

May 31, 2024

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120-0093

Re: Annual Resource Planning Report (ARPR)
Docket: M-2024-3045244

Dear Secretary:

Enclosed is a copy of the National Fuel Gas Distribution Corporation (NFGDC) submittal of the Annual Resource Planning Report (ARPR) pursuant to Title 52, Pennsylvania Code § 59.81 through § 59.84.

In accordance with the Emergency Order at Docket #M-2020-3019262 issued on March 20, 2020, this Report is being filed electronically. No additional paper copies will be sent.

General inquires concerning this submission and specific questions regarding FORMs-IRP-GAS-1A,1B, 3, 4A and 4B should be made to Cathy Cherven-Oczytko at (716) 857-7691.

Specific questions concerning FORMs-IRP-GAS-2A-Table 1, 2A-Table 2, 2B and 2C should be made to Nick Pasquarella at (716) 857-7010.

Definitive inquiries pertaining to FORMs-IRP-GAS-5, 6, 7, 8 or 9 should be directed to Michelle Kosko at (814) 871-8140.

Sincerely,



Cathleen Cherven-Oczytko
Assistant Manager-Market Planning
Rates & Regulatory Affairs

Enclosures

cc: Office of Consumer Advocate
Office of Small Business Advocate
Bureau of Investigation and Enforcement

Form-IRP-GAS-1A: Annual Gas Demand Requirements
Reporting Utility: National Fuel Gas Distribution Corporation - Pennsylvania Division
(Volumes in MMcf)

Index Year: Actual Year:	Historical Data		Current Year	Three Year Forecast		
	-2 2022	-1 2023	0 2024	1 2025	2 2026	3 2027
Firm Sales:						
Retail Residential	18,089	15,591	17,950	18,070	18,251	18,463
Retail Commercial	3,370	2,898	3,228	3,538	3,595	3,659
Retail Industrial	347	265	283	290	300	310
Electric power generation	0	0	0	0	0	0
Exchange with other utilities	0	0	0	0	0	0
Unaccounted for Gas	(209)	(342)	33	33	33	34
Company Use	8	6	10	15	12	14
Other (Off-system)	0	0				
Subtotal Firm Sales	21,605	18,418	21,503	21,945	22,191	22,479
Interruptible Sales:						
Retail	0	0	0	0	0	0
Electric power generation	0	0	0	0	0	0
Company's Own Plant	0	0	0	0	0	0
Subtotal Interruptible	0	0	0	0	0	0
Subtotal Firm and Interruptible Sales:	21,605	18,418	21,503	21,945	22,191	22,479
Transportation:						
Firm Residential	2,004	1,750	1,927	1,849	1,786	1,728
Firm Commercial	6,596	6,254	6,764	6,769	6,792	6,835
Firm Industrial	16,903	16,048	18,185	19,190	19,497	19,423
Interruptible Residential	0	0	0	0	0	0
Interruptible Commercial	0	0	0	0	0	0
Interruptible Industrial	0	0	0	0	0	0
Electric power generation	0	0	0	0	0	0
Subtotal Transportation	25,502	24,052	26,877	27,808	28,076	27,986
Total Gas Requirements	47,107	42,470	48,380	49,753	50,267	50,465
Increase (Decrease)		(4,637)	5,910	1,373	514	199
Percent Change (%)		-9.8%	13.9%	2.8%	1.0%	0.4%

FORM-IRP-GAS-1B: PEAK DAY REQUIREMENTS
REPORTING UTILITY: National Fuel Gas Distribution Corporation - Pennsylvania Division
(volumes in Mmcf)

