even though only 25 rebates have been processed through this method as of September 30, 2009, 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 has 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, <u>fixed</u> 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, <u>customized</u> 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 NYPSC office in Albany on March 25, 2009. Since the new fixed rebate became effective on December 1, 2008, the Company is encouraged by the growing response we have seen from our small non-residential customers. Through September 30,2009, 514 customers have taken advantage of this simpler rebate option available to them.

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

b. External

At this point, the Company does not have sufficient data for most rebate participants to accurately compare pre-versus post-installation consumption for either the five-month heating season of November – March or the 12-month water heating/process heating season. 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 4 through 6, Column K, provide the preliminary M&V results for the non-residential rebate program.

Non-Residential M&V Summary					
TRC Base Analysis	1.76				
Base Societal Test w/WNY Benefits	2.75				
TRC Adjusted	1.71				
Adjusted Societal Test w/WNY Benefits	2.68				

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

The Mcf saved per participant, Row 20, on Appendix E, is the deemed nonresidential 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 and to help them become fully aware of its benefits and to encourage customers to take advantage of the program.

2. Goal

The goal of the communication initiative is to educate customers on the need for and the benefit of employing energy efficiency measures with the CIP rebate and lowincome programs being a cornerstone of the methods available for improving energy efficiency in their homes and businesses.

3. Program Information

The formal advertising and public relations campaign associated with the CIP launched December 1, 2007. That campaign included bill inserts, direct mail, outdoor advertising, transit and bus shelter advertising, online advertising, a dedicated Web site, print advertisements and grassroots efforts. Tactics executed during this reporting period (July 1, 2009, through September 30, 2009) included:

Web Site (<u>NationalFuelForThought.com</u>)

- Program-specific Web site generated approximately 6,371 visits (with 20,970 page views among those visits) from July 1 to September 30, 2009.
 - See **Appendix D**, **Exhibit 1** for a screen shot of the Web site's homepage.

Other Web Site Outreach

Buffalo.com – 507,170 total impressions from July 1 to September 30, 2009.

• See Appendix D, Exhibit 2 for sample Web site ads.

Take-Aways:

- Conservation kits and program materials were distributed at community events and to employees, customers, heating and cooling appliance dealers, local appliances stores, area not-for-profit organizations, health and human service agencies, and local elected officials.
 - Approximately 3,280 kits were distributed between July 1 and September 30, 2009.
- Along with starter-materials to help customers weatherize their homes and payment assistance information, the conservation kits included:
 - **Program brochures describing features for Residential and Non-residential customers** – also distributed upon request to employees, customers, heating and cooling appliance dealers and local appliances stores.
 - See **Appendix D**, **Exhibit 3** for a sample of the brochure featuring program benefits for residential customers.
 - See **Appendix D**, **Exhibit 4** for a sample of the brochure featuring program benefits for non-residential customers.
 - **Conservation Tip Sheet** includes tips and facts about energy conservation and Web sites that contain conservation information.
 - See **Appendix D**, **Exhibit 5** for a sample tip sheet.

Community Outreach:

- Program materials and conservation kits were distributed at the following:
 - "Going Green" day at the Erie County Fair on Thursday, August 13, 2009. Information and 2,185 conservation kits distributed.
 - o Judge's Row Block Club Meeting, 70 kits
 - o Carleton Technologies Employee Benefits Fair, 280 kits
 - The ERB Company Green Energy Expo. 150 kits
 - o Senator Antoine Thompson's Community Meeting, 100 kits
 - o Southtown's Energy Fair, 500 kits
- Program materials were distributed at the following:
 - National Fuel's Buffalo Place Customer Assistance Center.
 - National Fuel's Appletree Customer Assistance Center.
 - National Fuel's Jamestown Customer Assistance Center.

- o National Fuel's Niagara Falls Customer Assistance Center.
- National Fuel's Customer Response Center.
- Continued sponsorship of the Buffalo Sabres' "Blue + Gold= Green" Initiative:
 - Prominent feature of the CIP and conservation tips on the Sabres' dedicated "Green Team" Web site.
 - The Buffalo Sabres continued to issue e-mails to registered Green Team members promoting energy conservation and the Energy Detectives Program and the CIP.
 - As of September 30, 2009, there were 3,700 "Green Team" members.
- Sponsorship of the Buffalo Bisons' "Help Keep Our Field Green" Initiative:
 - In-Game Big Board recognition for the CIP with the "*This date in Mets history*," scoreboard feature. Feature posts conservation facts during inning breaks in all home games from April – September 2009.
 - Prominent feature of the CIP on the Bisons' Web site, including banner advertising.
 - Estimated attendance for the 2009 season: 590,000 total attendees, or an average of 8,600 attendees per game.

Distribution also executed the following:

Media Relations:

- Local coverage included:
 - News story featuring National Fuel rebates titled, "Easy summer on your energy bill?," published in the *Lockport Union-Sun Journal* (circulation: 11,460).
 - News story featuring National Fuel rebates titled, "National Grid plans push to cut power use," published in the *Buffalo News* (circulation: 194,225).
 - News story featuring National Fuel rebates titled, "More than a 30 percent return on your investment," published in the *Amherst Bee* (circulation: 26,500), the *Clarence Bee* (circulation: 4,522), the *Depew Bee* (circulation: 1,575), and the *Cheektowaga Bee* (circulation: 1,753).
 - News story featuring National Fuel rebates titled,
 "Southtowns Energy Fair slated for this Saturday,"
 published in the *Hamburg Sun Times* (circulation: 10,000).

Dealer/Contractor Outreach:

• Contact was maintained with area heating and cooling contractors and appliance dealers throughout this time period.

4. Reporting

The Company is monitoring the progress and success of the communication activities related to the CIP. A benchmark customer survey was conducted in October 2007 to measure customer awareness of energy efficiency and current practices and behaviors associated with the efficient use of natural gas and the Company is 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 July 2009. At this time, there are no new research results to report.

At November 30, 2008, approximately \$2.25 million was spent on communications initiatives for the first year of the CIP. As of September 30, 2009, approximately \$1.36 million has been spent on outreach and education initiatives during the program's second year.

5. M&V Analysis

Appendix E, Pages 4 through 6, Column L, provide the preliminary M&V results for the Outreach program.

Outreach M&V Summary					
TRC Base Analysis	5.19				
Base Societal Test w/WNY Benefits	8.51				
TRC Adjusted	4.21				
Adjusted Societal Test w/WNY Benefits	6.97				

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

Gauging the exact customer behavioral changes due to the Company's outreach effort is perhaps the most difficult part of this M&V analysis. The Company's outreach effort is broad based and cuts across a number of programs and initiatives as demonstrated in the program details above. The first step in the M&V analysis was to assign a portion of the outreach costs to the rebate programs since a significant effort was made to inform customers about the rebate programs. The assignment of outreach costs to the rebate programs was 50% of total outreach costs. Outreach costs associated with the rebate programs were included in the M&V results for the rebate programs. The Mcf saved per participant, Row 20, on Appendix E, is a deemed Mcf savings associated with the general outreach efforts. The sensitivity analysis section of the M&V report provides an analysis of the sensitivity of the adjusted TRC results to the volume savings assumption. The adjusted TRC results range from 6.31 if the volume savings resulting from general outreach are 50% greater than those assumed in the base analysis to 2.10 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 19% 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 seventh quarterly report, which has provided an overview of each component of the CIP along with a summary of results to date for each component. This report provided a preliminary analysis of M&V results based on program results to date. Appendix G provides a summary of allowances by program, Company expenditures for each CIP initiative, and NYSERDA expenditures under the Company's program through September 30, 2009. More information regarding M&V variables resulting from the actual operation of the CIP and the ongoing state-wide energy efficiency initiative should be available for inclusion in future quarterly reports. The Company also anticipates including reasonable data reporting modifications that may be suggested by Staff and others involved in making the energy efficiency initiatives included in the CIP available to the Company's customers. * referrals held due to program currently at capacity

I. Program Intake (Cumulative / Program Years 1 & 2)

NFG Customers Referred	10,461	
Customer Letter/Application Sent	8,210 *	78% of 10,461 Referrals
Applications Returned	3,270	40% of 8,210 Applications Sent

II. Status of Application Triage (Cumulative / Program Years 1 & 2)

Applications on Hold (Landlord Authorization):	371	11%	of 3,270 Applications Returned
Applications on Hold (Additional Information/Other):	16	0%	of 3,270 Applications Returned
Deemed Ineligible (house for sale etc)	<u>998</u>	31%	of 3,270 Applications Returned
Assigned to Contractors for Service	1,885	58%	of 3,270 Applications Returned

III. Status of Audits/Measures (Cumulative / Program Years 1 & 2)

Audits in Process	156	8% of 1,885 Households assigned to Contractors for Service
Jobs in Process	185	10% of 1,885 Households assigned to Contractors for Service
Jobs Completed	<u>1.411</u>	75% of 1,885 Households assigned to Contractors for Service
Program Participants	1,752	93% of 1,885 Households assigned to Contractors for Service
Jobs Cancelled	133	7% of 1,885 Households assigned to Contractors for Service

III. Program Results (Cumulative / Program Years 1 & 2)

Conservation Measure	Jobs	Estimated Annual Energy Savings (Mcf)	Estimated Annual Savings (\$)	Total Cost of Measures	Average Cost per Measure
Audit Fee/Education	1,411	tbd	tbd	\$463,991	\$329
Insulation	1,131	46,498	\$627,727	\$3,290,818	\$2,910
Air Sealing	1,160	8,982	\$121,251	\$409,216	\$353
Heating System Repair/Replacement	526	4,973	\$67,132	\$349,979	\$665
Thermostats	133	1,638	\$22,118	\$13,642	\$103
DHW Improvements	98	197	\$2,660	\$116,059	\$1,184
Showerheads	387	296	\$4,002	\$6,423	\$17
Pipe Wrapping	479	121	\$1,628	\$8,076	\$17
Other	180	19	\$257	\$39,905	\$222
Total	1,411	62,724	\$846,775	\$4,698,109	\$3,330

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

Equipment	Quantity F	Rebate Amount	Total Rebate	Processing Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	934	\$400.00	\$373,600.00	\$7.50	\$7,005.00	\$380,605.00
Boiler - Steam	42	\$200.00	\$8,400.00	\$7.50	\$315.00	\$8,715.00
Furnace >= 90%	<u>12613</u>	\$300.00	<u>\$3,783,900.00</u>	\$7.50	\$94,590.00	<u>\$3,878,490.00</u>
Subtotal	13589		\$4,165,900.00		\$101,910.00	\$4,267,810.00
II. Water Heating						
Water Heater - Storage Tank	2516	\$150.00	\$377,400.00	\$6.50	\$16,354.00	\$393,754.00
Water Heater - Tankless	<u>1250</u>	\$350.00	<u>\$437,700.00</u>	\$6.50	<u>\$8,125.00</u>	\$445,825.00
Subtotal	3766		\$815,100.00		\$24,479.00	\$839,579.00
III. Programmable Thermostat	12255	\$24.97 *	\$305,947.55	\$4.50	\$49,585.50 **	\$355,533.05
Total all Equipment	29,610		\$5,286,947.55		\$175,974.50	\$5,462,922.05
Program Administration	22 mc	onths		\$2,000.00	\$44,000.00	
Inspections	1869			\$87.00	\$162,603.00	
					г	
PROGRAM TOTAL					L	\$5,669,525.05

Appendix B - Residential CIP Rebate Program Cumulative Results through 9/30/09

* 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.

I. FIXED Rebates

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

I. Space Heating Boiler - Hot Water 19 \$400.00 \$7,600.00 \$7.50 \$142.50 \$7,74. Boiler - Steam 0 \$200.00 \$0.00 \$7.50 \$0.00 \$1 Furnace 144 \$300.00 \$43,200.00 \$7.50 \$1,080.00 \$44,281 Subtotal 163 \$50,800.00 \$1,222.50 \$52,022 II. Water Heating \$1,800.00 \$6.50 \$78.00 \$1,870 Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$52.00 \$2,852 Subtotal 20 \$4,600.00 \$6.50 \$52.00 \$2,852 Subtotal 20 \$4,600.00 \$130.00 \$4,73 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,161	- · · ·		ndividual Rebate	T (1 D 1 (T F	T
Boiler - Hot Water 19 \$400.00 \$7,600.00 \$7.50 \$142.50 \$7,74 Boiler - Steam 0 \$200.00 \$0.00 \$7.50 \$0.00 \$1 Furnace 144 \$300.00 \$43,200.00 \$7.50 \$1,080.00 \$44,281 Subtotal 163 \$50,800.00 \$7.50 \$1,022.50 \$52,022 II. Water Heating * \$50,800.00 \$6.50 \$78.00 \$1,877 Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$52.00 \$2.852 Subtotal 20 \$4,600.00 \$6.50 \$52.00 \$2.852 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,161	Equipment	Quantity	Amount	Total Rebate	Processing Fee	Total Fee	Total
Boiler - Hot Water 19 \$400.00 \$7,600.00 \$7.50 \$142.50 \$7,74 Boiler - Steam 0 \$200.00 \$0.00 \$7.50 \$0.00 \$1 Furnace 144 \$300.00 \$43,200.00 \$7.50 \$1,080.00 \$44,281 Subtotal 163 \$50,800.00 \$7.50 \$1,022.50 \$52,022 II. Water Heating * \$50,800.00 \$6.50 \$78.00 \$1,877 Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$52.00 \$2.852 Subtotal 20 \$4,600.00 \$6.50 \$52.00 \$2.852 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,161							
Boiler - Steam 0 \$200.00 \$0.00 \$7.50 \$0.00 \$1 Furnace 144 \$300.00 \$43,200.00 \$7.50 \$1,080.00 \$44,280 Subtotal 163 \$50,800.00 \$7.50 \$1,080.00 \$44,280 II. Water Heating ************************************	I. Space Heating						
Furnace 144 \$300.00 \$43,200.00 \$7.50 \$1,080.00 \$44,280 Subtotal 163 \$50,800.00 \$1,222.50 \$52,022 II. Water Heating ************************************	Boiler - Hot Water	19	\$400.00	\$7,600.00	\$7.50	\$142.50	\$7,742.50
Subtotal 163 \$50,800.00 \$1,222.50 \$52,023 II. Water Heating Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$78.00 \$1,874 Water Heater - Tankless 8 \$350.00 \$2,800.00 \$6.50 \$52.00 \$2,855 Subtotal 20 \$4,600.00 \$130.00 \$4,730 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,163	Boiler - Steam	0	\$200.00	\$0.00	\$7.50	\$0.00	\$0.00
II. Water Heating Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$78.00 \$1,874 Water Heater - Tankless 8 \$350.00 \$2,800.00 \$6.50 \$52.00 \$2,855 Subtotal 20 \$4,600.00 \$130.00 \$4,734 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,164	Furnace	<u>144</u>	\$300.00	\$43,200.00	\$7.50	<u>\$1,080.00</u>	<u>\$44,280.00</u>
Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$78.00 \$1,874 Water Heater - Tankless 8 \$350.00 \$2,800.00 \$6.50 \$52.00 \$2,853 Subtotal 20 \$4,600.00 \$130.00 \$4,734 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,164	Subtotal	163		\$50,800.00		\$1,222.50	\$52,022.50
Water Heater - Storage Tank 12 \$150.00 \$1,800.00 \$6.50 \$78.00 \$1,874 Water Heater - Tankless 8 \$350.00 \$2,800.00 \$6.50 \$52.00 \$2,853 Subtotal 20 \$4,600.00 \$130.00 \$4,734 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,164							
Water Heater - Tankless 8 \$350.00 \$2,800.00 \$6.50 \$52.00 \$2,852 Subtotal 20 \$4,600.00 \$130.00 \$4,734 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,164	II. Water Heating						
Subtotal 20 \$4,600.00 \$130.00 \$4,734 III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,164	Water Heater - Storage Tank	12	\$150.00	\$1,800.00	\$6.50	\$78.00	\$1,878.00
III. Programmable Thermostat 210 \$24.88 * \$5,224.96 \$4.50 \$945.00 ** \$6,169	Water Heater - Tankless	<u>8</u>	\$350.00	<u>\$2,800.00</u>	\$6.50	<u>\$52.00</u>	\$2,852.00
	Subtotal	20		\$4,600.00		\$130.00	\$4,730.00
Total all Equipment 393 \$60,624.96 \$2,297.50 \$62,925	III. Programmable Thermostat	210	\$24.88 *	\$5,224.96	\$4.50	\$945.00 **	\$6,169.96
Total all Equipment 393 \$60,624.96 \$2,297.50 \$62,923			_		_		
	Total all Equipment	393	_	\$60,624.96	_	\$2,297.50	\$62,922.46
			_		_		
Inspections 27 \$87.00 \$2,349.00	Inspections	27			\$87.00	\$2,349.00	
PROGRAM SUBTOTAL \$65,27	PROGRAM SUBTOTAL					Г	\$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.

I. FIXED Rebates (continued)

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

		dividual Rebate				
Equipment	Quantity	Amount	Total Rebate	Processing Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	15	\$1,980.00 *	\$29,700.00		\$0.00	\$29,700.00
Boiler - Steam	2	\$1,100.00	\$3,700.00		\$0.00	\$3,700.00
Unit Heater	6	\$916.67 *	\$5,500.00		\$0.00	\$5,500.00
Furnace	<u>45</u>	\$1,144.44 *	<u>\$51,500.00</u>		<u>\$0.00</u>	<u>\$51,500.00</u>
Subtotal	68		\$90,400.00		\$0.00	\$90,400.00
II. Water Heating						
Water Heater - Storage Tank	10	\$150.00	\$1,500.00		\$0.00	\$1,500.00
Water Heater - Tankless	<u>4</u>	\$350.00	<u>\$1,400.00</u>		<u>\$0.00</u>	<u>\$1,400.00</u>
Subtotal	14		\$2,900.00		\$0.00	\$2,900.00
III. Cooking	1	\$500.00	\$500.00		\$0.00	\$500.00
IV. Programmable Thermostat	38	\$211.18 *	\$8,025.00		\$0.00 **	\$8,025.00
Total all Equipment	121	-	\$101,825.00	-	\$0.00	\$101,825.00
		=		=		
Inspections	0			\$87.00	\$0.00	
	Ĵ			<i>40.100</i>	<i>Q</i> 0	

PROGRAM SUBTOTAL

\$101,825.00

* 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.

