

**Fiscal Year 2009 (April 1, 2008 –
March 31, 2009) Cast Iron/Bare
Steel Replacement Program
Results Filing**

DG 09-095

May 19, 2009

**Submitted to:
New Hampshire
Public Utilities Commission**

Submitted by:

nationalgrid

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Introduction

Pursuant to the settlement agreement approved by the New Hampshire Public Utilities Commission (the “Commission”) as part of the National Grid/KeySpan merger proceeding in Docket DG 06-107¹ (“Settlement Agreement”), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH (“National Grid” or “Company”) is submitting the results of the Cast Iron Bare Steel Replacement Program (“CIBS”) for fiscal year 2009 (April 1, 2008-March 31, 2009). As required by the Settlement Agreement, this report contains the following information: 1) A report detailing the actual amount of capital investments made in accordance with implementing the CIBS program during fiscal year 2009 ; 2) A calculation of the incremental revenue requirement associated with placing the capital investments into rate base above the CIBS base amount of \$500,000; 3) An explanation for deviations between actual results and the original plan, and; 4) A request for a permanent increase in base distribution delivery rates in the amount of \$314,318 effective for usage on and after July 1, 2009.²

Section 1: Actual Capital Expenditures

Actual capital expenditures incurred during implementation of the CIBS for fiscal year 2009 are detailed in Attachment A. Prior to submitting this report to the Commission, the Company met with Commission Staff, to review the results of the program for fiscal year 2009 against the agreed upon scope of the program. At a May 9, 2008 technical session, staff and the Company agreed that the capital investments amount to be included for recovery under the CIBS

¹ See Order No. 24,777 (July 12, 2007).

² In the interest of administrative ease and efficiency the Company, Commission Staff and the Office of the Consumer advocate recommend that, subject to Commission approval the final allowed increased be incorporated into the reconciliation that the company will submit following the Order in its pending rate case in docket DG 08-009.

Program may include all prudently incurred direct and indirect³ costs associated with : (i) replacement or abandonment⁴ of cast iron and bare steel mains, including replacement of existing pipe with replacement pipe up to one diameter size larger than the existing pipe, (ii) replacement or abandonment of cast iron or bare steel service lines directly connected to bare steel or cast iron main replacement projects, and (iii) tie over of connected service lines not replaced or abandoned as part of a cast iron bare steel main replacement project.

Categories of costs that may not be included for recovery under the Plan include: (i) replacement or abandonment of plastic main, (ii) replacement or abandonment of coated steel main, regardless of vintage, (iii) replacement or abandonment of plastic or coated steel services connected to cast iron or bare steel main replacement projects, (iv) the differential in cost to replace existing cast iron or bare steel mains with pipe of a diameter that is more than one size greater than the existing main and the cost to replace that main with a pipe that is one diameter size larger than the existing main, (v) relocation of customer meters from inside to out and (vi) random cast iron or bare steel service replacements not connected to a cast iron or bare steel main replacement project.

As a result of that meeting, certain costs were removed as being beyond the scope of the agreed upon plan. Those items are detailed in column f of Attachment A. Taking into account, those adjustments, Line 37 column G shows actual expenditures of \$2,465,616.01. After removing the CIBS base amount of \$500,000 from the actual expenditures, the total incremental expenditures to be include in rate base amounts to \$2,165,616.01.

³ Indirect costs mean overheads such as pension, OPEB's and other fringe benefits, payroll taxes, material handling costs and other general & administrative expenses that are loaded on all labor and material transactions. Categories of costs that may not be included for recovery under the Plan include: (vii) costs related to CIBS planning (other than normal engineering and project planning), reporting and filing.

⁴ For purposes of ii and iii, abandonments such as mains that are not servicing a customer via a service will not be allowed. Other abandonments will be considered by Staff on a case by case basis.