Index Year: Actual Year:	Historical Data		Current Year	Three Year Forecast		
	-2 2022	-1 2023	0 2024	1 2025	2 2026	3 2027
Firm Sales						
Retail Residential	139.700	178.400	219.123	220.297	222.515	224.703
Retail Commercial	27.900	33.100	42.625	43.055	43.751	44.451
Retail Industrial	2.500	2.600	2.590	2.644	2.738	2.830
Electric Power Generation Exchanges with Other Utilities						
Unaccounted for Gas			0.397	0.400	0.404	0.409
Company Use			0.071	0.074	0.070	0.070
Other						
Subtotal Firm Sales	170.100	214.100	264.806	266.470	269.478	272.463
Interruptible Sales						
Retail						
Electric Power Generation						
Company's Own Plant						
Subtotal Interruptible Sales	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL FIRM AND INTERRUPTIBLE SALES:	170.100	214.100	264.806	266.470	269.478	272.463
Transportation						
Firm Residential	16.700	17.600	23.856	22.825	22.051	21.303
Firm Commercial	53.000	53.700	76.493	76.171	76.477	76.929
Firm Industrial	80.500	73.700	78.989	83.543	84.758	84.292
Interruptible Residential						
Interruptible Commercial						
Interruptible Industrial						
Electric Power Generation						
Subtotal Transportation	150.200	145.000	179.338	182.539	183.286	182.524
TOTAL GAS REQUIREMENTS	320.300	359.100	444.144	449.009	452.764	454.987
Increase (Decrease)		38.800	85.044	4.865	3.755	2.223
Percent Change (%)		12.11%	23.68%	1.10%	0.84%	0.49%

Form-IRP-GAS-2B: Natural Gas Transportation
 Reporting Utility: National Fuel Gas Distribution Corporation - Pennsylvania Division
 (Volumes in MMcf)

Index Year Actual Year	Historical Data				Current Year		Three Year Forecast					
	-2 2022		-1 2023		0 2024		1 2025		2 2026		3 2027	
City Gate Transportation Contracts (List) ¹	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
1. N.F.G.S.C. - EFT	21,133.8	170.1	17,844.8	214.1	21,771.5	264.8	21,944.9	266.5	22,190.9	269.5	22,479.5	272.5
Other - Transportation to end users	25,502.0	150.2	24,052.0	145.0	26,877.0	179.3	27,808.0	182.5	28,076.0	183.3	27,986.0	182.5
Total	46,635.8	320.3	41,896.8	359.1	48,648.5	444.1	49,752.9	449.0	50,266.9	452.8	50,465.5	455.0
Upstream Transportation Contracts:	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
1. TGP Zone 4	7,330.5	58.9	7,659.2	59.8	6,768.2	61.9	6,649.0	62.3	6,657.0	62.7	6,713.9	63.2
2. Columbia G. T.	2,031.7	1.7	1,714.0	1.8	392.0	1.7	379.2	1.7	368.0	1.7	367.7	1.7
3. Texas Eastern	3,012.8	9.5	3,233.0	9.5	3,759.2	9.5	3,755.3	9.5	3,755.3	9.5	3,755.3	9.5
Other (NFGSC & NFGDC)	-	36.8	-	34.9	-	33.9	-	33.9	-	33.9	-	33.9
Total	12,375.0	106.9	12,606.2	106.0	10,919.4	107.0	10,783.5	107.4	10,780.3	107.8	10,836.9	108.3
Storage Related Transportation Contracts 2:	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
1. ESS - NFGSC	6,063.0	21.1	6,228.4	86.2	5,725.4	114.7	5,954.4	117.6	5,969.5	120.2	5,985.5	122.7
2. FSS - NFGSC	212.3	9.5	9.5	6.3	171.3	10.2	133.3	10.2	133.3	10.2	133.3	10.2
3. FSS 2 - NFGSC	200.2	13.4	13.3	-	463.1	13.3	334.9	13.3	334.9	13.3	334.9	13.3
4. FSS-SST Col.	478.9	16.9	374.0	16.8	498.2	17.5	392.9	17.5	419.0	17.5	441.5	17.5
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total	6,954.5	60.9	6,625.2	109.3	6,858.0	155.7	6,815.5	158.6	6,856.7	161.2	6,895.2	163.7

1 Rank contracts in order of magnitude for the current year. Reporting should proceed along rank ordering until 75% of total contract supplies is accounted for, or until ten contracts have been listed, whichever occurs first. Provide a separate sheet identifying the supplier for each contract listed. (Note: rank ordered based on annual).