II. CUSTOMIZED Rebates

Through Small Non-Residential CIP - Administered by NYSERDA

	ŀ	Average Rebate				
Equipment	Quantity	Amount	Total Rebate	Administration Fee	Total Fee	Total
I. Space Heating						
Boiler - Hot Water	17	\$12,474.76	\$212,071.00	9.00%	\$19,086.39	\$231,157.39
Boiler - Steam	0	\$0.00	\$0.00	9.00%	\$0.00	\$0.00
Unit Heater	1	\$16,975.00	\$16,975.00	9.00%	\$1,527.75	\$18,502.75
Furnace	0	\$0.00	\$0.00	9.00%	\$0.00	\$0.00
Other	<u>5</u>	\$4,156.80 *	\$20,784.00	9.00%	<u>\$1,870.56</u>	<u>\$22,654.56</u>
Subtotal	23	\$10,862.17	\$249,830.00		\$22,484.70	\$272,314.70
II. Water Heating						
Water Heater - Storage Tank	2	\$6,792.50	\$13,585.00	9.00%	\$1,222.65	\$14,807.65
Water Heater - Tankless	<u>0</u>		<u>\$0.00</u>	9.00%	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal	2	\$6,792.50	\$13,585.00		\$1,222.65	\$14,807.65
III. Process Heating	0		\$0.00	9.00%	\$0.00	\$0.00
IV. Programmable Thermostat	0		\$0.00	9.00%	\$0.00	\$0.00
		_				
Total all Equipment	25	-	\$263,415.00		\$23,707.35	\$287,122.35
		-				
Inspections	25			N/A	\$0.00	
-1				•	<i>Q</i> 0	

PROGRAM SUBTOTAL

\$287,122.35

III. TOTAL Rebates

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

				Total	
Equipment	Quantity	Average Rebate Amount	Total Rebate	Admin/Processing Fee	Total
I. Space Heating					
Boiler - Hot Water	51	\$4,889.63	\$249,371.00	\$19,228.89	\$268,599.89
Boiler - Steam	2	\$0.00	\$3,700.00	\$0.00	\$3,700.00
Unit Heater	7	\$3,210.71	\$22,475.00	\$1,527.75	\$24,002.75
Furnace	189	\$501.06	\$94,700.00	\$1,080.00	\$95,780.00
Other	<u>5</u>	\$4,156.80	<u>\$20,784.00</u>	<u>\$1,870.56</u>	<u>\$22,654.56</u>
Subtotal	254	\$1,539.49	\$391,030.00	\$23,707.20	\$414,737.20
II. Water Heating					
Water Heater - Storage Tank	24	\$703.54	\$16,885.00	\$1,300.65	\$18,185.65
Water Heater - Tankless	<u>12</u>	\$350.00	<u>\$4,200.00</u>	<u>\$52.00</u>	\$4,252.00
Subtotal	36	\$585.69	\$21,085.00	\$1,352.65	\$22,437.65
III. Cooking	1	\$500.00	\$500.00	\$0.00	\$500.00
IV. Process Heating	0	\$0.00	\$0.00	\$0.00	\$0.00
V. Programmable Thermostat	248	\$53.43	\$13,249.96	\$945.00	\$14,194.96
Total all Equipment	539		\$425,864.96	\$26,004.85	\$451,869.81
Inspections	52			\$2,349.00	

PROGRAM TOTAL

\$454,218.81

APPENDIX D General Customer Outreach and Energy Efficiency Education

EXHIBIT 1 CIP Web Site (NationalFuelForThought.com)



EXHIBIT 2 Other Web Site Outreach – Online Advertisements



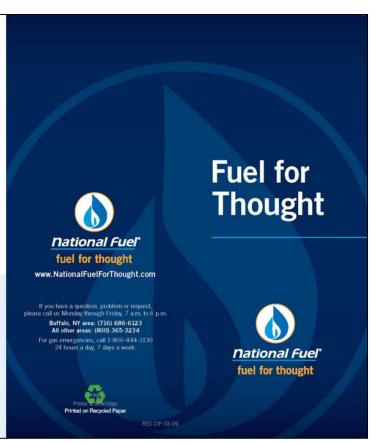
EXHIBIT 3 Take Aways –Brochure, Residential Customer Focus

Receive these rebates on select natural gas appliances and save energy and money!

Required Efficiency	Rebate
90% AFUE*	\$300
85% AFUE	\$400
81% AFUE	\$200
Energy Star®-rated	\$25
0.61 EF**	\$150
0.78 EF	\$350
	85% AFUE 81% AFUE Energy Star®-rated 0.61 EF**

Please Note: space and water heating appliances must be installed by a contractor. Contractors must be able to supply one of the following: Federa IID number, a Certificate of Insurance or a Business Certificate showing their company's name and address in order for the totale application to be considered compare. The Conservation Incentive Program relate offers are anables for qualifying equipment purchaved and installed on or able November 1, 2007, oxy. Retasts are available for enablemistic automore, payorties of income or armual energy usage. Appliances purchased and installed in merivaluits are not eligible for relate.

Small, non-residential customers whose facilities use less than 12,000 Mcf (thousand cubic feet) of natural gas per year are also eligible to receive either fixed or customized rebates for upgrading to more energy-efficient equipment. To learn more about National Fuel's fixed rebates, visit www.NationalFuelForThought.com. Customized rebates are determined on a case-by-case basis, based on the results of an energy-use analysis. For these customers, rebates can be as much as 50% of the incremental equipment and installation costs, up to \$25,000. Call 1-866-697-3732 or visit www.nyserda.org for more information. The fixed rebates being offered to non-residential customers are available for qualifying equipment installed on or after December 1, 2008.



The Conservation Incentive Program For Residential Customers

Thinking about a new natural gas appliance? Choose high-efficiency and save.

The National Fuel Conservation Incentive Rebate Program offers residential and small, non-residential customers in National Fuel's western New York service area a number of money-saving rebates when you buy an Energy Star®-rated programmable thermostat or when you replace specified appliances with new, nergy-efficient models. When you combine the rebates with the projected annual fuel savings realized by using more efficient equipment, you'd be amazed at how quickly these new appliances can pay for themsel

So why is National Fuel helping you use less natural gas?

A lot of people believe that National Fuel controls the cost of natural gas and that higher natural gas costs mean the Utility makes more money. The truth is that utilities have no control over the market price of natural gas. By law, these costs are passed along without mark-up. The price you pay for natural gas is set in the energy marketplace where the forces of supply and nand affect prices most.

With the Conservation Incentive Rebate Program, National Fuel is partnering with customers on ways to use less natural gas, helping to bring balance back to the marketplace and lowering the price we all pay for the energy we use.

For more information about this program, visit www.NationalFuelForThought.com, where you can print a rebate application and learn more about

By using natural gas wisely, you could help protect the environment.

how to use less energy

Natural gas is the most efficient and cleanest fossil fuel available. According to the U.S. Environmental Protection Agency, natural gas also produces a significantly smaller volume of greenhouse gasses, compared to oil or other fossil fuels used in the production of electricity. When you conserve natural gas, you not only help your pocketbook, you reduce emissions further, making the air cleaner for everyone. And that's something that will help your children, their children, and generations to com

The National Fuel Conservation Incentive Rebate Program also includes a number of other ways for you to save through energy-efficiency, including initiatives specifically designed for non-residential natural gas use and to assist lower income households. For complete details, visit www.NationalFuelForThought.com If you've submitted a rebate application and have estions, call (toll free) 1-877-285-7824

An example of how you can make high-efficiency more affordable:

Cost Difference for Higher-Efficiency Model	\$1,00
Standard 80% Efficient Furnace	\$2,500
New 90% High Efficiency Furnace	\$3,50



\$700 \$208/year**

And of course, by choosing a high-efficiency product for your home now, you'll continue to enjoy energy savings for years to come

- With savings on annual operating costs of \$208 per year, the \$700 incremental investment will be paid back in 3.4 years.
- **This is only an example. Your actual investment and savings may be higher or lower depending on the models you choose to install, the efficiency of the furnace you are replacing. Ructuating fue costs and your actual installed cost. Based on average gas costs for 12 months ending. February 2009.

Rebates are available for residential customers, regardless of income or annual energy usage. Appliances purchased and installed in new-builds are not eligible for rebates.

EXHIBIT 4 Take Aways – Brochure, Non-Residential Customer Focus

An example of how a small, non-residential customer can make high-efficiency more affordable:

New 92% High Efficiency, Condensing Boiler	\$20,000
Standard 80% Efficiency, Non-Condensing Boiler	\$15,000
Cost Difference for Higher Efficiency Model	\$5,000
One-time Rebate	\$2,000
Cost Difference After Rebate	\$3,000
Annual Operating Cost Savings	\$987/year
Simple Payback on Cost for High-Efficiency Model	3.0 years*

And of course, by choosing a high-efficiency product for your business now, you'll continue to enjoy energy savings for years to come.

- With savings on annual operating costs of \$987 per year, the \$3,000 incremental investment will be paid back in 3.0 years.

By using natural gas wisely, you could help protect the environment.

Natural gas is the most efficient and cleanest fossil fuel available. According to the U.S. Environmental Protection Agency, natural gas also produces a significantly smaller volume of greenhouse gasses, compared to oil or other fossil fuels used in the production of electricity. When you conserve natural gas, you not only help your pocketbook, you reduce emissions further, making the air cleaner for everyone. And that's something that will help your children, their children, and generations to come.

The National Fuel Conservation Incentive Rebate Program also includes a number of other ways for you to save through energy-efficiency, including initiatives specifically designed for residential natural gas use and to assist lower income households. For complete details, visit www.NationalFuelForThought.com.



The Conservation Incentive Program

For Non-Residential Customers

Thinking about purchasing a new piece of natural gas equipment? Choose high-efficiency and save.

The National Fuel Conservation Incentive Rebate Program offers residential and small, non-residential customers in National Fuel's western New York service area a number of money-saving rebates when you replace specified appliances with new, energy-efficient models. When you combine the rebates with the projected annual fuel savings realized by using more efficient equipment, you'd be amazed at how quickly these new appliances can pay for themselv

Fixed & customized rebates for non-residential customers.

Small, non-residential customers whose facilities use less than 12,000 Mcf (thousand cubic feet) of natural gas per year are eligible to receive either fixed or customized rebates for upgrading to more energyefficient natural gas equipment.

Now offering you two ways to save!

- · New Fixed (Pre-Qualified) Rebate Fixed rebates available on pre-qualified equipment. It's fast and easy! Visit www.NationalFuelForThought.com for xate appl ation.
- · Customized (Performance-Based) Rebate Rebates are determined on a case-by-case basis, based on the results of an energy-use analysis. Customized rebates can be as much as 50% of the incremental equipment and installation costs, up to \$25,000. This may result in a larger rebate than if your company received a fixed rebate. Call 1-866-697-3732 or visit www.NYSERDA.org to get started

Equipment	Required Efficiency	Rebate			
			Equipr	nent Size	
Space Heating		(<300kBtuh)	(300-500kBtuh)	(500-1,000kBtuh)	(>1,000kBtuh)
Hot Air Furnace	90% AFUE	\$500	N/A	N/A	N/A
Hot Water Boiler	85% AFUE 90% AFUE	\$600 \$1,000	\$750 \$1,500	\$1,500 \$2,500	\$2,500 \$3,500
Steam Boiler	81% AFUE	\$600	(\$2/kBtuh) \$600-\$1,000	(\$2/kBtuh) \$1,000-\$2,000	(\$2/kBtuh) \$2,000+
Space Heating					
Unit Heater	90% AFUE	\$1,000			
Low Intensity Infrared Heater	N/A	\$500	contractor	te: all appliances mus Non-residential custo	mers applying for a
Programmable Thermostat	Energy Star®-rated	\$25	of the folio	D contractors must be wing: Federal ID numt	per, a Certificate
Water Heating				ce or a Business Certil pany's name and addre	
Storage Tank Water Heater	0.61 EF	\$150	the rebate	application to be conservation incentive Prog	idered complete.
Tankless	0.78 EF	\$350		ole for qualifying equip	

Receive these fixed rebates on select natural gas appliances and save energy and money!

Water Heater	0.78 EF	4000
Cooking		
Fryer	Energy Star®-rated	\$750
Broiler	30% AFUE	\$500
Convection Oven	40% AFUE	\$500
Combination Oven	40% AFUE	\$750
Steamer	Energy Star®-rated	\$750
Oridetta	ARM ARTIC	4500

Minimum

(AFUE) Annual Fuel Utilization Efficiency (EF) Energy Factor (ABturb 1,000 Btu per hou

and installed on or after November 1, 2007, only The fixed rebates being offered to non-residential customers are available for qualifying equipment installed on or after December 1, 2008.

Call 1-800-365-3234 or vis

www.NationalFuelForThought.com to learn more and print a non-residentia fixed rebate application.

EXHIBIT 5 Take Aways – Conservation Tip Sheet





that can help you save money...and the environment!

You'd be amazed at what you can save.

Natural gas is the most efficient and cleanest fossil fuel available. According to the U.S. Environmental Protection Agency, natural gas produces a significantly smaller volume of greenhouse gasses, compared to oil or other fossil fuels used in the production of electricity. When you conserve natural gas, you not only help your pocketbook, you reduce emissions further, making the air cleaner for everyone. Just a few small, inexpensive steps can make a big difference!

Keep The Cold Out

Reducing air leaks could cut as much as 10% from your monthly energy bill. Seal leaks around doors, windows, and other openings such as pipes or ducts, with caulk or weather stripping. The most common places where air escapes from homes are: floors, walls, ceilings

ductsfireplace

plumbing penetrations

- o doors
- windows
- g fans and ventsh electric outlets

Quick, easy energy savings

Set thermostals between 65° and 70° during the winter, and at 58° when away from the house for more than a few hours. While sleeping, add an extra blanket for warmth. Bear in mind that warmer temperatures are recommended for homes with infants or ill or elderly persons.

2 Turn down thermostats automatically without sacrificing comfort by installing a programmable thermostat. Savings: Every degree you lower your thermostal should shave about 2% off your heating bill. Change or clean furnace air filters once a month during the heating season. Furnaces concumples ensure if they

consume less energy if they "breathe" more easily. Use the arrival of your natural gas bill as your reminder to change the filter.

4 Warm air rises, so use registers to direct warm air flow across the floor. 5 Close vents and doors in unused rooms and close the damper on your fireplace when it is not in use.

Set your water heater to 120°, or the medium temperature setting, you'll enjoy energy savings without reducing comfort. A family of four, each showering for five minutes a day, uses 700 gallons of water each week. Not surprisingly, water heating is a typical family's third largest energy expense, accounting for about 14% of the utility bill.



7 Install water-flow restrictors in showerheads and faucets.

8 If radiators are located near cold walls, place a sheet of aluminum foil between the radiator and the wall to reflect heat back into the room.

9 Run washing machines and clothes dryers only with a full load.

On sunny days, let in the sun's warmth. Open draperies and blinds on windows that receive direct sunlight. Close them at night or on cloudy days to insulate against the cold air outside.

Long-term energy efficiency improvements. Consider having your home evaluated to improve its

Sources for more information on using energy Wisely. Visit the following Web sites for more information on forecasted energy proces, detailed home energy conservation strategies, and energy efficient home improvement materials:

Bill Payment Programs National Fuel offers billing arrangements or assistance programs designed to help you manage your energy bills. Now is a great time to consider enrolling in the Budget Plan to make paying wintertime bills easier. energy efficiency. Through the Home Performance with ENERGY STAR® Program, a participaling Building Performance Institute (BPI) Accredited Home Perform an assessment of your home, make recommendations for energy improvements and provide a cost estimate to do the improvements. Visit: www.getenergysmart.org.

If you are of low-to-moderate income, you can make your 1-4 family home more energy efficient and reduce your utility bills, if eligible, with the Assisted Home Performance with ENRGY STAR® Program.

 Make sure the recommended levels of insulation are installed in your attic and basement.
 Older furnaces aren't nearly

as fuel efficient as today's high

Visit www.ase.org: The Alliance to Save Energy has posted some tips on its web site to help consumers avoid "\$ticker \$hock" this winter.

Visit www.aga.org: The American Gas Association web site is a valuable resource for understanding the benefits and availability of clean, safe, reliable natural gas.

Special Assistance for Low-Income Households We care about our customers. If you have problems paying your National Fuel bills, please contact us for personal assistance. 20% more fuel than a new high efficiency furnace. And an old water heater could be just as inefficient as an older furnace. When shopping for new appliances, compare energy efficiency ratings and amunal operating costs. National Fuel's Conservation Incentive Program offers residential and nonresidential customers in National Fuel's western New York service area rebates when upgrading to qualifying energy efficient units. 20 Install storm or thermal windows and doors or double-

efficiency models. Even if it's still

in good working condition, an older furnace could be using approximately

windows and doors or doublepaned glass. A less expensive alternative is plastic sheeting, which can be temporarily fastened over doors and windows to prevent drafts and retain heat.

Visit www.energysavers.gov: This Department of Energy web site offers additional information on general energy conservation tips.

Visit www.getenergysmart.org: The New York State Energy Research and Development Authority offers energy-saving tips and information on selecting a contractor for your energy efficient upgrades.