Section 2: Calculation of Incremental revenue Requirement

In this filing, National Grid is seeking recovery of the incremental revenue requirement associated with \$2,165,616.01 of capital investments in rates, as provided for in the Settlement Agreement.⁵ As set forth in Attachment B, the revenue requirement associated with fiscal year 2008 capital expenditures of \$2,165,616.01 is \$314,318. Because the Commission has not yet issued its order in the Company's first rate case following the merger (Docket DG 08-009), the Company has used its last allowed return on equity as a proxy for this calculation, which it will update once a final Commission order is issued in docket DG 08-009. Attachment B also indicates the bill impacts for a typical residential customer and commercial customers in rate classes G-41, G-42 and G-54

Section 3: Differences between planned and actual expenditures

The Company's proposed CIBS program for fiscal year 2009, submitted to the Commission Staff on May 16, 2009, provided for the replacement of 4.07 miles of cast iron and bare steel pipe at an estimated cost of \$3,635,605. As shown on attachment A, the Company actually completed 2.9 miles of replacement at a cost of \$2,465,616.01.⁶ The primary factor that contributed to the difference between the proposed fiscal year 2009 CIBS program and actual expenditures for fiscal year 2009 was the fact that five of the proposed projects were not completed and have been deferred to the Company's proposed fiscal year

⁵ See Settlement Agreement Exhibit EN-3 Section D at page 114 of 117.

⁶ As of April 1, 2009, there is approximately 150.69 miles of remaining cast iron, bare steel and wrought iron pipe in the Company's distribution system; made up of 711,427 feet of cast iron, 74,873 feet of bare steel, and 9,360 feet of wrought iron.

2010 CIBS program. For those jobs actually completed during fiscal year 2009, the differences between estimated and actual cost are detailed Attachment A.