2 Storage should net to zero (Net withdrawal activity on Sheet 2-C)

Form-IRP-GAS-2C: Natural Gas Storage
 Reporting Utility: National Fuel Gas Distribution Corporation - Pennsylvania Division
 (Volumes in MMcf)

Index Year Actual Year	Historical Data				Current Year		Three Year Forecast					
	-2 2022		-1 2023		0 2024		1 2025		2 2026		3 2027	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
Storage Contracts (List); ¹												
1. NFGSC (ESS 1)	6,063.0	21.1	6,228.4	86.2	5,725.4	114.7	5,954.4	117.6	5,969.5	120.2	5,985.5	122.7
2. NFGSC (FSS)	212.3	9.5	9.5	6.3	171.3	10.2	133.3	10.2	133.3	10.2	133.3	10.2
3. NFGSC (FSS 2)	200.2	13.4	13.3	-	463.1	13.3	334.9	13.3	334.9	13.3	334.9	13.3
4. Columbia (FSS)	478.9	16.9	374.0	16.8	498.2	17.5	392.9	17.5	419.0	17.5	441.5	17.5
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total	6,954.5	60.9	6,625.2	109.3	6,858.0	155.7	6,815.5	158.6	6,856.7	161.2	6,895.2	163.7

¹ Rank contracts in order of magnitude for the current year. Reporting should proceed along rank ordering until 75% of total contract supplies is accounted for, or until ten contracts have been listed, whichever occurs first. Provide a separate sheet identifying the supplier for each contract listed. (Note: rank ordered based on MDQ).

FORM-IRP-GAS-3: NUMBER OF CUSTOMERS (YEAR END)
 REPORTING UTILITY: National Fuel Gas Distribution Corporation - Pennsylvania Division

	Historical Data		Current Year	Three Year Forecast			
	Index Year: Actual Year:	-2 2022	-1 2023	0 2024	1 2025	2 2026	3 2027
Sales Service:							
Retail Residential		179,151	179,612	180,170	181,072	181,973	182,874
Retail Commercial		11,655	11,603	11,946	12,062	12,178	12,294
Retail Industrial		178	174	171	170	169	168
Other							
Subtotal Sales Service		190,984	191,389	192,287	193,304	194,320	195,336
Electric Power Generation							
Transportation Service		22,551	21,933	22,283	21,738	21,192	20,646
CUSTOMER TOTAL		213,535	213,322	214,570	215,042	215,512	215,982
Increase (Decrease)			(213)	1,248	471	471	470
Percent Change (%)			-0.1%	0.6%	0.2%	0.2%	0.2%

FORM-IRP-GAS-4A: ANNUAL SUPPLY AND REQUIREMENTS SUMMARY
 REPORTING UTILITY: National Fuel Gas Distribution Corporation - Pennsylvania Division
 (volumes in MMcf)

	Index Year: Actual Year:	Historical Data		Current Year	Three Year Forecast		
		-2 2022	-1 2023	0 2024	1 2025	2 2026	3 2027
Gas Supply:							
Supply Contracts		13,290	11,297	21,503	21,945	22,191	22,479
Spot Purchases		8,315	7,121				
Subtotal Gas Supply		21,605	18,418	21,503	21,945	22,191	22,479
Transportation		25,502	24,052	26,877	27,808	28,076	27,986
TOTAL GAS SUPPLY		47,107	42,470	48,380	49,753	50,267	50,465
Requirements:							
Firm Requirements		21,605	18,418	21,503	21,945	22,191	22,479
Interruptible Requirements							
Subtotal Firm & Interruptible		21,605	18,418	21,503	21,945	22,191	22,479
Transportation		25,502	24,052	26,877	27,808	28,076	27,986
Load Reductions		-	-	-	-	-	-
TOTAL GAS REQUIREMENTS		47,107	42,470	48,380	49,753	50,267	50,465
Surplus (Deficiency)		-	-	-	-	-	-