NationalFuelForThought.com

If you have a question, problem or request, please call us Monday through Friday, Zam to 6pm, Buffalo, NY area; (716) 686-6123 All other areas; (800) 365-3234 For oss emergencies, call 1-800-444-3130. 24 hours a day, 7 days a week. Ptendon Benciar P

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1	A National Fuel Gas Distribution Corporation	1	В		С		D	E			F	Γ	G
2													
3													
	Program Measurement and Verification Summary												
6	Date: 20 Month Period Ending September 2009 11/24/2009	0											
7	Quarter	Year		<u> </u>		1		1		-			
8		7	Sep-0	9				+		+		+	÷ 10.
9		Total R	esidential										
10						Resid	dential Appli	ance Rebate	es	1		,	
11		Rebate Fu	pliance es - Hot Ai irnace idential	r	Appliance Rebates - Hot Water Boiler Residential	Reba	ppliance ites - Stean Boiler esidential	Applia Rebate Program Tsta Resider	es - lable t	F Sto Wa	ppliance Rebates - brage Tank ater Heater esidential		Appliance Rebates - Storage nkless Wate Heater Residential
	Base Analysis		luontia	+	rtco.dontiai		Jonachtian	Realder			esidentia	╀─	Residential
	I. Customer and Volume Information	1								1		+	
	Number of Customers Eligible		351,219		93,658		23,415		8,292		468,292		23,415
	Participation Rate Total Number of Participants		3.59% 12,613		1.00% 934		0.18% 42	1	2.62%		0.54%		5.34%
10			12,010		934		42	'	2,255		2,516		1,250
17	Total Annual Mcf Saved		283,793		17,839		773	2	9,412	İ.	13,586		13,375
18	DTH Conversion		1.035		1.035	1	1.035		1.035		1.035		1.035
10	Total DTH Saved		202 70-		40.40							1	
19	i otar o ni i Saveu		293,725		18,464	[800	3	0,441		14,062		13,843
20	Mcf Saved per Participant Base	1	22.50	1	19.10		18.40		2.40		5.40	1	10.70
		1									0.10		
	Multiple Factor for Sensitivity Analysis		0%		0%		0%		0%		0%		0%
	Mcf Saved per Participant DTH Saved per Participant	1	22.50 23.29		19.10 19.77		18.40 19.04		2.40		5.40	1	10.70
	Estimated Peak Day Impact Mcf	1	23.29		19.77		19.04		2.48 269		5.59 124		11.07 122
25	Estimated Peak Day Impact DTH		2,682	1	169		7	1	203		124		122
26	Total Average Annual Accounts		482,775		482,775		482,775	48:	2,775		482,775		482,775
~ ~	Impact on Total Average Annual Usage Per Account Per			1								1	
	Mcf II. Program Cost Information	 	0.59		0.04		0.00		0.06		0.03		0.03
29	Company Direct Costs	\$	3,878,498	\$	380,605	\$	8,715	\$ 35	5,031	\$	393,754	\$	445,625
30	Company Admin Costs	ŝ	146,700	ŝ	14,396	\$	330		3,429	\$	14,893	\$	16,855
31	Company Advertising Costs		1,194,752		117,243	\$	2,685		9,365	\$	121,294	\$	137,273
32	Total Initial Program Costs - Company		5,219,949	\$	512,244	\$	11,729		7,825	\$	529,941	\$	599,753
	Total Initial Program Costs - Participant		8,829,100	\$	1,494,400	\$	29,400		5,375	\$	503,200	\$	437,500
34 35	Total Initial Program Costs		4,049,049	\$	2,006,644	\$	41,129		4,200	\$	1,033,141	\$	1,037,253
	Per Participant Initial Program Costs - Company Per Participant Initial Program Costs - Participant	\$ \$	307.50 700.00	\$	407.50 1,600.00	\$ \$	207.50		28.97	\$	156.50	\$	356.50
	Total Initial Program Costs per Annual Participant	\$	1,007.50	\$	2,007.50	ծ \$	700.00 907.50		25.00 53.97	\$ \$	200.00 356.50	\$	350.00 706.50
	Annual Ongoing Costs - Company per Participant	\$	-	ŝ	2,007.00	\$	-	\$ S	-	\$		\$	700.50
	Annual Ongoing Costs - Participant per Participant	\$	-	\$	-	\$	-	\$		\$	-	\$	-
	Total Annual Ongoing Costs per Participant	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Annual Ongoing Costs - Company	\$	-	\$		\$		\$	~	\$	-	\$	-
	Annual Ongoing Costs - Participant Total Annual Ongoing Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	III. Discount Assumptions	\$	-	\$		\$		\$	-	\$	•	\$	
15	Anticipated Life of Program Measure (Years)		17		17		17		17		14		14
6	Discount Rate		5.50%		5.50%		5.50%	ŧ	5.50%		5.50%		5.50%
	PVIFA		10.8646		10.8646		10.8646		8646		9.5896		9.5896
	V. Incremental Savings												
	Natural Gas Supply Rate (\$/Mcf)	\$	12.00	\$		\$	12.00		2.00	\$	12.00	\$	12.00
	Natural Gas Supply Rate (\$/Dth) Annual NGS Savings per Participant	\$ \$	11.59 270.00	\$		\$	11.59		1.59	\$	11.59	\$	11.59
	Fotal NGS Savings per Participant		3,405,510	\$ \$		\$ \$	220.80 9,274		8.80	\$ \$	64.80 163,037	\$ \$	128.40 160,500
3	/. Direct Cost Benefit Summary			Ť	2,4,0/0	¥	0,217	- 002	.,	. <u> </u>	100,001	Ψ	.00,000
	Present Value of Participant Savings	\$	2,933.44	\$		\$	2,398.91		2.90	\$	621.41	\$	1,231.31
	Present Value of Total Savings	\$ 36	6,999,533	\$	2,325,817	\$	100,754	\$ 3,834	,598		1,563,466	\$	1,539,138
	Present Value of Total Initial Program Costs per Annual Participant	æ	4 000			e		¢		*		~	
	Present Value of Total Initial Program Costs	\$ \$ 14	1,008 1,049,049	\$ \$		\$ \$	908 41,129	\$ \$ 784	54 ,200	\$ \$	357 1,033,141	\$ \$	707 1,037,253
8	IRC	↓ I=	2.63	ľ	2,000,044	Ψ	2.45		4.89	Ψ	1,033,141	φ	1,037,253
9	/I. TRC-WNY												
	VNY Incremental Expenditures	\$ 12	,854,298	\$		\$				\$	911,847	\$	899,980
	VNY Expenditure Multiplier	•	0.46		0.46	•	0.46		0.49		0.46		0.46
	VNY Expenditure Benefits Advertising		,912,977 ,194,752	\$ \$		\$ ¢				\$	419,450	\$	413,991
	Adventising Multiplier	ψĨ	,194,752	φ	0.87	\$	2,685 0.87		,365	\$	121,294 0.87	\$	137,273 0.87
	Advertising Benefits	\$ 1	,039,434	\$		\$				\$	105,526	\$	119,427
S I	VNY Expenditure & Adv Benefits	\$6	,952,411	\$	971,126	\$				\$	524,975	\$	533,418
	Customer Net Savings	\$ 22	,950,484	\$		\$		\$ 3,050	,398	\$	530,324	\$	501,886
	VNY Income Multiplier	e	0.49	¢	0.49	¢	0.49		0.49	•	0.49	~	0.49
	VNY Customer Net Savings Benefits otal WNY Benefits		,245,737 ,198,148	\$ \$		\$ \$		\$ 1,494 \$ 1,920		\$ \$		\$ ¢	245,924
	RC-WNY	ψ 10	3.93	φ	1,127,521	ψ	49,236		7.34	φ	784,834 2.27	\$	779,342 2.24
	'll. Societal Test		0.00		1.12		5.05				2.21		2.24
2 I '	invironmental												
3				\$	176,028	\$	7,626	\$ 290	219	\$	118,330	\$	116,489
3 I 4	Total	\$2	,800,287	÷	170,020	Ψ	,,020]						
3 I 4 5 (Total bther	\$2	,800,287	Ť	170,020	Ψ	,,020					-	
3 I 4 5 6	Total Ither Total									•			
3 I 4 5 0 6 7 1	Total bther	\$ 2	,800,287 ,800,287 ,997,968	• \$ \$	176,028	\$ \$	7,626			\$ \$		\$ \$	116,489 2,434,969

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	A	В	с	D	E	F	G
H	A National Fuel Gas Distribution Corporation				<u> </u>		
	New York Division						
	Conservation Incentive Program						
	Program Measurement and Verification Summary						
	Date: 20 Month Period Ending September 2009						
6							
	Quarter	Year	1	· · · · ·		T	·····
8		Sep-09					
9		Total Residential				+	
10	-	Total Residentia	L	Residential Applia	ance Rehates	L	l
H	4		1	T			
							Appliance
					Appliance	Appliance	Rebates -
		Appliance	Appliance	Appliance	Rebates -	Rebates -	Storage
		Rebates - Hot Air		Rebates - Steam		Storage Tank	Tankless Water
		Furnace	Water Boiler	Boiler	Tstat	Water Heater	Heater
11		Residential	Residential	Residential	Residential	Residential	Residential
	Adjustment Detail						
	I. Spillover						
	Total Spillover Impact (Mcf)	-	-	-	-	-	- 1
83	Total Participants	12,613	934	42	12,255	2,516	1,250
84	Adjustment to Per Participant Volume Due to Spillover	-	-	-	-	-	-
	II. Free Riders						
86	Mcf Saved per Participant	22.50	19.10	18.40	2.40	5.40	10.70
	Free Ridership %	19%	19%	19%	19%	19%	19%
	1						
88	Adjustment to Per Participant Volume Due to Free Riders	4.28	3.63	3.50	0.46	1.03	2.03
89	III. Snapback						
90	Total Snapback Impact (Mcf)	11,705	867	39	-	-	- 1
91	Total Participants	12,613	934	42	12,255	2,516	1,250
	Adjustment to Per Participant Volume Due to Snapback	0.93	0.93	0.93	-	-	-
	IV. Total Volume Adjustment						
	Total Volume Adjustments	(5.20)	(4.56)	(4.42)	(0.46)	(1.03)	(2.03)
	Adjustment Impact	,,		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
	I. Customer and Volume Information						
	Number of Customers Eligible	351,219.00	93,658.00	23,415.00	468,292.00	468,292.00	23,415.00
	Participation Rate	3.59%	1.00%	0.18%	2.62%	0.54%	5.34%
	Annual Number of Participants	12,613	934	42	12,255	2,516	1,250
	Total Mcf Adjusted	(65,625)	(4,256)	(186)	(5,588)	(2,581)	(2,541)
	DTH Conversion	1.035	1.035	1.035	1.035	1.035	1.035
	Total DTH Adjusted	(67,922)	(4,405)	(192)	(5,784)	(2,672)	(2,630)
	Mcf Adjusted per Participant	(5.20)	(4,156)	(4.42)	(0.46)	(1.03)	(2.03)
	DTH Adjusted per Participant	(5.39)	(4.72)	(4.58)	(0.47)	(1.06)	(2.10)
	II. Program Cost Information	(0.00)	(1.72)	(1.00)	(0)	(1.00)	
	Company Direct Costs	\$-	s -	\$ -	\$ -	\$-	\$ -
	Company Admin Costs	• -	•	•	-	-	·
	Company Admin Costs						
	Total Initial Program Costs - Company	\$-	\$-	s -	\$-	\$-	\$-
		\$ (1,677,529)	\$ (283,936)	•			\$ (83,125)
	Total Initial Program Costs - Participant						\$ (83,125)
	Total Initial Program Costs	\$ (1,677,529)			\$ (58,211) \$ -	\$ (95,608) \$ -	\$ (83,125) \$ -
	Per Participant Initial Program Costs - Company	\$ -	\$ - \$ (204.00)	\$ - \$ (122.00)	•		
	Per Participant Initial Program Costs - Participant						\$ (66.50) \$ (66.50)
	Total Initial Program Costs per Annual Participant	\$ (133.00)	\$ (304.00)	\$ (133.00)	\$ (4.75)	\$ (38.00)	\$ (66.50)
	Annual Ongoing Costs - Company per Participant					1 1	
	Annual Ongoing Costs - Participant per Participant						
	Total Annual Ongoing Costs per Participant						
	Annual Ongoing Costs - Company						
	Annual Ongoing Costs - Participant						
	Total Annual Ongoing Costs				******	ļļ	
	III. Discount Assumptions						
		- 1	-	-			-
122	Anticipated Life of Program Measure (Years)	1		5.50%	5.50%	5.50%	5.50%
122 123	Discount Rate	5.50%	5.50%	5.50 %			
122 123 124	Discount Rate PVIFA	5.50% -	5.50%		-	_	
122 123 124 125	Discount Rate PVIFA IV. Incremental Savings	-	-	-	-	-	
122 123 124 125 126	Discount Rate PVIFA IV. Incremental Savings Natural Gas Supply Rate (\$/Mcf)	- \$ 12.00	- \$ 12.00	- \$ 12.00	- \$ 12.00	- \$ 12.00	\$ 12.00
122 123 124 125 126 127	Discount Rate PVIFA IV. Incremental Savings Natural Gas Supply Rate (\$/Mcf) Natural Gas Supply Rate (\$/Dth)	- \$ 12.00 \$ 11.59	- \$ 12.00 \$ 11.59	- \$ 12.00 \$ 11.59	\$ 12.00 \$ 11.59	\$ 11.59	\$ 11.59
122 123 124 125 126 127	Discount Rate PVIFA IV. Incremental Savings Natural Gas Supply Rate (\$/Mcf)	- \$ 12.00	- \$ 12.00 \$ 11.59	\$ 12.00 \$ 11.59 \$ (53.09)	\$ 12.00 \$ 11.59 \$ (5.47)	\$ 11.59 \$ (12.31)	\$ 11.59 \$ (24.40)

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2 3 4 5 6 7 8 9 10 11 130 131 132 133 134 135	A National Fuel Gas Distribution Corporation New York Division Conservation Incentive Program Program Measurement and Verification Summary Date: 20 Month Period Ending September 2009 11/24/2009 Quarter	7 7	B ar Sep-09		С		D		E	<u> </u>	F		G
2 3 4 5 6 7 8 9 10 11 130 131 132 133 134 135	New York Division Conservation Incentive Program Program Measurement and Verification Summary Date: 20 Month Period Ending September 2009 11/24/2009	7 7				_				-	_	_	
3 4 5 6 7 8 9 10 11 130 131 132 133 134 135	Conservation Incentive Program Program Measurement and Verification Summary Date: 20 Month Period Ending September 2009 11/24/2009	7 7											
4 5 6 7 8 9 10 11 130 131 132 133 134 135	Program Measurement and Verification Summary Date: 20 Month Period Ending September 2009 11/24/2009	7 7		1		_							
5 6 7 8 9 10 11 130 131 132 133 134 135	Date: 20 Month Period Ending September 2009 11/24/2009	7 7		1									
6 7 8 9 10 11 130 131 132 133 134 135	11/24/2009	7 7		1									
7 8 9 10 11 130 131 132 133 134 135		7 7		Τ									
8 9 10 11 130 131 132 133 134 135		7						T		—		T	
9 10 11 130 131 132 133 134 135		Tot	3ep-08			+	12-10	–		+		┿───	
10 11 130 131 132 133 134 135		100	al Residential	<u>'</u>		+		╂		+		+	
11 130 131 132 133 134 135		1	arresidential				esidential Applia	anc	e Rebates	<u> </u>		<u> </u>	
130 131 132 133 134 135		-		1		T		T		T		Г	
130 131 132 133 134 135								1					
130 131 132 133 134 135									Appliance		Appliance		Appliance Rebates -
130 131 132 133 134 135			Appliance		Appliance		Appliance		Rebates -		Rebates -	'	Storage
130 131 132 133 134 135		P.	bates - Hot Air		Rebates - Hot	6	ebates - Steam		Programable	e	Storage Tank		storage nkless Wa
130 131 132 133 134 135		1.0	Furnace		Water Boiler		Boiler	1	Tstat		Nater Heater	1 ai	Heater
130 131 132 133 134 135			Residential		Residential		Residential		Residential		Residential	6	tesidentia
131 132 133 134 135	Adjusted Analysis		reordentia	+	Residential	+	Residentia	\vdash	Residential	+	Residential	<u>+-^</u>	concentio
132 133 134 135	I. Customer and Volume Information	+		+		+				+			
133 134 135	Number of Customers Eligible		351,219		93,658	1	23,415		468,292		468,292		23,4
134 135	Participation Rate		3.59%		1.00%		0.18%		2.62%		0.54%		5.3
135	Total Number of Participants		12,613		934		42		12,255		2,516		1,2
136	Total Mcf Saved		218,167		13,583		587		23,824		11,005		10,8
	DTH Conversion	1	1.035	1	1.035	1	1.035	1	1.035	1	1.035		1.0
	Total DTH Saved		225,803	1	17,839	1	608	1	24,658		11,390		11,2
	Mcf Saved per Participant	1	17.30	1	14.54		13.98		1.94		4.37	1	8
	DTH Saved per Participant		17.90	1	19.10	1	14.47		2.01		4.53		8
140		1											
	Estimated Peak Day Impact Mcf		1,992.39	1	124.05	1	5.36		217.57		100.50		98
	Estimated Peak Day Impact Dth	1	2,062.13		128.39	1	5.55		225.18		104.02	1	102
	Total Average Annual Accounts	1	482,775		482,775	1	482,775		482,775		482,775	1	482,7
	Impact on Total Average Annual Usage Per Account	+	0.45	<u> </u>	0.03		0.00	ļ	0.05	⊢	0.02	<u> </u>	0.
	II. Program Cost Information	1.	0.070 400		200.005				055.001	1	000 75 -		
	Company Direct Costs Company Admin Costs	\$ \$	3,878,498		380,605		8,715	\$	355,031	\$	393,754	\$	445,6
	Company Admin Costs	\$	146,700		14,396	\$	330	\$	13,429	\$	14,893	\$	16,8
	Total Initial Program Costs - Company	\$	1,194,752 5,219,949	\$ \$	117,243 512,244	\$ \$	2,685 11,729	\$ \$	109,365 477,825	\$ \$	121,294 529,941	\$ \$	137,2
	Total Initial Program Costs - Company	\$	7,151,571	ŝ	1,210,464	\$	23,814	э \$	248,164	\$	407,592	\$	599,7 354,3
	Total Initial Program Costs	\$	12,371,520	\$	1,722,708	\$	35,543	\$	725,989	\$	937,533	\$	954,1
	Per Participant Initial Program Costs - Company	\$	413.85	ŝ	548.44	\$	279.27	\$	38.99	\$	210.63	\$	479
	Per Participant Initial Program Costs - Participant	\$	567.00	ŝ	1,296.00	\$	567.00	\$	20.25	\$	162.00	\$	283.
	Total Initial Program Costs per Annual Participant	\$	980.85	ŝ	1,844.44	\$	846.27	\$	59.24	\$	372.63	\$	763.
	Annual Ongoing Costs - Company per Participant	\$	-	ŝ	-	\$	-	\$		ŝ	-	\$	-
	Annual Ongoing Costs - Participant per Participant	\$	-	\$	-	\$	-	\$	-	s	-	\$	-
	Total Annual Ongoing Costs per Participant	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
58	Annual Ongoing Costs - Company	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
159	Annual Ongoing Costs - Participant	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Total Annual Ongoing Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	II. Discount Assumptions												
	Anticipated Life of Program Measure (Years)		17		17		17		17		14		
	Discount Rate		5.50%		5.50%		5.50%		5.50%		5.50%		5.5
	PVIFA		10.86		10.86		10.86		10.86		9.59		9.
	V. Incremental Savings												
	Natural Gas Supply Rate (\$/Mcf)	\$	12.00	\$	12.00	\$	12.00	\$	12.00	\$	12.00	\$	12.
읤	Natural Gas Supply Rate (\$/Dth)	\$	11.59	\$	11.59	\$	11.59	\$	11.59	\$	11.59	\$	11.
	Annual NGS Savings per Participant	\$	207.56	\$	174.52	\$) 6	167.71	\$ ¢	23.33	\$	52.49	\$	104.
	Total NGS Savings 7. Direct Cost Benefit Summary	1.2	2,618,005	\$	162,998	\$	7,044	\$	285,885	\$	132,060	\$	130,0
	Present Value of Participant Savings	\$	2,255.10	\$	1,896.05	\$	1,822.13	\$	253 45	¢	503 34	¢	007
	Present Value of Participant Savings	\$	2,255.10	\$	1,896.05	\$ \$	76,529	ֆ \$	253.45 3,106,025	\$ \$	503.34 1,266,407	\$ \$	997. 1 246 7
	Present Value of Total Initial Program Costs per Annual	ľ	20,443,397	Ψ	1,770,909	Ŷ	10,529	φ	3,100,025	φ	1,200,407	Φ	1,246,7
	Participant	\$	981	\$	1,844	\$	846	\$	59	\$	373	\$	7
	Present Value of Total Initial Program Costs	\$	12,371,520	\$	1,722,708	\$	35,543		725,989	9 \$		э \$	954.1
	RC	ľ	2.30	*	1.03	1	2.15	Ŧ	4.28	Ť	1.35	*	1.
	/I. TRC-WNY	 	2.00										
	VNY Incremental Expenditures	\$	11,176,769	\$	1,605,465	\$	32,859	\$	616,623	\$	816,239	\$	816,8
78 V	VNY Expenditure Multiplier		0.46		0.46	•	0.46	-	0.49	·	0.46		0.
	VNY Expenditure Benefits	\$	5,141,314	\$	738,514	\$	15,115	\$	302,145	\$		\$	375,7
	dvertising	\$	1,194,752	\$	117,243	\$	2,685		109,365	\$	121,294	\$	137,2
	dverttising Multiplier		0.87		0.87		0.87		0.87		0.87		0.
	dvertising Benefits	\$	1,039,434	\$	102,002	\$	2,336		95,148	\$		\$	119,4
	VNY Expenditure & Adv Benefits	\$	6,180,747	\$	840,516	\$		\$	397,293	\$		\$	495,1
	Customer Net Savings	\$	16,072,077	\$	48,200	\$	40,986	\$	2,380,036	\$		\$	292,5
55IV	VNY Income Multiplier		0.49	•	0.49	-	0.49	•	0.49	~	0.49		0.
	VNY Customer Net Savings Benefits	\$	7,875,317	\$	23,618	\$	20,083		1,166,218	\$		\$	143,3
36 V	otal WNY Benefits	\$	14,056,065	\$	864,134	\$		\$	1,563,511	\$		\$	638,5
86 V 87 T	RC-WNY	ļ	3.44		1.53		3.21		6.43		2.04		1.
86 V 87 T 88 T	II. Societal Test												
86 V 87 T 88 T 89 V	nvironmental	1				•	F 700	•	005 070	•	05.04-		
86 V 87 T 88 T 89 V 90 E		¢	2450 700	¢	404 000 1								
86 V 87 T 88 T 89 V 90 E 91	Total	\$	2,152,736	\$	134,030	\$	5,792	\$	235,078	\$	95,847	\$	94,3
86 V 87 T 88 T 89 V 90 E 91 C	Total Nher		2,152,736		134,030				235,078				94,3
86 V 87 T 88 T 89 E 90 E 91 C 93	Total Ither Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	94,3
86 V 87 T 88 T 89 E 90 E 91 92 C 93 T	Total Nher		2,152,736		134,030		5,792	\$	235,078		95,847	\$ \$	94,34 - 94,34 1,979,60