2008 NH ACE 107 Program

WO#	Comments	Status	Actual Footage	Actual Spend YTD (3-31-2009)	Costs to be removed from the program	Costs to be recovered	Avg Cost/ft based on Actuals	Estimate footage vs Actual footage (over)/under	Estimate vs Actual cost (over)/under	Estimate Cost/ft vs Actual Cost/ft (over)/under	Service Costs to be removed from program	Svc Relay	Svc reconnect	Svc Insert	Abandoned	Priority	Paving	Category
																		First Group of \$500,000 Approved
586498		CASBUILT	410	\$55,733.78		\$55,733.78	\$135.94	100	\$9,784.97	(\$7.47)	\$0.00	1 (BS)				1	No	PROG
586407	Abandon 750' of main (only 65' replaced)	CASBUILT	65	\$69,088.82		\$69,088.82	\$1,062.90	750			\$0.00	3	1			2	Yes-PEND	PROG
548871	Main abandonment only	CASBUILT	586	\$87,941.37		\$83,949.73	\$150.07	114	(\$39,583.77)	(\$80.99)	\$3,991.64	13 (12-BS, 1PL)				3	No	RNMC
626849	Take soil sample and cut out section	COMP	1	\$600.86		\$600.86					\$0.00							RNMC
586547	565 feet of 4" and 1200 of 6"	CASBUILT	1864	\$286,790.84	\$33,972.06	\$231,570.06	\$153.86	(779)	(\$61,986.06)	\$53.34	\$21,248.72	8 (4-BS, 2-CS, 1-CS/PL)	3 (2-CS, 1-PL)	4 (PL)		4	No	PROG
592301		CASBUILT	487	\$73,203.88	\$4,227.80	\$68,976.08	\$150.32	(12)	(\$2,657.40)	(\$1.80)	\$0.00	5 (4-BS, 1-BS/PL)	3 (PL)			31	Yes-PEND	RNMC
		Sub-tot	3413	\$573,359.55	\$38,199.86	\$509,919.33					\$25,240.36							First Group Totals
																		Second Group Pending Approval
586538		CASBUILT	1238	\$195,953.23		\$190,397.28	\$158.28	(38)	(\$34,765.90)	(\$23.96)	\$5,555.95	16 (9-BS, 1-CS, 1-CS/PL)	6 (PL)			5	No	PROG
586408		CASBUILT	145	\$32,145.10	\$1,682.77	\$30,462.33	\$221.69	0	\$2,404.96	\$16.59	\$0.00	2(BS	1(PL)			6	No	PROG
586501		CASBUILT	234	\$37,871.73	\$1,737.75	\$35,059.86	\$161.85	26	\$34,973.09	\$118.33	\$1,074.12	1 (CS)				7	Yes-PEND	PROG
548877	Extended due to poor condition of main	CASBUILT	685	\$154,679.80	\$5,880.37	\$140,534.47	\$225.81	(485)	(\$107,512.06)	\$10.03	\$8,264.96	7 (3-BS, 4-CS)	1 (PL)			8	No	RNMC
626920	Take soil sample and cut out section	CASBUILT	1	\$1,429.43		\$1,429.43					\$0.00							RNMC
548872		CASBUILT	280	\$27,351.31		\$27,351.31	\$97.68	(5)	\$42,410.29	\$156.00	\$0.00	2 (BS)	1 (PL)	1 (BS)		9	No	RNMC
586531	Abandoned 52' of main (no main replaced)	CASBUILT	1	\$3,608.96	\$3,608.96	\$0.00	\$3,608.96	51			\$0.00					10	No	PROG
548884		CASBUILT	720	\$137,557.62	\$3,830.96	\$133,726.66	\$191.05	(190)	(\$34,842.24)	\$2.75	\$0.00	10 (BS)				11	No	RNMC
586504		CASBUILT	990	\$95,758.89		\$92,135.22	\$96.73	(535)	(\$29,512.79)	\$48.87	\$3,623.67	1 (CS)	3 (2-PL, 1-CS)		1 (CS)	12	No	PROG
586508		CASBUILT	728	\$191,240.46		\$191,240.46	\$262.69	22	(\$18,002.97)	(\$31.71)	\$0.00	8 (8-BS)	3 (1CS, 2PL)			13	Yes-PEND	PROG