FORM-IRP-GAS-4B: PEAK DAY SUPPLY AND REQUIREMENTS SUMMARY
 REPORTING UTILITY: National Fuel Gas Distribution Corporation - Pennsylvania Division
 (volumes in MMcf)

	Historical Data		Current Year	Three Year Forecast			
	Index Year: Actual Year:	-2 2022	-1 2023	0 2024	1 2025	2 2026	3 2027
Gas Supply:							
Supply Contracts		170.100	214.100	264.800	266.500	269.500	272.500
Spot Purchases		0.000	0.000	0.000	0.000	0.000	0.000
Subtotal Gas Supply		170.100	214.100	264.800	266.500	269.500	272.500
Transportation		150.200	145.000	179.300	182.500	183.300	182.500
TOTAL GAS SUPPLY		320.300	359.100	444.100	449.000	452.800	455.000
Requirements:							
Firm Requirements		170.100	214.100	264.806	266.470	269.478	272.463
Interruptible Requirements		0.000	0.000	0.000	0.000	0.000	0.000
Subtotal Firm & Interruptible		170.100	214.100	264.806	266.470	269.478	272.463
Transportation		150.200	145.000	179.338	182.539	183.286	182.524
Load Reductions		0.000	0.000	0.000	0.000	0.000	0.000
TOTAL GAS REQUIREMENTS		320.300	359.100	444.144	449.009	452.764	454.987
Surplus (Deficiency)		0.000	0.000	(0.044)	(0.009)	0.036	0.013

FORM IRP - GAS - 5 - PROGRAM DESCRIPTION

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION 2023

CONTACT: SHELLY KOSKO (814) 871-8140

PROGRAM: RESIDENTIAL HEAT SURVEYS

EXISTING

PROPOSED

OBJECTIVE:

To promote conservation measures and practices for residences containing four units or less and to respond to inquiries concerning heating systems, to assist in resolving high bill inquiries and to provide appropriate information for customers to evaluate conversion to natural gas from an alternate fuel.

2023 Goals - 9 Residential Heat Surveys, Air Conditioning Surveys, High Bill Inquiries and Conversions (all at customer request)

2024 Goals – 9 Residential Heat Surveys, Air Conditioning Surveys, High Bill Inquiries and Conversions (all at customer request)

DETAILS OF ACTIVITY AND IMPLEMENTATION SCHEDULE:

Provided 3 Residential Heat Surveys in 2023. Customer requirements determined the course of action which could include: an evaluation of the heating/cooling equipment and distribution system; insulation and ventilation; water heating; storm windows and doors; and calibrating some equipment. Customers are notified verbally and in writing of the findings and recommendations. Similar action is taken on high bill inquiries (1 in 2023) after obtaining a two-year history printout. An education session highlighting actions, which focus on energy reduction, is provided to each customer. All activities are performed free of charge to the requesting customer.

ACTUAL AND/OR ANTICIPATED RESULTS:

YEAR	<u>PEAK LOAD</u>		<u>ENERGY SAVINGS</u>		
	REDUCTION KW	ELECTRIC MWH	GAS MCF	OIL GALLONS	OTHER RESULTS
2023		N/A	N/A	N/A	
2024		N/A	N/A	N/A	

(Activity and savings are dependent on action taken by program recipient.)