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	А	Н	1	1	—	J	—	к	1	L	T	M	7
1	National Fuel Gas Distribution Corporation			· · · · · ·	1		-		L	<u> </u>	- I	IVI	
3	Conservation Incentive Program												Appendix E
	Program Measurement and Verification Summary Date: 20 Month Period Ending September 2009												Page 4 of 18
6	11/24/2009	·										11-11	
8	Quarter 7	,	-		+		+		-		+		-
9 10			1		1		1				t		-
- 10			+	#faire1	+		+				┢		
11		Total Res Rebates		.IURP		Total Res	Τ	otal Non Res	1	General	_		
12	Base Analysis	Repates		LIORF	+	Total Res		Rebates		Outreach		otal Program	
	I. Customer and Volume Information Number of Customers Eligible			15,000				34,100		482,775			
15	Participation Rate			9.41%	,			1.58%		100.00%			
16	Total Number of Participants			1,411				539		482,775			
	Total Annual Mcf Saved	358,778		74,783		433,561		32,095		482,775		948,431	
18	DTH Conversion	1.035		1.035		1.035		1.035		1.035		1.035	
19	Total DTH Saved	371,335	ļ	77,400		448,736		33,218		499,672		981,626	
20	Mcf Saved per Participant Base			53.00				59.55	[1.00			
24	Multiple Factor for Sensitivity Analysis												
22	Mcf Saved per Participant			0% 53.00	1			0% 59.55	1	0% 1.00			
	DTH Saved per Participant Estimated Peak Day Impact Mcf	3,277		54.86 683		3,959		61.63 293		1.04 4,409		0 004	
25	Estimated Peak Day Impact DTH	3,391		707		4,098		303		4,409 4,563		8,661 8,965	
26	Total Average Annual Accounts Impact on Total Average Annual Usage Per Account Per	482,775		482,775		482,775		34,100		482,775			
	Mcf	0.74		0.15		0.90		0.94		1.00			
	II. Program Cost Information Company Direct Costs	\$ 5,462,227	\$ 4	,698,109	\$	10,160,336	\$	425,865			\$	10,586,201	
30	Company Admin Costs	\$ 206,603	\$	747,250	\$	953,853	\$	28,354			\$	982,207	
	Company Advertising Costs Total Initial Program Costs - Company	\$ 1,682,611 \$ 7,351,442	\$ \$5	- 5,445,359	\$ \$		\$ \$	131,186 585,404		1,813,797 1,813,797	\$	3,627,594 15,196,002	
33	Total Initial Program Costs - Participant	\$ 11,599,975	\$	-	\$	11,599,975	\$	1,792,823	\$	-	\$	13,392,798	
	Total Initial Program Costs Per Participant Initial Program Costs - Company	\$ 18,951,417		5,445,359 3,859.22	\$	24,396,776	\$ \$	2,378,227 1,086.09		1,813,797 3.76	\$	28,588,800	
36	Per Participant Initial Program Costs - Participant		\$	-			\$	3,326.20	\$	-			
	Total Initial Program Costs per Annual Participant Annual Ongoing Costs - Company per Participant		\$ \$	3,859.22			\$ \$	4,412.29	\$ \$	3.76			
39	Annual Ongoing Costs - Participant per Participant		\$	-			\$	-	\$	-			
	Total Annual Ongoing Costs per Participant Annual Ongoing Costs - Company		\$ \$	-			\$ \$	-	\$	-			
	Annual Ongoing Costs - Participant Total Annual Ongoing Costs		\$	-			\$	-	\$	-			
	III. Discount Assumptions		\$	-			\$	-	\$				
	Anticipated Life of Program Measure (Years) Discount Rate	16.67 5.50%		25 5.50%		19 5 50%		17		1.75		17.3	
47	PVIFA	5.50% 10.7253		5.50% 13.4139		5.50% 11.4405		5.50% 10.8646		5.50% 1.6262		5.50% 10.9962	
	IV. Incremental Savings Natural Gas Supply Rate (\$/Mcf)		\$	12.00			\$	12.00	¢	12.00			
50	Natural Gas Supply Rate (\$/Dth)		\$	11.59			\$	11.59	\$	11.59			
	Annual NGS Savings per Participant Total NGS Savings	\$ 4,305,337	\$ \$	636.00 897,396	\$	5,202,733	\$ \$	714.55 385,140		12.00 5,793,300	\$	11,381,173	
53	V. Direct Cost Benefit Summary	,000,007			Ť	5,202,100	-				Ψ	1,001,110	
	Present Value of Participant Savings Present Value of Total Savings	\$ 46,363,307		8,531.26 ,037,610	\$	58,400,916	\$	7,763.26 4,184,398	\$ \$	19.51 9,421,041	\$	72,006,356	
	Present Value of Total Initial Program Costs per Annual				Ĩ						*		
57	Participant Present Value of Total Initial Program Costs	\$ 18,951,417	\$ \$5,	3,859 445,359,	\$	24,396,776	\$ \$	4,412 2,378,227		4 1,813,797	\$	28,588,800	
58	TRC VI. TRC-WNY	2.45		2.21		2.39		1.76		5.19		2.52	
60	WNY Incremental Expenditures	\$ 17,268,805	\$5,	,445,359	\$	22,714,164	\$	2,247,041	\$	-	\$	24,961,206	
	WNY Expenditure Multiplier WNY Expenditure Benefits		¢ ^	0.46	¢	10 160 761		0.46	¢	0.46			
63	Advertising		\$2, \$	-	\$ \$	10,468,761 1,682,611	\$ \$	1,033,639	\$ \$	1,813,797	\$ \$	11,502,400 3,627,594	
	Adverttising Multiplier Advertising Benefits		\$	0.87	\$	1,463,872	\$	0.87		0.87	\$	3,156,007	
66	WNY Expenditure & Adv Benefits	\$ 9,427,768	\$2,		\$	11,932,633	\$	1,147,770	\$	1,578,003	\$	14,658,407	
	Customer Net Savings WNY Income Multiplier	\$ 27,411,890	\$6,	592,251 0.49	\$	34,004,140	\$	1,806,171 0.49	\$	7,607,244	\$	43,417,556	
69	WNY Customer Net Savings Benefits			230,203			\$	885,024		3,727,550		21,274,602	
	Fotal WNY Benefits	\$ 22,859,594 3.65	\$ 5,	735,068 3.26	\$	28,594,661 3.57	\$	2,032,794 2.61	\$	5,305,553 8.12	\$	35,933,009 3.78	
72	/II. Societal Test	0.00		0.20		0.07		2.01		0.12		3.10	
	Environmental Total	\$ 3,508,978	\$	911,059	\$	4,420,037	\$	316,694	\$	713,026	\$	5,449,756	
75	Dther				-	.,,	•	5.5,007	•	,	*	-,	
	Total Total Incremental Societal Benefits	\$ 3,508,978	\$ 9	911,059	\$	4,420,037	\$	316,694	\$	713,026	\$	5,449,756	
78	otal Benefits W/ TRC WNY	\$ 72,731,878		683,736		91,415,614	\$	6,533,886		5,439,620		13,389,120	
19	Societal Test	3.84		3.43		3.75		2.75		8.51		3.97	

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	ional Fuel Gas Distribution Corporation						
	v York Division						
	nservation Incentive Program						
	gram Measurement and Verification Summary						
Date	e: 20 Month Period Ending September 2009						
	. 11/24/2009	·					
Qua	arter						
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		Tetal Dee			THUND		
1		Total Res			Total Non Re		
	and Data II	Rebates	LIURP	Total Res	Rebates	Outreach	Total Program
	ustment Detail						
	billover						
	al Spillover Impact (Mcf)				-	-	
	al Participants		1,3	59	539	482,775	
	stment to Per Participant Volume Due to Spillover		-		-	-	
	ree Riders						1
	Saved per Participant		53.	00	59.55	1.00	1
7 Free	e Ridership %		1	0%	109		,
1						1	
3 Adju	stment to Per Participant Volume Due to Free Riders		-		5.95	0.19	
	Snapback		1		5100	1	1
	I Snapback Impact (Mcf)		1,2	51	-		1
	l Participants		1,3		539	482,775	
	stment to Per Participant Volume Due to Snapback		0.		-	-	
	otal Volume Adjustment		t				1
	Volume Adjustments		(0.	3)	(5.95	(0.19)	
	Istment Impact		10.		(0.90	(0.19)	
	stomer and Volume Information						
	ber of Customers Eligible		45.000			400	
	cipation Rate		15,000.		34,100.00		1
			9.4		1.58%		
	ual Number of Participants		1,4		539		1
	Mcf Adjusted		(1,3		(3,210		
	Conversion		1.0		1.035		
	I DTH Adjusted		(1,3		(3,322		
	Adjusted per Participant		(0.9		(5.95		
	Adjusted per Participant		(0.9	6)	(6.16) (0.20)	
	ogram Cost Information						
	pany Direct Costs		\$-		\$-	\$ -	}
	pany Admin Costs						
	pany Advertising Costs						
	Initial Program Costs - Company	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Initial Program Costs - Participant		\$ -	1	\$ (179,282) \$ -	-
	Initial Program Costs		\$ -		\$ (179,282		
	Participant Initial Program Costs - Company		\$ -		\$ (175,202	\$ -	
	Participant Initial Program Costs - Company Participant Initial Program Costs - Participant		\$ -	1	\$ (332.62		
	Initial Program Costs per Annual Participant		\$- \$-				
	al Ongoing Costs - Company per Participant		Ψ -		\$ (332.62	/ ⊅ -	
	al Ongoing Costs - Participant per Participant				1		
	Annual Ongoing Costs per Participant						
	al Ongoing Costs - Company			1			
	al Ongoing Costs - Participant						
	Annual Ongoing Costs						
	iscount Assumptions						
2 Antic	ipated Life of Program Measure (Years)		-		-		
3 Disco	ount Rate		5.50	%	5.50%	5.50%	
PVIF			-	· · ·	-	-	
	ncremental Savings					†	
	ral Gas Supply Rate (\$/Mcf)		\$ 12.0		\$ 12.00	\$ 12.00	
	ral Gas Supply Rate (\$/Mc1)						
Ann	al NGS Savings per Participant				\$ 11.59		
MINU			\$ (11.1 \$ (15,71		\$ (71.45) \$ (38,514)	\$ (2.28) \$ (1,100,727)	
	NGS Savings					IN (1 100 727)	

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- 1	A National Fuel Gas Distribution Corporation	1	Н		1		J	1	K	1	L	1	M	4
2	New York Division													
	Conservation Incentive Program													Appendix E
	Program Measurement and Verification Summary													Page 6 of 18
6	Date: 20 Month Period Ending September 2009 11/24/2009													Page 0 01 10
	Quarter	°—		·		Т		—	· · ·	T		1		-
8	1 7			+		+		-	····	+		+		4
9 10														1
10						+								
		1												
		1 -	Total Res					1-	otal Non Res		General			
11			Rebates		LIURP		Total Res	1.	Rebates		Outreach	Т	otal Program	
	Adjusted Analysis									1		† ·		1
	I. Customer and Volume Information					Т				1		Г		1
	Number of Customers Eligible				15,000				34,100		482,775			
	Participation Rate Total Number of Participants			1	9.41%	, I			1.58%		100.00%	·		
	Total Mcf Saved	1	278,000		1,411 73,474		351,473	1	539 28,886		482,775 391,048	1	771,407	
136	DTH Conversion	1	1.035		1.035	1	1.035		1.035		1.035		1.035	
	Total DTH Saved		291,510		76,045		367,556		29,897		404,734		802,187	
	Mcf Saved per Participant				52.07				53.59		0.81			
139	DTH Saved per Participant				53.89				55.47		0.84			
	Estimated Peak Day Impact Mcf		2,538.81	1	670.99		3,209.80	1	263.79		3,571.21		7.044.81	
	Estimated Peak Day Impact Dth		2,627.67		694.48		3,322.14		263.79		3,696.20		7,044.81	
	Total Average Annual Accounts	1	482,775		482,775		482,775		2.0.00		482,775		.,	
	Impact on Total Average Annual Usage Per Account		0.58		0.15		0.73				0.81			
	II. Program Cost Information		E 400 000		4 000		40.400.000							
	Company Direct Costs Company Admin Costs	\$ \$	5,462,227 206,603	\$	4,698,109	\$			425,865	\$	-	\$		
	Company Advertising Costs	\$	1,682,611	\$	747,250	\$ \$			28,354 131,186	\$ \$	- 1,813,797	\$ \$	982,207 3,627,594	
	Total Initial Program Costs - Company	s	7,351,442	\$	5,445,359	\$		ŝ	585,404	\$	1,813,797	\$		
	Total Initial Program Costs - Participant	\$	9,395,980	\$	-	\$		\$	1,613,540	\$	-	\$		
	Total Initial Program Costs	\$	16,747,422	\$	5,445,359	\$	22,192,781	\$	2,198,945	\$	1,813,797		26,205,522	
	Per Participant Initial Program Costs - Company			\$	3,859.22			\$	1,086.09	\$	3.76			
	Per Participant Initial Program Costs - Participant Total Initial Program Costs per Annual Participant			\$ \$	3,859.22			\$ \$	2,993.58 4,079.67	\$ \$	-			
	Annual Ongoing Costs - Company per Participant			\$	3,039.22			\$	4,079.67	э \$	3.76			
	Annual Ongoing Costs - Participant per Participant			\$	-			\$	-	\$	-			
	Total Annual Ongoing Costs per Participant			\$	-			\$	-	\$	-			
	Annual Ongoing Costs - Company			\$	-			\$	-	\$	-			
	Annual Ongoing Costs - Participant			\$	-			\$	-	\$	-			
	Total Annual Ongoing Costs III. Discount Assumptions	ļ		\$	-	⊢		\$	-	\$	-			
	Anticipated Life of Program Measure (Years)		16.67		25		19		17		1.75		17	
	Discount Rate		5.50%		5.50%		5.50%		5.50%		5.50%		5.50%	
	PVIFA		10.73		13.41		11.51		10.86		1.63		11.02	
	IV. Incremental Savings													
	Natural Gas Supply Rate (\$/Mcf) Natural Gas Supply Rate (\$/Dth)			\$	12.00 11.59			\$ \$	12.00	\$ \$	12.00			
	Annual NGS Savings per Participant			\$	624.86			\$	11.59 643.09	\$ \$	11.59 9.72			
	Total NGS Savings	\$	3,335,996	\$	881,683	\$	4,217,679		346,626	Ф \$	4,692,573	\$	9,256,878	
170	V. Direct Cost Benefit Summary					Ē		Ĺ.			, _,_, _	-		
	Present Value of Participant Savings			\$	8,381.88			\$	6,986.94	\$	15.81			
	Present Value of Total Savings	\$ 3	35,910,169	\$	11,826,838	\$	47,737,006	\$	3,765,958	\$	7,631,044	\$	59,134,008	
	Present Value of Total Initial Program Costs per Annual Participant			\$	3,859			\$	4,080	\$	اړ			
	Present Value of Total Initial Program Costs	\$	16,747,422	э \$	3,859 5,445,359	\$	22,192,781	₽ \$	2,198,945		4 1,813,797	\$	26,205,522	
175		Ť	2.14	Ť	2.17	ľ	2.15	ľ	1.71	*	4.21	*	2.203,322	
	VI. TRC-WNY													
	WNY Incremental Expenditures	\$ ⁻	15,064,810	\$	5,445,359	\$	20,510,169	\$	2,067,759	\$	-	\$	22,577,928	
	WNY Expenditure Multiplier	¢	6 0 40 044		0.46		0 450 477	-	0.46	¢	0.46	*		
	WNY Expenditure Benefits Advertising	\$ \$	6,948,311 1,682,611	\$	2,504,865	\$ \$	9,453,177 1,682,611		951,169 131,186		1,813,797	\$ \$	10,404,346 3,627,594	
	Advertising Multiplier	Ψ	1,002,011	Ψ	- 0.87	Ψ	1,002,011	Ψ	0.87	ψ	1,813,797	9	0,021,094	
182	Advertising Benefits	\$	1,463,872	\$	-	\$	1,463,872	\$		\$	1,578,003	\$	3,156,007	
183	WNY Expenditure & Adv Benefits	\$	8,412,183	\$	2,504,865		10,917,049	\$	1,065,301	\$	1,578,003	\$	13,560,353	
	Customer Net Savings	\$ 1	19,162,747	\$	6,381,479	\$	25,544,226	\$		\$	5,817,247	\$	32,928,486	
	WNY Income Multiplier	¢	0 200 740	¢	0.49	æ	10 540 074	¢	0.49	¢	0.49	ø	10 101 000	
	WNY Customer Net Savings Benefits Total WNY Benefits		9,389,746 17,801,929	\$ \$	3,126,925 5,631,790		12,516,671 23,433,719	\$ \$		\$ \$	2,850,451 4,428,454		16,134,958 29,695,311	
	TRC-WNY	Ψ	3.21	Ψ	3.21	Ψ	3.21	ψ	2.55	Ψ	4,420,454	Ψ	3.39	
189	VII. Societal Test											***		
	Environmental													
	Total	\$	2,717,839	\$	895,107	\$	3,612,945	\$	285,024	\$	577,551	\$	4,475,520	
192 193	Other Total			\$				¢		\$				
	Total Incremental Societal Benefits	\$	2,717,839	ֆ \$	895,107	\$	3,612,945	\$ \$	285,024	\$ \$	577,551	\$	4,475,520	
	Total Benefits W/TRC-WNY		56,429,937		18,353,734		74,783,671	\$					93,304,839	
	Societal Test		3.37		3.37		3.37		2.68		6.97		3.56	