586550		CASBUILT	560	\$169,047.46	\$8,032.99	\$155,952.97	\$301.87	40	(\$13,176.85)	(\$42.09)	\$5,061.50	11 (9-BS, 1-CS, 1PL)	4 (PL)			14	No	PROG
586506		CASBUILT	390	\$109,901.26	\$3,207.85	\$103,074.36	\$281.80	10	(\$32,231.71)	(\$87.62)	\$3,619.05	4 (BS)	5 (PL)	1 (CS)		16	No	PROG
548886	Abandoned 985 feet of cast iron, relayed 510 feet	CASBUILT	510	\$75,664.70	\$3,532.40	\$72,132.30	\$148.36	300	\$4,007.88	(\$50.00)	\$0.00	2 (BS)				17	No	RNMC
548885		CASBUILT	756	\$159,505.75	\$6,998.96	\$136,712.96	\$210.99	294	(\$20,572.50)	(\$78.67)	\$15,793.83	11 (2-BS, 8-CS, 1-PL)				18	No	RNMC
586413		CASBUILT	886	\$226,011.13	\$10,601.19	\$215,409.94	\$255.09	39	(\$67,970.09)	(\$84.24)	\$0.00	6 (BS)	7 (PL)			19	Yes-PEND	PROG
586551		CASBUILT	520	\$61,701.45	\$5,255.09	\$50,920.78	\$118.66	(40)	\$54,160.23	\$122.72	\$5,525.58	4 (3-CS, 1-PL)	4 (PL)			21	No	PROG
586496		CASBUILT	482	\$78,839.21		\$78,839.21	\$163.57	(52)	\$32,040.21	\$94.29	\$0.00	5 (BS)	3 (PL)			23	No	PROG
586510		CASBUILT	1303	\$231,746.03		\$220,810.84	\$177.86	(23)	\$40,376.72	\$34.74	\$10,935.19	9 (5-BS, 4CS, 1-PL)	5 (PL)			24	No	PROG
548894		CASBUILT	114	\$27,902.63		\$27,902.63	\$244.76	(14)	\$4,251.91	\$76.79	\$0.00	1 (BS)	1 (PL)			27	No	RNMC
586411	Abandoned 1255 feet of cast iron, relayed 370 feet	CASBUILT	370	\$98,841.75	\$98,841.75	\$0.00	\$267.14	885	\$14,670.79	(\$176.69)	\$7,813.53	9 (4-BS, 2-BS/CS, 2-BS/PL, 1-CS/PL)	7 (4-PL, 1-BS/PL, 2-CS/PL)	2 (1-PL, 1-CS/PL)		29	No	PROG
609897	Worked with wo#586411	CASBUILT	282	\$29,013.45	\$29,013.45	\$0.00					\$0.00							RNMC
586416		CASBUILT	304	\$39,171.65		\$36,419.55	\$128.85	(9)	(\$10,222.75)	(\$30.72)	\$2,752.10		2 (PL)	1 (PL)		32	No	RNMC
586417	Field scope change	CASBUILT	271	\$15,184.12		\$15,184.12	\$56.03	304	\$36,530.39	\$33.91	\$0.00					33	No	PROG
		Sub-tot	11770	\$2,200,127.12	\$182,224.49	\$1,955,696.68		469	(\$121,672.98)		\$70,019.48							
		Tot Group 1 & 2	15183	\$2,773,486.67	\$220,424.35	\$2,465,616.01					\$95,259.84							
																		Third Group -- Work not completed in 08 and work deferred to 09
586529	Tie in to be comp March/April	WSTOP		\$161,625.78				1,100	\$45,944.06			1				25	No	PROG
586410	Deferred to 2009	WSCHD		\$8,551.75				875	\$183,184.67							22	No	PROG
586414	Deferred to 2009	WSCHD		\$8,853.80				990	\$168,204.20							20	No	PROG
586493	Closed due to town paving requirements	CLOSE		\$18,900.53				860	\$128,138.32							15	No	PROG
586536	Deferred to 2009	WSCHD		\$11,401.10				1,250	\$317,633.75							26	No	PROG
548870		GUAR		\$0.00				200	\$55,664.27							28	No	RNMC
586554	Deferred to 2009 - State Permit	WSCHD		\$3,111.90				575	\$75,040.26							30	No	PROG
588562	Deferred to 2009	WSCHD		\$0.00														RNMC
				\$212,444.86														Second Group Totals
				\$2,985,931.53														