MONETARY AND PERSONNEL RESOURCES:

YEAR	<u>PERSONNEL</u>		<u>CATEGORIZED PROGRAM EXPENSES</u>			
	ESTIMATED MANHOURS	LABOR	TRANSP	SERVICES	OTHER	TOTAL
2023	15	\$ 426	\$ 109	\$ 0	\$ 40	\$ 575
2024	45	\$ 1,296	\$ 111	\$ 0	\$ 41	\$ 1,448

FORM IRP - GAS - 5 - PROGRAM DESCRIPTION

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION - 2023

CONTACT: SHELLY KOSKO (814) 871-8140

PROGRAM: COMMERCIAL HEAT SURVEYS

EXISTING

PROPOSED

OBJECTIVE:

To evaluate the heating system at a commercial establishment and to advise and educate the customer concerning conservation measures and practices for energy savings.

2023 Goal - 5

2024 Goal - 5

DETAILS OF ACTIVITY AND IMPLEMENTATION SCHEDULE:

Provided 1 Commercial Heat Survey in 2023. A written report containing the results of an evaluation of the establishment is presented to the customer. This may include insulation, boiler or furnace performance, heat and cooling distribution systems, a fuel analysis for conversion from alternate fuels, modifications to correct comfort problems and energy savings recommendations. Work patterns and schedules are discussed to determine if changes here will have an impact on energy usage. There is no charge for the service, which is based on customer request.

ACTUAL AND/OR ANTICIPATED RESULTS:

<u>YEAR</u>	<u>PEAK LOAD</u>	<u>ELECTRIC</u>	<u>GAS</u>	<u>ENERGY SAVINGS</u>		<u>OTHER</u>
	<u>REDUCTION</u>			<u>OIL</u>	<u>OTHER</u>	
	<u>KW</u>	<u>MWH</u>	<u>MCF</u>	<u>GALLONS</u>	<u>RESULTS</u>	
2023			N/A			
2024			N/A			

(Activity and savings are dependent on actions taken by program recipient.)

MONETARY AND PERSONNEL RESOURCES:

<u>YEAR</u>	<u>PERSONNEL</u>		<u>CATEGORIZED PROGRAM EXPENSES</u>			
	<u>ESTIMATED</u>	<u>LABOR</u>	<u>TRANSP</u>	<u>SERVICES</u>	<u>OTHER</u>	<u>TOTAL</u>
	<u>MANHOURS</u>					
2023	4.5	\$ 142	\$ 109	\$0	\$40	\$ 291
2024	22.5	\$ 720	\$ 111	\$0	\$41	\$ 872

FORM IRP - GAS - 5 - PROGRAM DESCRIPTION

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION 2023

CONTACT: SHELLY KOSKO (814) 871-8140

PROGRAM: ENERGY CONSERVATION SURVEYS (ECS)

EXISTING

PROPOSED

OBJECTIVE:

To perform free Energy Surveys for customers who demonstrate ability - to - pay problems and determine if the customers are eligible for LIURP.

2023 Goal - 208

2024 Goal - 210

(Per customer request when payment arrangements are made.)

DETAILS OF ACTIVITY AND IMPLEMENTATION SCHEDULE:

A National Fuel conservation representative will identify procedures and measures, which will impact energy savings and comfort. Items discussed could include attic, wall, and basement insulation, caulking and weather-stripping, heating and ventilation, comfort zone and behavior changes in lifestyle, which may significantly impact energy usage. A site-specific report identifying deficiencies or actions to be taken is provided at each surveyed residence. Recipients of ECS, are often customers who have ability-to-pay problems. Many of these customers are also referred to the Low-Income Usage Reduction Program for further services. There were 25 surveys completed in 2023. There were also 2,138 customers that were sent an Energy Conservation Tips flier.

ACTUAL AND/OR ANTICIPATED RESULTS:

<u>YEAR</u>	<u>PEAK LOAD</u>	<u>ENERGY SAVINGS</u>			
	<u>REDUCTION</u> <u>KW</u>	<u>ELECTRIC</u> <u>MWH</u>	<u>GAS</u> <u>MCF</u>	<u>OIL</u> <u>GALLONS</u>	<u>OTHER</u> <u>RESULTS</u>
2023			N/A		
2024			N/A		

(Savings are dependent upon actions taken by a survey recipient.)