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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	Date: 20 Month Period Ending September 2009					
6	11/24/2009					
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22 Mcf Saved per Participant 13.34 4.60 3.77 6.5 23 DTH Saved per Participant 13.80 4.76 3.90 7.1	ter I Total Res Rebates 22 27% 50 55 55 1.035 79 264,706 14 8
I0Appliance Rebates - Heating SystemsAppliance Rebates - Programable Tstat ResidentialAppliance Rebates - Programable Tstat ResidentialAppliance Rebates - Programable Tankless Water Heater Tankless Water Heater Tankless Water Heater Tankless Water Heater Tankless Water Heater Tankless Water Heater Tankless Water Heater ResidentialAppliance Rebates - Programable Tankless Water Heater Tankless Water Heater ResidentialAppliance Rebates - Water Heater Tankless Water Heater ResidentialAppliance Rebates - Water Heater Tankless Water Heater ResidentialAppliance Rebates - Water Heater Tankless Water Heater ResidentialAppliance Rebates - 	ter
Appliance Rebates - Heating SystemsAppliance Rebates - Programable Tstat ResidentialAppliance Rebates - Programable Tstat ResidentialAppliance Rebates - Programable Tank ResidentialAppliance Rebates - Programable Tank ResidentialAppliance Rebates - Programable Tank ResidentialAppliance Rebates - Programable Tank ResidentialAppliance Rebates - Programable Tank ResidentialAppliance Rebates - Programable Tank ResidentialAppliance Rebates - Programable Tank ResidentialAppliance 	ter I Total Res Rebates 22 27% 50 55 55 1.035 79 264,706 14 8
Rebates - Heating SystemsRebates - Programable Tstat ResidentialRebates - Programable Tstat ResidentialRebates - Programable Tstat ResidentialRebates - Tankess Wa Heater Tank Residential1111ResidentialResidential ResidentialResidential ResidentialResidential ResidentialResidential Residential12Base Analysis1Residential ResidentialResidential ResidentialResidential ResidentialResidential Residential13I. Customer and Volume Information 14468,292468,292468,292468,292468,29215Participation Rate 152.90%2.62% 0.54%0.2261,2316Total Number of Participants13,58912,2552,5161,2317Total Annual Mcf Saved 18181,20956,3859,4858,6718DTH Conversion1.0351.0351.0351.03519Total DTH Saved187,55258,3599,8178,9720Mcf Saved per Participant Base13.344.603.776.921Multiple Factor for Sensitivity Analysis0%0%0%0%22DTH Saved per Participant13.344.603.776.923DTH Saved per Participant13.804.763.907.1	ter I Total Res Rebates 22 27% 50 55 55 1.035 79 264,706 14 8
Rebates - Heating SystemsRebates - Programable Tstat ResidentialRebates - Programable Tstat ResidentialRebates - Programable Tstat ResidentialRebates - Tankess Wa Heater Tank Residential1111ResidentialResidential ResidentialResidential ResidentialResidential ResidentialResidential Residential12Base Analysis1Residential ResidentialResidential ResidentialResidential ResidentialResidential Residential13I. Customer and Volume Information 14468,292468,292468,292468,292468,29215Participation Rate 152.90%2.62% 0.54%0.2261,2316Total Number of Participants13,58912,2552,5161,2317Total Annual Mcf Saved 18181,20956,3859,4858,6718DTH Conversion1.0351.0351.0351.03519Total DTH Saved187,55258,3599,8178,9720Mcf Saved per Participant Base13.344.603.776.921Multiple Factor for Sensitivity Analysis0%0%0%0%22DTH Saved per Participant13.344.603.776.923DTH Saved per Participant13.804.763.907.1	ter I Total Res Rebates 22 27% 50 55 55 1.035 79 264,706 14 8
11 Residential Residential Residential Residential Residential 12 Base Analysis	I Rebates
12 Base Analysis	22 7% 50 75 255,755 1.035 79 264,706 14 19% 8
13 I. Customer and Volume Information 468,292 468,293 468,293 468,293 468,293 468,293 468,293 468,293 468,293 468,293 468,293 4	7% 50 75 255,755 1.035 79 264,706 14 19% 8
15 Participation Rate 2.90% 2.62% 0.54% 0.2 16 Total Number of Participants 13,589 12,255 2,516 1,23 17 Total Annual Mcf Saved 181,209 56,385 9,485 8,66 18 DTH Conversion 1.035 1.035 1.035 1.035 19 Total DTH Saved 187,552 58,359 9,817 8,97 20 Mcf Saved per Participant Base 13.34 4.60 3.77 6.5 21 Multiple Factor for Sensitivity Analysis 0% <td>7% 50 75 255,755 1.035 79 264,706 14 19% 8</td>	7% 50 75 255,755 1.035 79 264,706 14 19% 8
16 Total Number of Participants 13,589 12,255 2,516 1,23 17 Total Annual Mcf Saved 181,209 56,385 9,485 8,67 18 DTH Conversion 1.035 1.035 1.035 1.035 1.035 19 Total DTH Saved 187,552 58,359 9,817 8,97 20 Mcf Saved per Participant Base 13.34 4.60 3.77 6.9 21 Multiple Factor for Sensitivity Analysis 0% 0% 0% 0% 23 DTH Saved per Participant 13.34 4.60 3.77 6.9	50 55 55 1.035 79 264,706 14 19% 8
17 Total Annual Mcf Saved 181,209 56,385 9,485 8,67 18 DTH Conversion 1.035 1.035 1.035 1.035 1.035 19 Total DTH Saved 187,552 58,359 9,817 8,97 20 Mcf Saved per Participant Base 13.34 4.60 3.77 6.9 21 Multiple Factor for Sensitivity Analysis 0% 0% 0% 0% 22 Mcf Saved per Participant 13.34 4.60 3.77 6.9 23 DTH Saved per Participant 13.80 4.76 3.90 7.1	25 255,755 55 1.035 9 264,706 44 8
18 DTH Conversion 1.035	 1.035 264,706 264,706 44 8
19 Total DTH Saved 187,552 58,359 9,817 8,97 20 Mcf Saved per Participant Base 13.34 4.60 3.77 6.9 21 Multiple Factor for Sensitivity Analysis 0% 0% 0% 0% 22 Mcf Saved per Participant 13.34 4.60 3.77 6.9 23 DTH Saved per Participant 13.80 4.76 3.90 7.7	79 264,706 14 1% 4 8
20 Mcf Saved per Participant Base 13.34 4.60 3.77 6.9 21 Multiple Factor for Sensitivity Analysis 0%	14 1% 14 8
20 Mcf Saved per Participant Base 13.34 4.60 3.77 6.9 21 Multiple Factor for Sensitivity Analysis 0%	14 1% 14 8
21 Multiple Factor for Sensitivity Analysis 0% <td>1% 14 8</td>	1% 14 8
22 Mcf Saved per Participant 13.34 4.60 3.77 6.9 23 DTH Saved per Participant 13.80 4.76 3.90 7.1	8
22 Mcf Saved per Participant 13.34 4.60 3.77 6.9 23 DTH Saved per Participant 13.80 4.76 3.90 7.1	8
23 DTH Saved per Participant 13.80 4.76 3.90 7.7	8
24 Estimated Peak Day Impact Mcf 1,655 515 87 7	
	9 2,336
	2 2,417
26 Total Average Annual Accounts 482,775 482,775 482,775 Image to a Total Average Annual Heads Par Account Par 482,775 482,775 482,775	5 482,775
Impact on Total Average Annual Usage Per Account Per 0.38 0.12 0.02 0.02	0.53
28 II. Program Cost Information	0.00
29 Company Direct Costs \$ 4,178,618 \$ 360,542 \$ 393,754 \$ 445,62	5 \$ 5,378,539
30 Company Admin Costs \$ 158,052 \$ 13,637 \$ 14,893 \$ 16,85	
31 Company Advertising Costs \$ 1,287,202 \$ 111,063 \$ 121,294 \$ 137,27	
32 Total Initial Program Costs - Company \$ 5,623,871 \$ 485,242 \$ 529,941 \$ 599,75 32 Total Initial Program Costs - Company \$ 5,623,871 \$ 485,242 \$ 529,941 \$ 599,75	
33 Total Initial Program Costs - Participant \$ 9,512,300 \$ 306,375 \$ 503,200 \$ 437,50 34 Total Initial Program Costs - Participant \$ 45,126,471 \$ 10,23,441 \$ 437,50	
34 Total Initial Program Costs \$ 15,136,171 \$ 791,617 \$ 1,033,141 \$ 1,037,25 35 Per Participant Initial Program Costs - Company \$ 307.50 \$ 29.42 \$ 156.50 \$ 356.50	
35 Per Participant Initial Program Costs - Company \$ 307.50 \$ 29.42 \$ 150.50 \$ 350.50 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 \$ 706.5	
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 \$ - <t< td=""><td> </td></t<>	
43 Total Annual Origing Costs 5 - 5 - 5 - 44 III. Discount Assumptions	
45 Anticipated Life of Program Measure (Years) 17 17 14 1	4 16.7
46 Discount Rate 5.50% 5.50% 5.50% 5.50%	% 5.50%
47 PVIFA 10.8646 10.8646 9.5896 9.589	
48 IV. Incremental Savings	
49 Natural Gas Supply Rate (\$/Mcf) \$ 12.00 \$ 11.59 \$ 11.	(
50 Natural Gas Supply Rate (\$/Dth) \$ 11.59 \$ 11.	
52 Total NGS Savings \$ 2,174,512 \$ 676,623 \$ 113,824 \$ 104,10	
53 V. Direct Cost Benefit Summary	
54 Present Value of Participant Savings \$ 1,738.55 \$ 599.86 \$ 433.84 \$ 798.6	
55 Present Value of Total Savings \$ 23,625,219 \$ 7,351,245 \$ 1,091,531 \$ 998,28	2 \$ 33,066,277
Present Value of Total Initial Program Costs per Annual	,
56 Participant \$ 1,008 \$ 54 \$ 357 \$ 70 57 Present Value of Total Initial Program Costs \$ 15,136,171 \$ 791,617 \$ 1,033,141 \$ 1,037,25	
57 Present value of rotal initial Program Costs 5 15, 136, 171 5 791,617 5 1,037,25 58 TRC 1.56 9.29 1.06 0.9	
59 VI. TRC-WNY	· · · · · · · · · · · · · · · · · · ·
60 WNY Incremental Expenditures \$ 13,848,969 \$ 680,554 \$ 911,847 \$ 899,98	
61 WNY Expenditure Multiplier 0.46 0.49 0.46 0.4	
62 WNY Expenditure Benefits \$ 6,370,526 \$ 333,472 \$ 419,450 \$ 440,99 62 \$ 40,99 \$ 400,99 \$ 410,99 \$ 410,99 \$ 410,99	
63 Advertising \$ 1,287,202 \$ 111,063 \$ 121,294 \$ 137,27 64 Advertising Multiplier 0.87	
64 Advertising Multiplier 0.87<	
66 WNY Expenditure & Adv Benefits 5 7,490,392 430,097 5 524,975 5 560,41	
67 Customer Net Savings \$ 8,489,048 \$ 6,559,627 \$ 58,389 \$ (38,97	
68 WNY Income Multiplier 0.49 0.49 0.49 0.49	9
69 WNY Customer Net Savings Benefits \$ 4,159,634 \$ 3,214,217 \$ 28,611 \$ (19,09	
Total WNY Benefits \$ 11,650,025 \$ 3,644,314 \$ 553,586 \$ 541,32 TO Total WNY Benefits 13,80 14,80	
71 TRC-WNY 2.33 13.89 1.59 1.4 72 VII. Societal Test 1.4	3 2.75
73 Environmental	
74 Total \$ 1,788,060 \$ 556,374 \$ 82,612 \$ 75,55	\$ 2,502,600
75 Other	
76 Total	
777 Total Incremental Societal Benefits \$ 1,788,060 \$ 556,374 \$ 82,612 \$ 75,55	
T6 Total Benefits W/ TRC WNY \$ 37,063,304 \$ 11,551,933 \$ 1,727,729 \$ 1,615,150 T78 Consistent Track 2,45 4,450 4,672 <t< td=""><td></td></t<>	
79 Societal Test 2.45 14.59 1.67 1.50	2.89

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1		1		•	~	· · ·		<u> </u>	
2	New York Division								
3	Conservation Incentive Program								
	Program Measurement and Verification Summary								
5	Date: 20 Month Period Ending September 2009								
6	11/24/2009	·							
7	Quarter	<u> </u>							
8	7	L							
9 10		Pre	Post Analys	S					
		\vdash		Г		1	1	Т	
			Annlianaa		Appliance	Appliance	Ι.	Ann Honor	
		ł	Appliance Rebates -		Appliance Rebates -	Appliance Rebates -		Appliance Rebates -	
			Heating		rogramable	Water Heater		kless Water	
			Systems	۲ I	Tstat	Tank	1 ai	Heater	Total Res
11			Residential		Residential	Residential	6	esidential	Rebates
	Adjustment Detail	+- ^	Gardelittal	<u> </u>	concential	readential	<u> </u>	caluentidi	NEDdles
	I. Spillover	1		-			1		
	Total Spillover Impact (Mcf)		-		-	-		-	
	Total Participants		13,589		12,255	2,516		1,250	
	Adjustment to Per Participant Volume Due to Spillover		-			-		-	
	II. Free Riders	1					T		- <u>-</u>
	Mcf Saved per Participant		13.34		4.60	3.77		6.94	
87	Free Ridership %	1	19%		19%	19%		19%	
									:
	Adjustment to Per Participant Volume Due to Free Riders		2.53	L	0.87	0.72		1.32	
	III. Snapback								
	Total Snapback Impact (Mcf)		-		-	-		-	
	Total Participants		13,589		12,255	2,516		1,250	
	Adjustment to Per Participant Volume Due to Snapback		-	 	-				
	IV. Total Volume Adjustment Total Volume Adjustments		(0 50)		(0.07)	(0.70)		(4.22)	
	Adjustment Impact	-	(2.53)	-	(0.87)	(0.72)		(1.32)	
	I. Customer and Volume Information			-			-		
	Number of Customers Eligible		468,292.00		468,292.00	468,292.00		468,292.00	
	Participation Rate		2.90%		408,292.00	0.54%		0.27%	
	Annual Number of Participants		13,589		12,255	2,516		1,250	
	Total Mcf Adjusted		(34,430)		(10,713)	(1,802)		(1,648)	
	DTH Conversion		1.035		1.035	1.035		1.035	
	Total DTH Adjusted		(35,635)		(11,088)	(1,865)		(1,706)	
103	Mcf Adjusted per Participant		(2.53)		(0.87)	(0.72)		(1.32)	
	DTH Adjusted per Participant		(2.62)		(0.90)	(0.74)		(1.36)	
	II. Program Cost Information								
	Company Direct Costs	\$	-	\$	-	\$-	\$	-	
	Company Admin Costs								
	Company Advertising Costs								
	Total Initial Program Costs - Company	\$	-	\$	-	\$ -	\$	-	
	Total Initial Program Costs - Participant	\$	(1,807,337)	\$	(58,211)		\$	(83,125)	
	Total Initial Program Costs	\$	(1,807,337)		(58,211)		\$	(83,125)	
	Per Participant Initial Program Costs - Company Per Participant Initial Program Costs - Participant	\$ ¢	(133.00)	\$ ¢	-	\$ -	\$ ¢	(66 50)	
	Per Participant Initial Program Costs - Participant Total Initial Program Costs per Annual Participant	\$ \$	(133.00)	\$ \$	(4.75) (4.75)	\$ (38.00) \$ (38.00)	\$ \$	(66.50) (66.50)	
	Annual Ongoing Costs - Company per Participant	φ	(133.00)	Φ	(4.75)	φ (30.00)	φ	(00.00)	1
	Annual Ongoing Costs - Company per Participant								
	Total Annual Ongoing Costs per Participant								
	Annual Ongoing Costs - Company								
	Annual Ongoing Costs - Participant							1	
	Total Annual Ongoing Costs								
	III. Discount Assumptions								
122	Anticipated Life of Program Measure (Years)		-		-	-		-	
123	Discount Rate		5.50%		5.50%	5.50%		5.50%	
124	PVIFA		-		-	-		-	
	IV. Incremental Savings								
	Natural Gas Supply Rate (\$/Mcf)	\$	12.00	\$	12.00	\$ 12.00	\$	12.00	
	Natural Gas Supply Rate (\$/Dth)	\$	11.59	\$	11.59	\$ 11.59	\$	11.59	I
	Annual NGS Savings per Participant Total NGS Savings	\$	(30.40)		(10.49)		\$	(15.82)	
		\$	(413,157)	\$	(128,558)	\$ (21,627)	\$	(19,779)	

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	A National Fuel Gas Distribution Corporation	Щ	IN .	1		_	۲	1	Q	1	R
	New York Division										
3											
	Program Measurement and Verification Summary										
5											
6	11/24/2009 Quarter	′ —							******		
8	7	,⊢									
9	1 '	Pr	e/Post Analysi	is	u						
10		Ľ.			A1				~~~~~		
				Γ		Т		Т		Τ	
			Appliance		Appliance		Appliance		Appliance		
			Rebates -		Rebates -	1	Rebates -		Rebates -		
			Heating	P	rogramable	W	ater Heater	Та	ankless Wate	r	
			Systems	1	Tstat		Tank	1	Heater		Total Res
11		\perp	Residential		Residential	R	lesidential		Residential		Rebates
	Adjusted Analysis	_		⊢		_		\vdash		+	
	I. Customer and Volume Information Number of Customers Eligible		469 202		469 202		160 202		469 202	ł	
	Participation Rate		468,292 2.90%		468,292 2.62%		468,292 0.54%		468,292 0.27%		
	Total Number of Participants		13,589		12,255		2,516	1	1,250	1	
	Total Mcf Saved		146,780		45,672		7,683		7,027		207,161
	DTH Conversion	1	1.035		1.035		1.035		1.035		1.035
	Total DTH Saved	1	151,917		47,271	1	7,952	1	7,273	1	214,412
	Mcf Saved per Participant		10.80		3.73		3.05		5.62		
	DTH Saved per Participant	1	11.18	1	3.86	1	3.16	1	5.82		
140	Entimated Day Incort Mat		1 0 10 10			1		1			4 4 4 4 4 4
	Estimated Peak Day Impact Mcf		1,340.45		417.10		70.17		64.17		1,891.89
	Estimated Peak Day Impact Dth Total Average Annual Accounts	1	1,387.37 482,775		431.69 482,775	1	72.62 482,775	1	66.42 482,775	1	1,958.10
	Impact on Total Average Annual Usage Per Account	1	462,775		482,775		482,775		482,775	1	
	II. Program Cost Information	t	0.00	<u> </u>	0.03	+	0.02	+	0.01	+	
	Company Direct Costs	\$	4,178,618	\$	360,542	\$	393,754	\$	445,625	\$	5,378,539
	Company Admin Costs	\$	158,052	\$	13,637		14,893	\$	16,855	\$	203,438
	Company Advertising Costs	\$	1,287,202	\$	111,063	\$	121,294	\$	137,273	\$	1,656,832
	Total Initial Program Costs - Company	\$	5,623,871	\$	485,242	\$	529,941	\$	599,753	\$	7,238,808
	Total Initial Program Costs - Participant	\$	7,704,963	\$	248,164	\$	407,592	\$	354,375	\$	8,715,094
	Total Initial Program Costs	\$	13,328,834	\$	733,406	\$	937,533	\$	954,128	\$	15,953,901
	Per Participant Initial Program Costs - Company	\$	413.85	\$	39.60	\$	210.63	\$	479.80		
	Per Participant Initial Program Costs - Participant	\$	567.00	\$	20.25	\$	162.00	\$	283.50		
	Total Initial Program Costs per Annual Participant Annual Ongoing Costs - Company per Participant	\$ \$	980.85	\$ \$	59.85	\$	372.63	\$ \$	763.30		
	Annual Ongoing Costs - Company per Participant Annual Ongoing Costs - Participant per Participant	\$	-	\$		\$	-	\$	-		
	Total Annual Ongoing Costs per Participant	\$		\$		ŝ	-	\$	-		
	Annual Ongoing Costs - Company	\$	-	\$	_	ŝ	-	\$	-		
	Annual Ongoing Costs - Participant	\$	-	\$	-	\$	-	\$	-		
160	Total Annual Ongoing Costs	\$	-	\$	-	\$	-	\$	-		
	III. Discount Assumptions										
	Anticipated Life of Program Measure (Years)		17		17		14		14		17
	Discount Rate		5.50%		5.50%		5.50%		5.50%		5.50%
	PVIFA IV. Incremental Savings	\vdash	10.86		10.86	├	9.59	 	9.59	├	10.73
	Natural Gas Supply Rate (\$/Mcf)	\$	12.00	\$	12.00	\$	12.00	\$	12.00		
	Natural Gas Supply Rate (\$/Dth)	\$	12.00	9 59	12.00	э \$	12.00	\$	12.00		
	Annual NGS Savings per Participant	\$	129.62	\$	44.72	\$	36.64	\$	67.46	i	l
	Total NGS Savings	\$	1,761,355	\$	548,065	\$	92,197	\$	84,321	\$	2,485,938
170	V. Direct Cost Benefit Summary	Ľ.		<u> </u>		<u> </u>				<u> </u>	
	Present Value of Participant Savings	\$	1,408.23	\$	485.88	\$	351.41	\$	646.89	l	
	Present Value of Total Savings	\$	19,136,428	\$	5,954,508	\$	884,140	\$	808,609	\$	26,783,684
	Present Value of Total Initial Program Costs per Annual							1.			
	Participant	\$	981	\$	60	\$	373	\$	763	1	45 050 001
	Present Value of Total Initial Program Costs	\$	13,328,834	\$	733,406	\$	937,533	\$	954,128	\$	15,953,901
175	VI. TRC-WNY	<u> </u>	1.44		8.12		0.94		0.85	⊢	1.68
	WNY Incremental Expenditures	\$	12,041,632	\$	622,343	\$	816,239	\$	816,855	\$	14,297,070
	WNY Expenditure Multiplier		0.46	¥	0.49	۳.	0.46	Ű.	0.49	Ű	. 1,207,070
	WNY Expenditure Benefits	\$	5,539,151	\$	304,948	\$	375,470	\$	400,259	\$	6,619,828
180	Advertising	\$	1,287,202	\$	111,063	\$	121,294	\$	137,273	\$	1,656,832
181	Adverttising Multiplier	ĺ.	0.87		0.87	l	0.87		0.87	\$	3
	Advertising Benefits	\$	1,119,866	\$	96,625	\$	105,526	\$	119,427	\$	1,441,443
	WNY Expenditure & Adv Benefits	\$	6,659,017	\$	401,573	\$	480,996	\$	519,686	\$	8,061,272
	Customer Net Savings	\$	5,807,593	\$	5,221,102	\$	(53,394)	\$	(145,519)	\$	10,829,783
	WNY Income Multiplier WNY Customer Net Savings Benefits	¢	2 845 721	¢	0.49	æ	0.49	¢	0.49	¢	5,306,594
	Total WNY Benefits	\$ \$	2,845,721 9,504,737	\$ \$	2,558,340	\$ \$	(26,163) 454,833	\$ \$	(71,304) 448,382	\$ \$	5,306,594
	TRC-WNY	φ	9,504,737	φ	2,959,913	ų.	454,833	φ	448,382	φ	2.52
	VII. Societal Test				12.13		1.43		1.32		2.52
	Environmental										
	Total	\$	1,448,329	\$	450,663	\$	66,916	\$	61,199	\$	2,027,106
	Other						,	•			
193	Total	\$		\$	-	\$	-	\$	-	\$	-
	Total Incremental Societal Benefits	\$	1,448,329	\$	450,663	\$	66,916	\$	61,199	\$	2,027,106
	Total Benefits W/TRC-WNY Societal Test	\$	30,089,494 2.26	\$	9,365,084 12.77	\$	1,405,888	\$	1,318,190 1.38	\$	42,178,656 2.64

Appendix E Page 9 of 18

_	A	В	С	D	E	F	G
	National Fuel Gas Distribution Corporation						
	New York Division						
	Conservation Incentive Program Program Measurement and Verification Summary						
	Date: 20 Month Period Ending September 2009						
	Date: 20 Month Fender Ending September 2009 11/24/2009						
	Quarter	Year		r	T	1	1
	7	Sep-09					
		Total Residential					1
)				Residential Applia	ance Rebates		•
							Appliance
					Appliance	Appliance	Rebates -
		Appliance	Appliance	Appliance	Rebates -	Rebates -	Storage
		Rebates - Hot Air	Rebates - Hot	Rebates - Steam		Storage Tank	Tankless Wate
		Furnace	Water Boiler	Boiler	Tstat	Water Heater	Heater
-	Constituite Analysis	Residential	Residential	Residential	Residential	Residential	Residential
	Sensitivity Analysis TRC - Free Ridership Sensitivity	Adjusted Applyeis	TPC		r		1
3	The Tree hiderarily denaitivity	Adjusted Analysis - 2.30	1.03	2.15	4.28	1.35	1.31
4	0%	2.52	1.10	2.15	4.20	1.51	1.31
5	10%	2.41	1.07	2.24	4.58	1.43	1.39
26	20%	2.29	1.02	2.14	4.24	1.34	1.30
27 28	30%	2.14	0.97	2.03	3.88	1.24	1.19
28	40%	1.97	0.91	1.89	3.48	1.13	1.07
29 30	50%	1.76	0.83	1.71	3.04	1.00	0.94
30	60%	1.52	0.74	1.50	2.55	0.86	0.79
1	70%	1.22	0.61	1.22	2.02	0.69	0.63
23	80%	0.84	0.43	0.86	1.42	0.50	0.45
l	Societal - Test Free Ridership Sensitivity	Adjusted Analysis -	Societal TRC				
5	Contraction and the contraction of the contraction	3.61	1.61	3.37	6.76	2.14	2.07
5	0%	3.96	1.72	3.64	7.71	2.14	2.07
7	10%	3.79	1.67	3.51	7.23	2.26	2.00
3	20%	3.59	1.60	3.36	6.70	2.12	2.06
9	30%	3.36	1.52	3.18	6.13	1.97	1.89
Ŋ	40%	3.09	1.43	2.96	5.51	1,80	1.71
9012	50%	2.78	1.31	2.69	4.82	1.60	1.51
	60%	2.40	1.17	2.36	4.07	1.38	1.29
3 4	70%	1.94	0.97	1.94	3.23	1.12	1.04
5	80%	1.36	0.71	1.37	2.30	0.83	0.75
	RC Gas Cost Sensitivity	Adjusted Analysis -	TRC				
7	·····,	2.30	1.03	2.15	4.28	1.35	1.31
	\$ 16.00	3.07	1.37	2.87	5.70	1.80	1.74
	\$ 15.00	2.87	1.28	2.69	5.35	1.69	1.63
	\$ 14.00	2.68	1.20	2.51	4.99	1.58	1.52
	\$ 13.00	2.49	1.11	2.33	4.63	1.46	1.42
	\$ 12.00	2.30	1.03	2.15	4.28	1.35	1.31
	\$ 11.00	2.11	0.94	1.97	3.92	1.24	1.20
	\$ 10.00	1.92	0.86	1.79	3.57	1.13	1.09
	\$ 9.00 \$ 8.00	1.72	0.77	1.61	3.21	1.01	0.98
	\$ 8.00 \$ 7.00	1.53 1.34	0.69 0.60	1.44 1.26	2.85 2.50	0.90 0.79	0.87 0.76
		Adjusted Analysis - 1		1.20	2.00	0.19	0.76
1		2.30	1.03	2.15	4.28	1.35	1.31
	1%	3.29	1.47	3.08	6.13	1.83	1.77
1	2%	3.02	1.35	2.83	5.63	1.71	1.65
	3%	2.79	1.25	2.61	5.18	1.59	1.54
	4%	2.57	1.15	2.41	4.79	1.49	1.44
3 4 5	5%	2.39	1.07	2.23	4.44	1.39	1.35
	6% 70/	2.22	0.99	2.08	4.13	1.31	1.27
	7%	2.07	0.92	1.93	3.84	1.23	1.19
١	olume Savings Sensitiviity	Adjusted Analysis - T	RC				
ŀ	name cavinga constrainty	2.30	1.03	2.15	4.28	1.35	1.31
	50%	3.51	1.70	3.30	6.42	2.03	1.96
1	40%	3.27	1.57	3.07	5.99	1.89	1.83
	30%	3.03	1.43	2.84	5.56	1.76	1.70
3	20%	2.78	1.30	2.61	5.13	1.62	1.57
	10%	2.54	1.16	2.38	4.71	1.49	1.44
5	0%	2.30	1.03	2.15	4.28	1.35	1.31
	-10%	2.06	0.89	1.92	3.85	1.22	1.18
5	-20%	1.81	0.76	1.69	3.42	1.08	1.05
57						0.05	0.04
6 7 8	-30%	1.57	0.62	1.46	2.99	0.95	0.91
		1.57 1.33 1.09	0.62 0.49 0.35	1.46 1.23 1.01	2.99 2.57 2.14	0.95 0.81 0.68	0.91 0.78 0.65

	Α	В	С	D	E	F	G
1	National Fuel Gas Distribution Corporation			·····		•	
	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5	Date: 20 Month Period Ending September 2009						
6	11/24/2009						
7	Quarter	Year					
8 9	1 7	Sep-09					
9	1	Total Residential					
10	1			Residential Applia	nce Rebates	have a second	·
				T			
11		Appliance Rebates - Hot Air Furnace Residential	Appliance Rebates - Hot Water Boiler Residential	Appliance Rebates - Steam Boiler Residential	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
282	Gas Cost/Free Ridership Total Program TRC Sensitivity	Residentia	Residential	Residential	Residential	Residential	Residential
283		Free Ridership					
284		0%	10%	20%	30%	40%	50%
285		3.27	3.14	20%	2.83		
285	\$ 15.00	3.07				2.66	2.47
287	\$ 13.00 \$ 14.00		2.94	2.81	2.66	2.49	2.31
288	\$ 14.00 \$ 13.00	2.86 2.66	2.75 2.55	2.62 2.43	2.48	2.33	2.16
289	\$ 13.00 \$ 12.00				2.30	2.16	2.00
289	\$ 12.00 \$ 11.00	2.45	2.35	2.25	2.13	1.99	1.85
		2.25	2.16	2.06	1.95	1.83	1.70
291		2.05	1.96	1.87	1.77	1.66	1.54
292	\$ 9.00	1.84	1.77	1.68	1.59	1.50	1.39
293	\$ 8.00	1.64	1.57	1.50	1.42	1.33	1.23
294 295	\$ 7.00	1.43	1.37	1.31	1.24	1.16	1.08
295	Con Cont/Eron Didembin Total Program TDC Constitution						
	Gas Cost/Free Ridership Total Program TRC Sensitivity Gas Cost	Eres Didership					
		Free Ridership					5000
298	3.56	. 0%	10%	20%	30%	40%	50%
299	\$ 16.00	5.09	4.88	4.66	4.41	4.15	3.85
300	\$ 15.00	4.78	4.59	4.38	4.15	3.90	3.62
301	\$ 14.00	4.48	4.30	4.10	3.89	3.65	3.39
302	\$ 13.00	4.17	4.00	3.82	3.62	3.40	3.16
303	\$ 12.00	3.87	3.71	3.54	3.36	3.16	2.93
304	\$ 11.00	3.56	3.42	3.26	3.09	2.91	2.70
305	\$ 10.00	3.26	3.13	2.99	2.83	2.66	2.47
306	\$ 9.00	2.95	2.83	2.71	2.57	2.41	2.24
307	\$ 8.00	2.65	2.54	2.43	2.30	2.17	2.01
308	\$ 7.00	2.34	2.25	2.15	2.04	1.92	1.79

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—	A	н	1 1	J			1 14
1	National Fuel Gas Distribution Corporation	11	I!	J	К	L	M
2	New York Division						
3	Conservation Incentive Program						
4	Program Measurement and Verification Summary						
5	Date: 20 Month Period Ending September 2009						
6	11/24/2009						
7	Quarter						
8							
9	7				~~~		
10							
			1				
		Total Res			Total Non Res	General	
11		Rebates	LIURP	Total Res	Rebates	Outreach	Total Program
221	Sensitivity Analysis						v
222	TRC - Free Ridership Sensitivity						
23		2.14	2.17	2.15	1.71	4.21	2.26
23 24	0%	2.36	2.17	2.32	1.71	5.19	2.45
225	10%	2.25	2.17	2.23	1.71	4.67	2.35
26	20%	2.13	2.17	2.14	1.71	4.16	2.25
27	30%	1.99	2.17	2.04	1.71	3.64	2.13
28	40%	1.83	2.17	1.92	1.71	3.12	1.99
29	50%	1.64	2.17	1.79	1.71	2.60	1.85
230	60%	1.41	2.17	1.65	1.71	2.08	1.69
231	70%	1.13	2.17	1.48	1.71	1.56	1.51
225 226 227 228 229 230 231 232 233 234 235 236 237 238 237 238 239 240 241 242	80%	0.79	2.17	1.48	1.71	1.04	1.31
33	50 M	0.75	2.17	1.23	1.7 1	1.04	1.31
234	Societal - Test Free Ridership Sensitivity						
235	contraction of the second s	3.37	3.37	3.37	2.68	6.97	3.56
236	0%	3.70	3.37	3.63	2.68	8.51	3.87
37	10%	3.54	3.37	3.50	2.68		
38	20%	3.34	3.37			7.70	3.71
20	20% 30%	3.13		3.35	2.68	6.89	3.54
40	30 % 40%		3.37	3.20	2.68	6.07	3.36
240		2.88	3.37	3.02	2.68	5.26	3.16
41	50%	2.59	3.37	2.82	2.68	4.45	2.93
42	60%	2.24	3.37	2.59	2.68	3.63	2.69
243	70%	1.81	3.37	2.33	2.68	2.82	2.41
244	80%	1.28	3.37	2.03	2.68	2.01	2.10
245	TRC Gas Cost Sensitivity						
40	IRC Gas Cost Sensitivity						
47	•	2.14	2.17	2.15	1.71	4.21	2.26
	\$ 16.00	2.86	2.90	2.87	2.28	5.61	3.01
	\$ 15.00	2.68	2.71	2.69	2.14	5.26	2.82
	\$ 14.00	2.50	2.53	2.51	2.00	4.91	2.63
	\$ 13.00	2.32	2.35	2.33	1.86	4.56	2.44
	\$ 12.00	2.14	2.17	2.15	1.71	4.21	2.26
	\$ 11.00	1.97	1.99	1.97	1.57	3.86	2.07
54	\$ 10.00	1.79	1.81	1.79	1.43	3.51	1.88
	\$ 9.00	1.61	1.63	1.61	1.28	3.16	1.69
	\$ 8.00	1.43	1.45	1.43	1.14	2.80	1.50
	\$ 7.00	1.25	1.27	1.25	1.00	2.45	1.32
	Discount Rate Sensitivity			T			
59		2.14	2.17	2.15	1.71	4.21	2.26
60	1%	3.06	3.57	3.18	2.45	4.47	3.21
61	2%	2.81	3.16	2.90	2.25	4.41	2.95
62	3%	2.59	2.82	2.65	2.08	4.35	2.72
63	4%	2.40	2.53	2.43	1.92	4.29	2.52
64	5%	2.22	2.28	2.24	1.78	4.23	2.34
65	6%	2.07	2.07	2.07	1.65	4.18	2.18
66	7%	1.93	1.89	1.92	1.54	4.13	2.04
57	1% 2% 3% 4% 5% 6% 7% /olume Savings Sensitiviity						2.0.1
8	/olume Savings Sensitiviity			h			
59	- *	2.14	2.17	2.15	1.71	4.21	2.26
0	50%	3.28	3.28	3.28	2.57	6.31	3.43
1	40%	3.05	3.06	3.05	2.40	5.89	3.19
72	30%	2.82	2.84	2.83	2.23	5.47	2.96
73	20%	2.60	2.61	2.60	2.23	5.05	2.98
74	20% 10%	2.80	2.81				
5	0%	2.37		2.38	1.88	4.63	2.49
76			2.17	2.15	1.71	4.21	2.26
2	-10%	1.92	1.95	1.93	1.54	3.79	2.02
70	-20%	1.69	1.73	1.70	1.37	3.37	1.79
	-30%	1.46	1.51	1.47	1.20	2.95	1.55
				1 25 1	1 0 2	2 5 2	1 22 1
69 70 71 72 73 74 75 76 77 78 9 30	-40%	1.24	1.29	1.25	1.03	2.52	1.32
	-40% -50%	1.24	1.07	1.02	0.86	2.02	1.08

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	A	н	I I	J	к	L	м
	National Fuel Gas Distribution Corporation		L			<u>L.</u>	1 101
	New York Division						
	Conservation Incentive Program						
	Program Measurement and Verification Summary						
5	Date: 20 Month Period Ending September 2009						1
6	11/24/2009						
7	Quarter	r					
 			ļ	-			
1°	7						
8 9 10							
10							
1							
		Total Res			Total Non Res	General	
11		Rebates	LIURP	Total Res	Rebates	Outreach	Total Program
282	Gas Cost/Free Ridership Total Program TRC Sensitivity	Reputes	LIOIN	rotarites	Repates	Oureach	Total Program
283		Free Ridership					
284	2.26	60%	700/	80%			
285	\$ 16.00	2.25	70%				
286	\$ 15.00		2.02	1.75			
287	\$ 14.00	2.11	1.89	1.64			
288		1.97	1.76	1.53			
289		1.83	1.64	1.42			
209	\$ 12.00 \$ 11.00	1.69	1.51	1.31			
	+ 1100	1.55	1.39	1.20			
291	\$ 10.00	1.41	1.26	1.09			
292	\$ 9.00	1.27	1.13	0.98			
293	\$ 8.00	1.13	1.01	0.87			
294	\$ 7.00	0.99	0.88	0.77			
295							
296	Gas Cost/Free Ridership Total Program TRC Sensitivity						
		Free Ridership			ļ		
298	3.56	60%	70%	80%	[
299	\$ 16.00	3.53	3.16	2.76			
300	\$ 15.00	3.32	2.98	2.59			
301	\$ 14.00	3.11	2.79	2.43			
302	\$ 13.00	2.90	2.60	2.27			
303	\$ 12.00	2.69	2,41	2.10			
304	\$ 11.00	2.48	2.22	1.94			1
305	\$ 10.00	2.27	2.04	1.78			
	\$ 9.00	2.06	1.85	1.61			
					1		
307 308		1.85 1.64	1.66 1.47	1.45 1.29			