MONETARY AND PERSONNEL RESOURCES:

<u>YEAR</u>	<u>PERSONNEL</u>		<u>CATEGORIZED PROGRAM EXPENSES</u>			
	<u>ESTIMATED</u> <u>MANHOURS</u>	<u>LABOR</u>	<u>TRANS</u>	<u>SERVICES</u>	<u>OTHER</u>	<u>TOTAL</u>
2023	112.5	\$ 3,550	\$ 109	\$ 0	\$ 40	\$ 3,699
2024	945.0	\$ 30,240	\$ 111	\$ 0	\$ 41	\$ 30,392

FORM IRP - GAS - 5 - PROGRAM DESCRIPTION

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION - 2023

CONTACT: SHELLY KOSKO (814) 871-8140

PROGRAM: LOW INCOME USAGE REDUCTION PROGRAM (LIURP)

EXISTING

PROPOSED

OBJECTIVE:

To reduce the energy usage of qualifying low-income customers through weatherization and education, reduction of uncollectible accounts, collection and termination expenses of National Fuel as mandated by the PUC.

2023 Goal - 486 Homes

2024 Goal - 399 Homes

DETAILS OF ACTIVITY AND IMPLEMENTATION SCHEDULE:

Households, which qualify by having high consumption, high arrearage, and income at or below the 200% of the Federal Poverty Guidelines will be considered for LIURP. There were 77 households that received full services, which include a furnace safety check, a clean and tune, an energy audit, education sessions, weatherization measures, infiltration measures. A post inspection by a National Fuel Representative is completed on approximately 25% of the jobs. Major measures installed allow for a targeted goal of a twelve-year payback that may include attic insulation, wall insulation and furnace and/or water heater replacement. The average expenditure per household was \$6,983.71 for the 77 houses that received full services in 2023. There were 9 furnaces/boilers and 7 water heaters replaced for those who received weatherization measures. An additional (1) customer received partial services. National Fuel’s Emergency Repair/Replacement Program provides repair or replacement of defective heating systems or water heaters for customers at or below the 200% of poverty guidelines and who are not eligible for weatherization under LIURP. In 2023, National Fuel repaired 11 furnaces/boilers, 3 water heaters, 5 house lines, replaced 53 furnaces/boilers, and replaced 63 water heaters.

ACTUAL AND/OR ANTICIPATED RESULTS:

<u>YEAR</u>	<u>PEAK LOAD</u>	<u>ENERGY SAVINGS</u>			
	<u>REDUCTION KW</u>	<u>ELECTRIC MWH</u>	<u>GAS MCF</u>	<u>OIL GALLONS</u>	<u>OTHER RESULTS</u>
2023			3,326		
2024			17,237 (EST)		

MONETARY AND PERSONNEL RESOURCES:

<u>YEAR</u>	<u>PERSONNEL</u>		<u>CATEGORIZED PROGRAM EXPENSES</u>			
	<u>ESTIMATED MANHOURS</u>	<u>LABOR COST</u>	<u>TRANSP</u>	<u>SERVICES</u>	<u>OTHER</u>	<u>TOTAL</u>
2023	3,328	\$47,996	\$ 1,592	\$1,005,990	\$ 3,840	\$1,059,418
2024	3,328	\$57,457	\$ 1,592	\$3,618,604	\$ 3,845	\$3,681,497