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1		A	N	0	Р	Q	R
- E	1	National Fuel Gas Distribution Corporation					
[2	New York Division					
- [3	Conservation Incentive Program					
- [4	Program Measurement and Verification Summary					
- [5	Date: 20 Month Period Ending September 2009					
- E	6	11/24/2009					
- [7	Quarter					****

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7	Quarter					·····
8	7	Dro/Doot Amelius	<u> </u>			
10	<i>.</i>	Pre/Post Analysi	5			
				1		
11		Appliance Rebates - Heating Systems	Appliance Rebates - Programable Tstat	Appliance Rebates - Water Heater Tank	Appliance Rebates - Tankless Water Heater	Total Res
11 221	Sensitivity Analysis	Residential	Residential	Residential	Residential	Rebates
222	TRC - Free Ridership Sensitivity				T	
223	,,	1.44	8.12	0.94	0.85	1.68
224	0%	1.56	9.29	1.06	0.96	1.84
225	10%	1.50	8.69	1.00	0.90	1.76
226 227	20%	1.43	8.05	0.94	0.84	1.67
228	30% 40%	1.35 1.25	7.35 6.59	0.87 0.79	0.77 0.69	1.57 1.45
228 229	50%	1.14	5.76	0.70	0.61	1.45
230	60%	1.00	4.84	0.60	0.52	1.15
231	70%	0.84	3.82	0.48	0.41	0.95
232	80%	0.63	2.69	0.35	0.29	0.70
233 234	Societal - Test Free Ridership Sensitivity					
235	Construction and a state of the	2.26	12.77	1.50	1.38	2.64
236	0%	2.45	14.59	1.67	1.56	2.89
237	10%	2.35	13.67	1.59	1.47	2.77
238 239 240	20%	2.25	12.67	1.49	1.37	2.63
239	30% 40%	2.12 1.98	11.57 10.38	1.38 1.26	1.27 1.15	2.47 2.29
241	50%	1.80	9.08	1.13	1.02	2.29
241 242	60%	1.60	7.64	0.97	0.87	1.83
243	70%	1.34	6.06	0.80	0.71	1.52
244	80%	1.02	4.29	0.59	0.53	1.15
245 246	TRC Gas Cost Sensitivity					
247		1.44	8.12	0.94	0.85	1.68
248	\$ 16.00	1.91	10.83	1.26	1.13	2.24
249	\$ 15.00	1.79	10.15	1.18	1.06	2.10
250 251	\$ 14.00 \$ 13.00	1.68	9.47	1.10	0.99	1.96
252	\$ 12.00	1.56 1.44	8.80 8.12	1.02 0.94	0.92 0.85	1.82 1.68
253	\$ 11.00	1.32	7.44	0.86	0.78	1.54
254	\$ 10.00	1.20	6.77	0.79	0.71	1.40
255	\$ 9.00	1.08	6.09	0.71	0.64	1.26
256 257	\$ 8.00 \$ 7.00	0.96 0.84	5.41 4.74	0.63 0.55	0.56 0.49	1.12 0.98
	Discount Rate Sensitivity	0.04	4.74	0.05	0.49	0.98
259		1.44	8.12	0.94	0.85	1.68
260	1%	2.06	11.63	1.28	1.15	2.40
261 262	2% 3%	1.89	10.68	1.19	1.07	2.20
262	3% 4%	1.74 1.61	9.84 9.09	1.11 1.04	1.00 0.93	2.03 1.88
264	5%	1.49	8.42	0.97	0.87	1.74
265	6%	1.38	7.83	0.91	0.82	1.62
266	7%	1.29	7.30	0.86	0.77	1.51
267	Volume Savings Sensitiviity					
269		1.44	8.12	0.94	0.85	1.68
270	50%	2.15	12.18	1.41	1.27	2.52
271	40%	2.01	11.37	1.32	1.19	2.35
272	30% 20%	1.87	10.55	1.23	1.10	2.18
270 271 272 273 274 275 276 277 278 279	10%	1.72 1.58	9.74 8.93	1.13 1.04	1.02 0.93	2.01 1.85
275	0%	1.44	8.12	0.94	0.85	1.68
276	-10%	1.29	7.31	0.85	0.76	1.51
277	-20%	1.15	6.50	0.75	0.68	1.34
278	-30%	1.01	5.68	0.66	0.59	1.18
279	-40% -50%	0.86 0.72	4.87 4.06	0.57 0.47	0.51 0.42	1.01 0.84
281	-50 %	0.72	4.00	0.47	0.42	0.04

	Α	В	С	D	E	F	G
	National Fuel Gas Distribution Corporation		•				
	New York Division						
	Conservation Incentive Program						
	Program Measurement and Verification Summary						
	Date: 20 Month Period Ending September 2009						1
6	11/24/2009 Quarter			1	r		
+	Quarter 7	Year					
8 9 10	1	Sep-09 Total Residential					
10		Total Residential		Residential Appli	ance Rehates	L	I
H			1			r	
11		Appliance Rebates - Hot Air Furnace Residential	Appliance Rebates - Hot Water Boiler Residential	Appliance Rebates - Steam Boiler Residential	Appliance Rebates - Programable Tstat Residential	Appliance Rebates - Storage Tank Water Heater Residential	Appliance Rebates - Storage Tankless Water Heater Residential
197	Work Paper 1						
	Participant Calculations						
199							
	Program Participants	12.613	934		12,265	2,516	1,250
	Annualization Factor	1	1	1	1	1	1
	Total Participants for Analysis	12,613	934	42	12,255	2,516	1,250
203	Workpaper 2						
204	workpaper z						
	CO2 Benefit						
207							
	Cost of CO2 \$/Ton	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00
209				- 10,00	+ 10.00	÷ .0.00	÷ 10.00
	Cost of CO2 \$/Pound	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01
211							
	Lbs CO2 / Billion BTU	117,000	117,000	117,000	117,000	117,000	117,000
213							
	Lbs CO2 / Million BTU	117	117	117	117	117	117
215							
	DTH Conversion Factor	1.035	1.035	1.035	1.035	1.035	1.035
217							
	Lbs CO2 / Mcf	121.095	121.095	121.095	121.095	121.095	121.095
219		• • • •				• • • •	
220	Cost of CO2 \$/Mcf	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91

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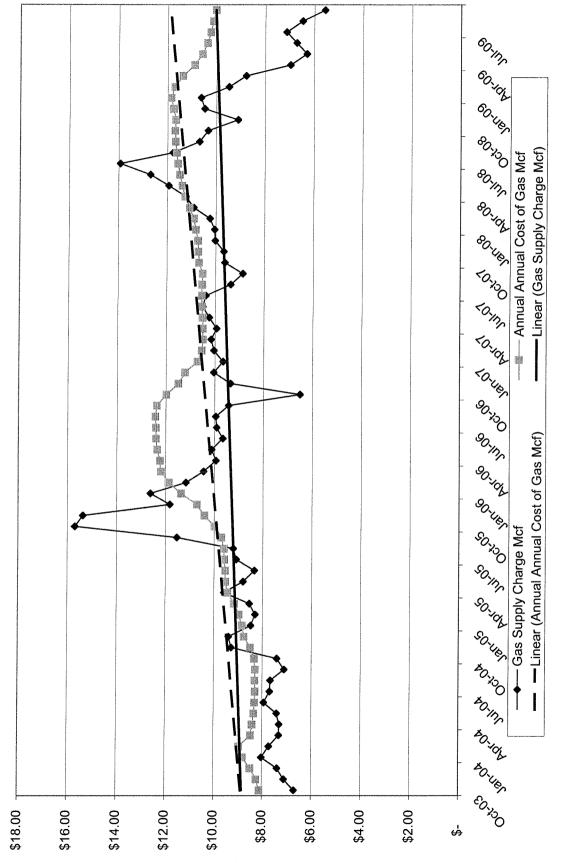
	Α	Н	1	J	к	L	M
	National Fuel Gas Distribution Corporation			•		.	·
	New York Division						
	Conservation Incentive Program						
	Program Measurement and Verification Summary						
5	Date: 20 Month Period Ending September 2009						
6	11/24/2009	·····	· · · · ·		r		
۲÷	Quarter		L	4			
8 9 10	7						
10		L					
						l	
		Total Res			Total Non Res	General	
11		Rebates	LIURP	Total Res	Rebates	Outreach	Total Program
	Work Paper 1						
	Participant Calculations						
199							
	Program Participants				539		
	Annualization Factor				1		
	Total Participants for Analysis				539		
203							
	Workpaper 2		· · · · · · · · · · · · · · · · · · ·		ļ		
205	000 0						
206	CO2 Benefit						
	Cost of CO2 \$/Ton	¢ 45.00					
208		\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00
	Cost of CO2 \$/Pound	\$ 0.01	¢ 0.01		e 0.01	¢ 0.04	
211		a 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01
	Lbs CO2 / Billion BTU	117,000	117,000	117,000	117,000	117.000	117.000
213	LDS CO2 / Dimon BTO	117,000	117,000	117,000	117,000	117,000	117,000
	Lbs CO2 / Million BTU	117	117	117	117	117	117
215	LOS COL / MINIOR DTO	117	117	117	117	117	111/
	DTH Conversion Factor	1.035	1.035	1.035	1.035	1.035	1.035
217		1.035	1.035	1.055	1.035	1.035	1.035
	Lbs CO2 / Mcf	121.095	121.095	121.095	121.095	121.095	121.095
219		121.090	121.095	121.095	121.095	121.095	121.095
	Cost of CO2 \$/Mcf	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91
-20		ψ 0.91	ψ 0.91	ψ 0.91	ψ 0.91	ψ 0.91	ψ 0.31

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Α	N	0	P	Q	R
1 National Fuel Gas Distribution Corporation					
2 New York Division					
3 Conservation Incentive Program					
4 Program Measurement and Verification Summary					
5 Date: 20 Month Period Ending September 2009					
6 11/24/2009					
7 Quarter	[
8 7					
9	Pre/Post Analys	is			
10					
				1	1
					-
				1	
	Appliance	Appliance	Appliance	Appliance	
	Rebates -	Rebates -	Rebates -	Rebates -	
	Heating	Programable	Water Heater	Tankless Water	1
	Systems	Tstat	Tank	Heater	Total Res
11	Residential	Residential	Residential	Residential	Rebates
197 Work Paper 1					
198 Participant Calculations					
199]		
200 Program Participants					
201 Annualization Factor					
202 Total Participants for Analysis					
203					
204 Workpaper 2					
205					
206 CO2 Benefit					
207				1	
208 Cost of CO2 \$/Ton	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.0
209					
210 Cost of CO2 \$/Pound	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.0
211					•
212 Lbs CO2 / Billion BTU	117,000	117,000	117.000	117,000	117,00
213	,				
214 Lbs CO2 / Million BTU	117	117	117	117	11
215					••
216 DTH Conversion Factor	1.035	1.035	1.035	1.035	1.03
217			,.000	1.000	1.00
218 Lbs CO2 / Mcf	121.095	121.095	121.095	121.095	121.09
19	121.000	121.000	121.000	121.000	121.03
220 Cost of CO2 \$/Mcf	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.91	\$ 0.9
	ψ 0.91	ψ 0.91	Ψ. U.91	ψ 0.91	φ 0.9

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Average Cost of Gas

\$

Appendix F Page 1 of 5

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 Stud					
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 0.56 of household income that is spent on goods and services by households within the service territory and the 0.56 value added associated with local spending an overall income multiplier to apply to savings under the CIP was calculated at 0.49% (0.49% = 0.40%multiplied by 0.56%).

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				
	Appliance				
	Rebates and				
Industry Segment	LIURP	Thermostats	Advertising		
Contractors	50%	50%			
Wholesale Equipment and	50%				
Insulation					
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	20.0%		
Insulation			
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					
	Appliance						
	Rebates and						
Industry Segment	LIURP	Thermostats	Advertising				
Contractors	36.1%	36.1%					
Wholesale Equipment and	10.0%						
Insulation							
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:	17	\$10K					
Impact		Direct	T	Indirect	Т	Induced	Total
Value Added	\$	354,320	\$		\$		\$ 562,704
Output	ŝ	950,950					
Employment	ľ	5.6		1.4		1.7	
Multiplier		2.0					
Value Added		35%		10%		11%	56%
Output	i i	95%		18%		19%	
Segment:	\$10	0K-15K					
Impact		Direct	1	Indirect	T	Induced	Total
Value Added	\$	354,632	\$	97,016	\$	112,265	\$ 563,913
Output	\$	950,994	\$	182,732	\$	188,524	\$1,322,250
Employment		5.9		1.4		1.8	9.1
Multiplier							
Value Added		35%		10%		11%	
Output		95%	<u></u>	18%		19%	132%
Segment:	\$1:	5K-25K	·		.		
Impact		Direct	-	Indirect	-	Induced	Total
Value Added	\$	354,632	\$	97,016	\$		\$ 563,913
Output Employment	3	950,994 5.9	\$	182,732	\$		\$1,322,250
Multiplier		5.9		1.4		1.8	9.1
Value Added		35%		10%		11%	56%
Output		35% 95%		10%		19%	
Segment:	\$25	5K-35K	1	1070	I	1970	15270
Impact	7	Direct	1	Indirect	T	Induced	Total
Value Added	\$	354,126	\$	95,425	\$	111,538	\$ 561,089
Output	ŝ	951,628	ŝ	178,951	\$	187,303	\$1,317,882
Employment	ľ	5.9	1.1	1.4		1.7	9
Multiplier							
Value Added		35%		10%		11%	56%
Output		95%		18%		19%	
Segment:	\$35	K-50K					
Impact		Direct	1	Indirect		Induced	Total
Value Added	\$	363,948	\$	93,021	\$	107,496	\$ 564,465
Output	\$	951,775	\$	173,671	\$	180,517	\$1,305,963
Employment		5.7	1	1.3		1.7	8.7
Multiplier							
Value Added		36%		9%		11%	56%
Output		95%		17%		18%	131%
Segment:	\$50	K-75K				·····	
Impact		Direct	-	Indirect	-	Induced	Total
Value Added	\$ \$	374,539	\$	92,880	\$	107,337	\$ 574,756
Output Employment	Þ	951,627 5.8	\$	172,513 1.3	\$	180,249 1.7	\$1,304,389 8.8
Multiplier		5.6		1.5		1.7	0.0
Value Added	1	37%		9%		11%	57%
Output	1	95%		17%		18%	130%
Segment:	\$75	K-100K	I	1770		10 /0	130 //
Impact	1,0	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	1	6.1	1 ⁻	1.4		1.7	9.2
Multipling		0.1		1.4			
Multiplier		0.1		1.4			
Multiplier Value Added		38%		9%		11%	59%
							59% 131%
Value Added Output Segment:	\$10	38% 95% 0K-150K		9% 17%		11% 18%	131%
Value Added Output Segment: Impact		38% 95% 0K-150K Direct		9% 17% Indirect		11% 18% Induced	131% Total
Value Added Output Segment: Impact Value Added	\$	38% 95% 0K-150K Direct 383,411	\$	9% 17% Indirect 93,743	\$	11% 18% Induced 109,380	131% Total \$ 586,534
Value Added Output Segment: Impact Value Added Output		38% 95% 0K-150K Direct 383,411 951,115	\$ \$	9% 17% Indirect 93,743 173,102	\$	11% 18% Induced 109,380 183,680	131% Total \$ 586,534 \$1,307,897
Value Added Output Segment: Impact Value Added Output Employment	\$	38% 95% 0K-150K Direct 383,411		9% 17% Indirect 93,743		11% 18% Induced 109,380	131% Total \$ 586,534
Value Added Output Segment: Impact Value Added Output Employment Multiplier	\$	38% 95% 0K-150K Direct 383,411 951,115 6.1		9% 17% Indirect 93,743 173,102 1.4		11% 18% Induced 109,380 183,680 1.7	131% Total \$ 586,534 \$1,307,897 9.2
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added	\$	38% 95% 0K-150K Direct 383,411 951,115 6.1 38%		9% 17% Indirect 93,743 173,102 1.4 9%		11% 18% Induced 109,380 183,680 1.7 1.7 11%	131% Total \$ 586,534 \$1,307,897 9.2 59%
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added Output	\$ \$	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95%		9% 17% Indirect 93,743 173,102 1.4		11% 18% Induced 109,380 183,680 1.7	131% Total \$ 586,534 \$1,307,897 9.2
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added Output Segment:	\$ \$	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95% \$150K		9% 17% 93,743 173,102 1.4 9% 17%	\$	11% 18% 109,380 183,680 1.7 11% 18%	131% Total \$ 586,534 \$ 1,307,897 9.2 59% 131%
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added Output Segment: mpact	\$ \$ GT :	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95% \$150K Direct	\$	9% 17% Indirect 93,743 173,102 1.4 9% 17% Indirect	\$	11% 18% Induced 109,380 183,680 1.7 11% 18% Induced	131% Total \$ 586,534 \$1,307,897 9.2 59% 131% Total
Value Added Output Segment: Impact Value Added Output Employment Vultiplier Value Added Output Segment: Impact Value Added	\$ \$ GT :	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95% 95% \$150K Direct 383,411	\$	9% 17% 93,743 173,102 1.4 9% 17% Indirect 93,743	\$	11% 18% 109,380 183,680 1.7 11% 18% Induced 109,380	<u>Total</u> \$ 586,534 \$1,307,897 9.2 59% 131% <u>Total</u> \$ 586,534
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added Output Segment: impact Value Added Output	\$ \$ GT :	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95% \$150K Direct 383,411 951,115	\$	9% 17% Indirect 93,743 173,102 1.4 9% 17% Indirect 93,743 173,102	\$	11% 18% 109,380 183,680 1.7 11% 18% Induced 109,380 183,680	<u>131%</u> <u>Total</u> \$ 586,534 \$1,307,897 9.2 59% 131% <u>Total</u> \$ 586,534 \$ 1,307,897
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added Output Segment: mpact Value Added Output Employment	\$ \$ GT :	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95% 95% \$150K Direct 383,411	\$	9% 17% 93,743 173,102 1.4 9% 17% Indirect 93,743	\$	11% 18% 109,380 183,680 1.7 11% 18% Induced 109,380	<u>Total</u> \$ 586,534 \$1,307,897 9.2 59% 131% <u>Total</u> \$ 586,534
Value Added Output Segment: Impact Value Added Output Employment Multiplier Value Added Output Segment: Impact Value Added Output Employment Multiplier	\$ \$ GT :	38% 95% 0K-150K Direct 383,411 951,115 6.1 383,411 95% Direct 383,411 951,115 6.1	\$	9% 17% 93,743 173,102 1.4 9% 17% Indirect 93,743 173,102 1.4	\$	11% 18% 109,380 183,680 1.7 11% 18% Induced 109,380 183,680 1.7	<u>Total</u> \$ 586,534 \$ 1,307,897 9.2 59% 131% Total \$ 586,534 \$ 1,307,897 9.2
Value Added Output Segment: impact Value Added Output Employment Multiplier Value Added Output Segment: mpact Value Added Output Employment	\$ \$ GT :	38% 95% 0K-150K Direct 383,411 951,115 6.1 38% 95% \$150K Direct 383,411 951,115	\$	9% 17% Indirect 93,743 173,102 1.4 9% 17% Indirect 93,743 173,102	\$	11% 18% 109,380 183,680 1.7 11% 18% Induced 109,380 183,680	<u>131%</u> <u>Total</u> \$ 586,534 \$1,307,897 9.2 59% 131% <u>Total</u> \$ 586,534 \$ 1,307,897

National Fuel Gas Distribution Corporation New York Division

Calculation of WNY Multipliers

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

Segment:	Contra	actors						
Impact	Direct		Indi	rect	Inc	luced	То	tal
Value Added	\$	341,429	\$	183,832	\$	197,232	\$	722,493
Output	\$	968,335	\$	360,096	\$	331,211	1	1,659,642
Employment	Ţ	6.8		2.8		3.1	*	12.7
Multiplier		0.0		2.0		0.1		/
Value Added		34.1%		18.4%		19.7%		72.2%
Output		96.8%		36.0%		33.1%		166.0%
Segment:	Retail	Building S	upnli		L	00.170	I	100.070
Impact	Direct		Indi		Ind	luced	To	tal
Value Added	\$	159,549	\$	46,063	\$	55,770	\$	261,382
Output	\$	265,187	\$	79,724	\$	93,651	\$	438,562
Employment	*	3.4	ľ	0.7	ľ	0.9	*	400,002
Multiplier		0.7		0.7		0.0		J
Value Added		16.0%		4.6%		5.6%		26.1%
Output		26.5%		4.0 <i>%</i> 8.0%		9.4%		43.9%
Segment:	Whole			0.070	l	5.770	L	
Impact	Direct		Indi	rect	Ind	uced	To	tal
Value Added	\$	131,938	\$	27,898	\$	40,221	\$	200,057
Output	\$	195,701	\$	49,399	\$	67,541	\$	312,641
Employment		6.8	¥	2.8	ΙΨ.	3.1	[♥]	12.7
Multiplier		0.0		2.0		5.1		12.1
Value Added		13.2%		2.8%		4.0%		20.0%
Output		19.6%		2.0 <i>%</i> 4.9%		4.0 <i>%</i> 6.8%		31.3%
Segment:	Advert			7.370	L	0.070		51.570
Impact	Direct		Indir	rect	Ind	uced	Tot	al
Value Added	\$	486,679	\$	164,745	\$	216,583	\$	868,007
Output	\$	948,478	\$	317,323	\$	363,704		,629,505
Employment	1	7.1	*	2.4	¥	3.4	Ψ	12.9
Multiplier				- . •		0.4		12.0
Value Added		48.7%		16.5%		21.7%		86.8%
Output		94.8%		31.7%		36.4%		163.0%
[e = •	1	0 1.0 /0		01.170				100.070
M&V Multipliers								
	D	irect		ndirect		Induced		Total
LIURP, Res Appliance	1							
Rebates & Commercial								
Rebates								
% Contractors	1	50%		50%		50%		50%
% Wholesale		50%		50%		50%		50%
Value Added		24%		11%		12%		46%
Output		58%		20%		20%		99%
Tstat Rebates	1							
% Contractors	1	50%		50%		50%		50%
% Retail		50%		50%		50%		50%
Value Added		25%		11%		13%		49%
Output		62%		22%		21%		105%
Outreach	t							
% Advertising	<u> </u>	100%		100%		100%		100%
Value Added		48.7%		16.5%		21.7%		86.8%
Output		94.8%		31.7%		36.4%		163.0%
	L	0070		51.170		55.770		100.070

NATIONAL FUEL GAS DISTRIBUTION CORPORATION NEW YORK DIVISION CIP SUMMARY THROUGH SEPTEMBER 30, 2009

CIF SUMMART THROUGHT	CIP	CIP	NYSERDA
			Spending ¹
LIURP - Allowance per year = \$2,940,000 Payments to NYSERDA	Expenditures	<u>Funding</u>	Spending
-	¢2 040 000 00		
2007 - 2008 payments	\$2,940,000.00		
1/31/2009	735,000.00 735,000.00		
4/30/2009	-		
7/30/2009	735,000.00		
	\$5,145,000.00		
Funding of LIURP by CMR		* =00.000.00	
3/7/2008		\$500,000.00	
Expanditures made by NVSERDA			
Expenditures made by NYSERDA Audit Fee/Education			¢462.001.00
Insulation			\$463,991.00
Air Sealing			3,290,818.00
-			409,216.00
Heating System Repair/Replacement Thermostats			349,979.00
DHW Improvements			13,642.00
Showerheads			116,059.00
			6,423.00
Pipe Wrapping Other			8,076.00
Total Through 9/30/09		-	<u>39,905.00</u> \$4,698,109.00
Total Through 9/30/09		-	\$4,098,109.00
Residential Rebate Program - Allowance per year - \$3,400,000			
Payments to EFI			
2007 - 2008 payments	¢2 102 257 09		
1/9/2009	\$3,103,257.08 168,275.47		
1/29/2009	194,256.34		
2/10/2009	151,897.40		
3/5/2009	145,308.75		
3/9/2009	124,033.00		
3/31/2009	146,920.97		
4/7/2009	189,394.66		
4/27/2009	148,865.96		
5/8/2009	106,355.94		
5/29/2009	167,873.50		
6/8/2009	142,673.50		
6/24/2009	148,593.50		
7/7/2009	82,137.00		
7/22/2009	137,596.50		
8/12/2009	114,764.50		
8/25/2009	81,206.47		
9/11/2009	138,855.50		
9/30/2009	90,001.50		
	\$5,582,267.54		
Mailing to Contractors May 2008	\$123.00		
Non-residential rebates paid by EFI	\$38,048.96		
· ·	·		
Residential Rebates paid by EFI	\$5,544,341.58		

NATIONAL FUEL GAS DISTRIBUTION CORPORATION NEW YORK DIVISION CIP SUMMARY THROUGH SEPTEMBER 30, 2009

CIP SUMMARY THROUGH SEP		015	
	CIP	CIP	NYSERDA
LIURP - Allowance per year = \$2,940,000	Expenditures	<u>Funding</u>	Spending ¹
Non Residential Rebate Program - Allowance per year - \$1,520,000			
Payments to NYSERDA			
12/5/2007	\$200,000.00		
2/27/2008	\$300,000.00		
5/30/2008	\$382,688.00		
8/29/2008	\$479,263.04		
	\$1,361,951.04		
Non-residential rebates paid by EFI	\$38,048.96		
Total Non-residential Rebates	\$1,400,000.00		
-			
Funding of Rebates by CMR			
3/7/2008		\$200,000.00	
Expenditures by NYSERDA through 9/30/09			\$188,661.00
Jobs Encumbered by NYSERDA through 9/30/09		_	\$176,579.00
		=	
General Outreach and Education - Allowance per year - \$2,200,000			
Expenditures (In House)			
Material	\$175.59		
Contractors	828,283.90		
Office Employee	5,579.31		
Print Advertising	253,438.53		
Radio Advertising	302,166.53		
TV Advertising	206,893.59		
Brochures	67,811.94		
Bill Inserts	75,288.48		
Direct mail	415,542.11		
Internet	64,711.50		
Billboards	215,007.60		
Misc. Advertising	916,335.63		
Postage	2,723.47		
	\$3,353,958.18		
=	φ0,000,000.10		
Funding of Outreach by CMR			
3/7/2008		\$911,634.82	
0172000		φ011,004.0 <u>2</u>	
Low Income Outreach and Education - Allowance per year - \$740,0	00		
Expenditures (In House)			
Contractors	\$7,819.84		
Print Advertising	23,143.37		
Direct mail	3,055.00		
Billboards	192,961.00		
Misc. Advertising	46,656.69		
	\$273,635.90		
=	φ210,000.00		
Funding of Outreach by CMR			
3/7/2008		\$104,624.22	
		ΨΙΟΤ,ΟΣΤ.ΖΖ	
Conservation Incentive Program Surcharge (through 9/30/09)			
Surcharge		\$17,579,918.58	
Refund of overcollection		(\$506,148.04)	
	-	(\$222,110.01)	
Total	\$15,716,935.66	\$18,790,029.58	\$5,063,349.00
=	, .,	,,	, ,

1 - NYSERDA Spending updated through 9/30/09

Appendix H - Residential CIP Rebate Program Customer Survey Results Cumulative thru 9/30/2009

	U	
	Total	
Rebates Received	28252	
Flawed Rebates	6620	23% of 28252 Rebates Received
Rebates Processed	21632	77% of 28252 Rebates Received
Randomly Selected Customers	2997	14% of 21632 Rebates Processed
Overland Astro-Ibs Overland	4.400	400/ of Developments Only start Overlage and
Customers Actually Contacted Responsive Customers	1468 1055	49% of Randomly Selected Customers 72% of Customers Contacted
Non-Responsive Customers	413	28% of Customers Contacted
(refused to participate or hung up on phone rep)		
Q1 - Program Awareness	=10	
Contractor NFG Bill Insert	712 191	67% of Customers Responding 18% " " "
News/Newspapers	104	10% " " "
Friends/Word of Mouth	100	9% " "
TV	91	9% " "
NFG Website	49	5% " " "
NFG Letters	15	1% " " "
NFG Billboards Radio	11 39	1% " " " 4% " " "
*Note: responses total > 1055 since many customers	1312	70
cited several sources		
Q2 - Rebate Influence on Upgrade Decision	450	
Not Important Somewhat Important	153 417	15% of the Customers were NOT Influenced by the NFG rebate in their purchase 40%
Very Important	417	40% 46% 86% of the Customers were Influenced by the NFG rebate in their purchase
vory important	1054	
Q3 - Received Rebate Check		
Yes	1029	98% of the Customers had received their rebate check
No	25	2%
	1054	
Q4 - Satisfaction with Time to Receive Rebate		
1- Very Dissatisfied	26	3% 5% of the Customers were NOT satisfied with the time it took to receive rebate
2- Dissatisfied	19	2%
3- Neither Dissatisfied or Satisfied	88	9%
4- Satisfied	200	19%
5- Very Satisfied	695 1028	68% 87% of the Customers were satisfied with the time it took to receive rebate
	1028	
N/A	26	2% of the Customers had NOT received their rebate check
	1054	
Q5 - Satisfaction with the Application Process		
1- Very Dissatisfied	25	2% 4% of the Customers were NOT satisfied with the application process
2- Dissatisfied 3- Neither Dissatisfied or Satisfied	20 86	2% 8%
4- Satisfied	214	20%
5- Very Satisfied	709	67% 87% of the Customers were satisfied with the application process
	1054	
Q6 - Satisfaction with Administrator, EFI	10	50/ 70/ of the Oustamore contacting EEI hundred with NOT activity of the
1- Very Dissatisfied 2- Dissatisfied	12 5	5% 7% of the Customers contacting EFI by phone were NOT satisfied with EFI 2%
2- Dissatisfied3- Neither Dissatisfied or Satisfied	32	13%
4- Satisfied	51	20%
5- Very Satisfied	153	60% 80% of the Customers contacting EFI by phone were satisfied with EFI
	253	
N/A	801	70% of the Customere did not context FEI burbane
N/A	801 1054	76% of the Customers did not contact EFI by phone
	. 30-1	
Q7 - Satisfaction with Inspection by CSG		
1- Very Dissatisfied	5	2% of the Customers with inspections were NOT satisfied with CSG
2- Dissatisfied	2	0%
3- Neither Dissatisfied or Satisfied	8 22	4%
4- Satisfied 5- Very Satisfied	185	10% 83% 93% of the Customers with inspections were satisfied with CSG
	222	
N/A	832	79% of the Customers had no inspection done
	1054	
09 Overall Satisfaction with Datate Branner		
Q8 - Overall Satisfaction with Rebate Program 1- Very Dissatisfied	11	1% 1% of the Customers were NOT satisfied with rebate program
2- Dissatisfied	4	0%
3- Neither Dissatisfied or Satisfied	31	3%
4- Satisfied	150	14%
5- Very Satisfied	858	81% 95% of the Customers were satisfied with rebate program
	1054	

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 customers 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 eleven months of complete pre and post consumption data for the following residential rebate categories: (1) Heating Systems, (2) Programmable Thermostats, (3) Hot Water Tank Systems, and (4) 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. The Company currently has pre/post consumption data for the time periods provided in Table 1 below.

Table 1		
Month Equipment	Pre Equipment Installation	Post Equipment Installation
Installed	Consumption Month	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
		•

The average consumption change over the five months period tested is summarized in Table 2 below.

Table 2		
	Change in Consu	mption Per Account
Equipment	Mcf per Account	Percent Change
Heating Systems	-13.34	-11.8%
Programmable Thermostats	- 4.60	- 4.5%
Storage Tank Water Heater	- 3.77	- 3.5%
Tankless Water Heater	- 6.94	- 6.5%

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

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

			Heating System Only	m Only			
			Noi	rmalized Co	Normalized Consumption (Mcf)	(Mcf)	
						Weighted Annual	Annual
						Consumption	ption
	·	1 Year Prior	1 Year				
Month Unit		þ	After				
Installed	Customers	Installation	Installation	Change	% Change	Pre	Post
November-07	230	112.737	99.678	-13.059	-11.6%	25,929.5	22,925.9
December-07	398	115.183	100.310	-14.873	-12.9%	45,842.8	39,923.4
January-08	250	117.993	107.190	-10.803	-9.2%	29,498.3	26,797.5
February-08	170	120.822	106.272	-14.550	-12.0%	20,539.7	18,066.2
March-08	133	118.652	104.778	-13.874	-11.7%	15,780.7	13,935.5
April-08	110	112.284	101.598	-10.686	-9.5%	12,351.2	11,175.8
May-08	112	105.219	91.544	-13.675	-13.0%	11,784.5	10,252.9
June-08	105	111.804	98.310	-13.494	-12.1%	11,739.4	10,322.6
July-08	133	102.541	93.111	-9.430	-9.2%	13,638.0	12,383.8
August-08	140	107.339	93.343	-13.996	-13.0%	15,027.5	13,068.0
September-08	172	106.557	90.496	-16.061	-15.1%	18,327.8	15,565.3
Total	1,953	112.882	99.548	-13.335	-11.8%	220,459.5	194,416.9

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

		Program	Programmable Thermostats Only	mostats Or	ly		
			Nor	malized Co	Normalized Consumption (Mcf)	Mcf)	
						Weighted Annual	Annual
						Consumption	ption
		1 Year Prior	1 Year				
Month Unit		þ	After				
Installed	Customers	Installation	Installation	Change	Change % Change	Pre	Post
November-07	50	109.751	102.847	-6.904	-6.3%	5,487.6	5,142.4
December-07	142	105.349	103.867	-1.482	-1.4%	14,959.6	14,749.1
January-08	135	105.997	102.688	-3.309	-3.1%	14,309.6	13,862.9
February-08	92	105.607	98.399	-7.208	-6.8%	9,715.8	9,052.7
March-08	98	97.032	92.135	4.897	-5.0%	9,509.1	9,029.2
April-08	55	97.211	89.963	-7.248	-7.5%	5,346.6	4,948.0
May-08	44	102.164	98.529	-3.635	-3.6%	4,495.2	4,335.3
June-08	46	107.622	101.381	-6.241	-5.8%	4,950.6	4,663.5
July-08	48	94.869	91.986	-2.883	-3.0%	4,553.7	4,415.3
August-08	36	107.802	101.214	-6.588	-6.1%	3,880.9	3,643.7
September-08	30	97.368	90.565	-6.803	-7.0%	2,921.0	2,717.0
Total	776	103.260	98.659	4.601	-4.5%	80,129.7	76,559.0

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

		Storage	Storage Tank Water Heating Only	Heating O	- Al		
			Nor	malized Co	Normalized Consumption (Mcf)	Mcf)	
						Weighted Annual	Annual
						Consumption	ption
		1 Year Prior	1 Year			1	
Month Unit		ę	After				
Installed	Customers	Installation	Installation	Change	Change % Change	Pre	Post
November-07	13	94.788	89.35	-5.438	-5.7%	1,232.2	1,161.6
December-07	59	105.585	101.684	-3.901	-3.7%	6,229.5	5,999.4
January-08	89	112.811	112.550	-0.261	-0.2%	10,040.2	10,017.0
February-08	51	108.139	103.771	-4.368	4.0%	5,515.1	5,292.3
March-08	73	106.680	103.484	-3.196	-3.0%	7,787.6	7,554.3
April-08	112	108.708	105.185	-3.523	-3.2%	12,175.3	11,780.7
May-08	85	108.051	102.769	-5.282	-4.9%	9,184.3	8,735.4
June-08	54	111.487	107.375	-4.112	-3.7%	6,020.3	5,798.3
July-08	56	98.885	95.675	-3.210	-3.2%	5,537.6	5,357.8
August-08	50	110.332	107.151	-3.181	-2.9%	5,516.6	5,357.6
September-08	61	105.378	97.753	-7.625	-7.2%	6,428.1	5,962.9
Total	703	107.634	103.865	-3.769	-3.5%	75,666.8	73,017.1

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		Tanki	Tankless Water Heating Only	eating Only			
			Nor	malized Co	Normalized Consumption (Mcf)	Mcf)	
	.					Weighted Annual	Annual
						Consumption	otion
		1 Year Prior	1 Year				
Month Unit		ą	After				
Installed	Customers	Installation	Installation	Change	Change % Change	Pre	Post
November-07	20	101.131	97.403	-3.728	-3.7%	2,022.6	1,948.1
December-07	67	107.375	100.986	-6.389	-6.0%	7,194.1	6,766.1
January-08	62	117.168	108.052	-9.116	-7.8%	7,264.4	6,699.2
February-08	40	98.482	90.786	-7.696	-7.8%	3,939.3	3,631.4
March-08	26	105.422	97.681	-7.741	-7.3%	2,741.0	2,539.7
April-08	41	104.535	97.890	-6.645	-6.4%	4,285.9	4,013.5
May-08	31	102.600	96.248	-6.352	-6.2%	3,180.6	2,983.7
June-08	28	110.493	104.602	-5.891	-5.3%	3,093.8	2,928.9
July-08	26	107.446	96.761	-10.685	-9.9%	2,793.6	2,515.8
August-08	26	95.716	87.217	-8.499	-8.9%	2,488.6	2,267.6
September-08	38	104.698	102.047	-2.651	-2.5%	3,978.5	3,877.8
Total	405	106.130	99.189	-6.940	-6.5%	42,982.5	40,171.7

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