FORM IRP - GAS - 6 - ENERGY USERS

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION – 2023

<u>ENERGY USERS</u>	NUMBER OF CUSTOMERS	ANNUAL ENERGY CONSUMPTION*	CONSERVATION IMPACT (MW REDUCTION OF MCF SAVINGS)	
	<u>(YEAR-END)</u>	<u>MCF</u>	<u>TARGET</u>	<u>ACTUAL</u>
RESIDENTIAL HEAT & NON HEATING	196,655	17,712,962.7		
COMMERCIAL	14,974	7,006,239.3		
INDUSTRIAL	594	16,268,948.9		
PUBLIC AUTHORITY	1,193	2,220,748.9		
RAILROADS				
RESALE INTERRUPTIBLE				
INTERDEPARTMENTAL				
TRANSPORTATION	22,018*			
TOTALS	213,416	43,208,899.8		

* These accounts are already included in the numbers above and the totals.

OTHER CONSERVATION ACTIVITIES

OUTREACH AND EDUCATION

Program expenses: None

Presentations are offered yearly to diverse agencies throughout the National Fuel 14 county territory. This presentation details National Fuel's Universal Service programs, which includes weatherization and conservation measures. In addition, Universal Services information is provided to customers and community partners at many events and conferences. Our Universal Services Advisory Committee meets twice a year obtaining feedback from various agencies and community partners to improve our current programs. Our goal is to outreach to various agencies, increasing their awareness of our Universal Service programs, which will increase referrals and assistance to our customers.

Contact: Shelly Kosko
Koskom@natfuel.com
(814) 871-8140

Jacquelyn Beardsley
Beardsleyj@natfuel.com
(814) 871-8062

FORM IRP - GAS - 7 - PROGRAM SUMMARY
2023 EXISTING

COMPANY: NATIONAL FUEL GAS DISTRIBUTION
CONTACT: Michelle Kosko (814) 871-8140

CATERGORIZED PROGRAM EXPENSES

<u>PROGRAM NAME</u>	<u>PEAK LOAD REDUCTION</u>	<u>ENERGY USE CHANGE MCF</u>	<u>ALLOCATED MANHOURS</u>	<u>LABOR</u>	<u>TRANS/TOOLS</u>	<u>SERVICES</u>	<u>OTHER</u>	<u>TOTAL</u>
ECS	N/A	N/A	112.5	\$3,550	\$109	\$0	\$40	\$3,699
RESIDENTIAL HEAT SURVEY	N/A	N/A	15	\$426	\$109	\$0	\$40	\$575
COMMERCIAL HEAT SURVEY	N/A	N/A	4.5	\$142	\$109	\$0	\$40	\$291
LIURP	N/A	3,326	3,328	\$47,996	\$1,592	\$1,005,990	\$3,840	\$1,059,418
TOTALS	N/A	3,326	3,460	\$52,114	\$1,919	\$1,005,990	\$3,960	\$1,063,983

FORM IRP - GAS - 7 - PROGRAM SUMMARY
2024 EXISTING AND PROPOSED

COMPANY: NATIONAL FUEL GAS DISTRIBUTION
CONTACT: Michelle Kosko (814) 871-8140

<u>PROGRAM NAME</u>	<u>PEAK LOAD REDUCTION</u>	<u>ENERGY USE CHANGE MCF</u>	<u>ALLOCATED MANHOURS</u>	<u>CATERGORIZED PROGRAM EXPENSES</u>				
				<u>LABOR</u>	<u>TRANS/TOOLS</u>	<u>SERVICES</u>	<u>OTHER</u>	<u>TOTAL</u>
ECS	N/A	N/A	945	\$30,240	\$111	\$0	\$41	\$30,392
RESIDENTIAL HEAT SURVEY	N/A	N/A	45	\$1,296	\$111	\$0	\$41	\$1,448
COMMERCIAL HEAT SURVEY	N/A	N/A	22.5	\$720	\$111	\$0	\$41	\$872
LIURP	N/A	17,237 (Est)	3,328	\$57,457	\$1,592	\$3,618,604	\$3,845	\$3,681,497
TOTALS	N/A	12,344 (Est)	4,341	\$89,713	\$1,925	\$3,618,604	\$3,968	\$3,714,209

FORM IRP - GAS - 8 - BENEFIT ANALYSIS INPUTS 2023

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION

PROGRAM: LIURP

YEAR	Energy Savings (E) MCF	Average Energy Costs (ACE) \$ PER/MCF	Avoided Energy Costs (MCE) \$PER/MCF	Participant Demand Savings (D) KW	Utility Capacity Savings (G) \$/KW	Average Demand Costs (ACD) \$/KW	Avoided Demand Costs (MCD) \$/KW	Participant Costs (PC) \$	Tax Credits (TC) \$
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2023	3,326	10.90	6.80	N/A	N/A	N/A	N/A	0	0
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Incentive Cost (1) \$	Utility Costs (UC) \$	Participants (D) %	Non-Participant (D) %	Utility (D) %	Escalation Rate _____ %	System Sales or Demand (S) MCF	Sales or Demand Ratio (F) %	Uncollectible Accounts Reduction (UA) \$
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0	1,059,418	*	*	*	4	17,712,963	0	0
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FORM IRP - GAS - 9 - COST BENEFIT ANALYSIS RESULTS 2023

COMPANY: NATIONAL FUEL GAS DISTRIBUTION CORPORATION

PROGRAM: LIURP

Period of Analysis		Total Utility Benefits	Total Utility Costs	Revenue Reduction Cost	Participant Revenue Requirement	Total Participant Benefits	Total Participant Costs	Total All Ratepayers Benefits	Total All Ratepayers Costs
Beginning Year	Ending Year	(Bu)	(Cu)	(Cr)	(Rp)	(Bp)	(Cp)	(Ba)	(Ca)
		\$	\$	\$	\$	\$	\$	\$	\$
1/1/2023	12/31/2023	22,620	1,059,418	36,258	0	36,258	22,620	22,620	1,059,418

Discounted Payback Period	Net Present Value				Benefit-Cost Ratio				Rate Impact Non-Participant (RIMnp) \$Per MCF
	Participant (NPVp)	Non-Participant (NPVnp)	Utility (NPVu)	Ratepayers (NPVa)	Participant (BCR_p)	Non-Participant (BCRnp)	Utility (BCR_u)	Ratepayer (BCR_a)	
	\$	\$	\$	\$		\$			
	36,258	1,073,056	1,036,798	1,036,798	N/A	0.021	0.021	0.021	0.061

FORM-IRP-GAS-4B: PEAK DAY SUPPLY AND REQUIREMENTS SUMMARY
 REPORTING UTILITY: National Fuel Gas Distribution Corporation - Pennsylvania Division
 (volumes in MMcf)

	Historical Data		Current Year	Three Year Forecast			
	Index Year: Actual Year:	-2 2021	-1 2022	0 2023	1 2024	2 2025	3 2026
Gas Supply:							
Supply Contracts		163.900	170.100	261.100	265.200	266.200	268.700
Spot Purchases		0.000	0.000	0.000	0.000	0.000	0.000
Subtotal Gas Supply		163.900	170.100	261.100	265.200	266.200	268.700
Transportation		117.900	150.200	188.100	189.300	189.200	190.200
TOTAL GAS SUPPLY		281.800	320.300	449.200	454.500	455.400	458.900
Requirements:							
Firm Requirements		163.900	170.100	261.110	265.244	266.194	268.718
Interruptible Requirements		0.000	0.000	0.000	0.000	0.000	0.000
Subtotal Firm & Interruptible		163.900	170.100	261.110	265.244	266.194	268.718
Transportation		117.900	150.200	187.785	189.710	189.999	190.871
Load Reductions		0.000	0.000	0.000	0.000	0.000	0.000
TOTAL GAS REQUIREMENTS		281.800	320.300	448.895	454.954	456.193	459.589
Surplus (Deficiency)		0.000	0.000	0.305	(0.454)	(0.793)	(0.689)