2008 NH ACE 107 Program

WO#	Division	Town Code	Location / Street	From	To	Address Range	Exst Diameter	Exst Material	YOI	System Pressure	Relay Diameter	Relay/Insert Footage	Abandon Footage	Total Footage	Aband Count	Recnct Count	Relay/Insert Count	# of Services	Estimated Direct Main Cost	Estimated Direct Service Cost	Total Estimated Direct Cost	Total Estimated Loaded Cost (60%)	DCost for Increased Size	LCost for Increased Size (60%)	AVG DCost / Foot	AVG LCost / Foot	Prioritization Factor (Pr)
586498	NH - Central	MNC	Brown Av	O'Malley St	W Hillcrest Av	406-492	6	CI	1930	LP	8	510	0	510	0	0	1	1	\$39,553.69	\$1,395.53	\$40,949.22	\$65,518.75	\$0.00	\$0.00	\$80.29	\$128.47	174.00
586407	NH - North	CCD	Centre St	Merrimack St	N Spring St	54-74	4	CI	1932	LP AB to 60 PSIG	Relay/Abandon	65	750	815	1	0	2	3	\$35,143.80	\$2,437.19	\$37,580.99	\$60,129.58	\$0.00	\$0.00	\$46.11	\$73.78	172.00
548871	NH - South	NAS	Chestnut St	60 Chestnut St	82 Chestnut St	60-82	2	BS	1908	LP AB to 60 PSIG	Abandon	0	700	700	2	1	8	11	\$19,674.74	\$10,548.76	\$30,223.50	\$48,357.60	\$0.00	\$0.00	\$43.18	\$69.08	162.40
626849		NAS	Chestnut St			60-82																					
586547	NH - Central	MNC	Varney St	Brock St	Precourt St	451	4	CI	1916	LP	6	1085	0	1085	0	3	9	12	\$125,099.13	\$15,403.86	\$140,502.99	\$224,804.78	\$33,317.32	\$53,307.71	\$129.50	\$207.19	145.00
592301	NH - North	CCD	Holt St	School St	#2 Holt St	2-20	2	BS	1894	LP	4	475	0	475	2	3	5	10	\$35,421.64	\$8,669.91	\$44,091.55	\$70,546.48	\$2,280.00	\$3,648.00	\$92.82	\$148.52	2.40
									= Reduced Diameter from OE Analysis			2135	1450	3585	5	7	25	37	\$254,893	\$38,455	\$293,348	\$469,357	\$35,597	\$56,956	\$130.92		
												0.40	0.27	0.68					Less Increased Sizing		\$257,751	\$412,401					
586538	NH - Central	MNC	Shasta St	Lincoln St	S Hall St	584-642	4	CI	1954	LP	6	1200	0	1200	0	6	10	16	\$81,986.78	\$18,755.30	\$100,742.08	\$161,187.33	\$0.00	\$0.00	\$83.95	\$134.32	145.00
586408	NH - North	CCD	Concord St	exst 4" Plat #7	EOM	7-13	2	BS	1953	LP	4	145	0	145	1	1	1	3	\$19,752.13	\$1,841.66	\$21,593.79	\$34,550.06	\$836.65	\$1,338.64	\$148.92	\$238.28	102.40
586501	NH - Central	MNC	Cedar St	Elm St			3	CI	1927	LP	4	260	0	260	0	0	1	1	\$44,031.39	\$1,496.62	\$45,528.01	\$72,844.82	\$1,500.20	\$2,400.32	\$175.11	\$280.17	68.00
548877	NH - South	NAS	DEXTER ST	43 DEXTER ST	49 DEXTER ST	43-49	2	BS	1927	LP	4	200	0	200	0	1	2	3	\$25,615.56	\$3,864.28	\$29,479.84	\$47,167.74	\$1,154.00	\$1,846.40	\$147.40	\$235.84	65.00
626920		NAS	Dexter St			24-51																					
548872	NH - South	HUD	Gloria Av	Highland St	#11 Gloria Av	2-19	2	BS	1954	60	4	275	0	275	0	1	3	4	\$38,614.41	\$4,986.59	\$43,601.00	\$69,761.60	\$0.00	\$0.00	\$158.55	\$253.68	60.00
586531	NH - Central	MNC	Rosedale Av	#30 Rosedale Av	#33 Rosedale Av	33	2	BS	1958	LP	Abandon	0	52	52	0	0	1	1	\$8,537.13	\$1,064.28	\$9,601.41	\$15,362.26	\$0.00	\$0.00	\$184.64	\$295.43	60.00
548884	NH - South	NAS	Brook St	1-17 Brook St, Nas		1-17	2	BS	1921	LP	4	530	0	530	0	0	9	9	\$54,114.43	\$10,082.68	\$64,197.11	\$102,715.38	\$3,058.10	\$4,892.96	\$121.13	\$193.80	60.00
586504	NH - Central	MNC	Esty Av	Hall St	EOM	30-62	4	CI	1959	LP	6	455	0	455	0	1	3	4	\$36,509.02	\$4,894.79	\$41,403.81	\$66,246.10	\$0.00	\$0.00	\$91.00	\$145.60	60.00
586508	NH - Central	MNC	Hall St & Lowell St	Concord St	E High St	592-628	3	CI	1893	LP	6	750	0	750	4	5	10	19	\$90,672.00	\$17,601.43	\$108,273.43	\$173,237.49	\$0.00	\$0.00	\$144.36	\$230.98	60.00
586550	NH - South	NAS	Mulberry St	Elm St	Chestnut St	18-38	2	BS	1912	LP	4	600	0	600	0	5	10	15	\$78,521.41	\$18,897.72	\$97,419.13	\$155,870.61	\$3,462.00	\$5,539.20	\$162.37	\$259.78	52.40
586506	NH - Central	MNC	Green St	Wilson St	Hall St	601-651	4	CI	1912	LP	4	400	0	400	1	5	6	12	\$36,170.29	\$12,373.18	\$48,543.47	\$77,669.55	\$1,920.00	\$3,072.00	\$121.36	\$194.17	43.33
548886	NH - South	HUD	Library St	Highland St	School st	2-18	2	BS	1908	LP, LP AB to 60 PSIG	Relay/Abandon	335	475	810	0	0	2	2	\$47,004.30	\$2,791.06	\$49,795.36	\$79,672.58	\$1,932.95	\$3,092.72	\$61.48	\$98.36	35.00
548885	NH - South	NAS	New Dunstable Rd & Liberty St	Gaffney St	Kinsley St		2	BS	1955	LP to 60 PSIG	Relay/Abandon	805	245	1050	0	2	9	11	\$72,673.51	\$14,159.77	\$86,833.28	\$138,933.25	\$5,040.00	\$8,064.00	\$82.70	\$132.32	32.00
586413	NH - North	CCD	School St	Liberty St	Westbourne Rd	114-122	4	CI	1911	LP	6	925	0	925	1	9	13	23	\$72,633.76	\$26,141.89	\$98,775.65	\$158,041.04	\$4,440.00	\$7,104.00	\$106.78	\$170.86	30.18
586551	NH - South	NAS	Prescott Rd & Putnam St	Baldwin St	Putnam St	31-40	2	BS	1924	LP	4 & 6	480	0	480	1	3	4	8	\$65,139.17	\$7,274.38	\$72,413.55	\$115,861.68	\$1,442.50	\$2,308.00	\$150.86	\$241.38	26.00
586496	NH - Central	MNC	Belmont St	Massabesic St	Auburn St	394-411	3	CI	1893	LP	6	430	0	430	1	3	7	11	\$57,838.67	\$11,460.97	\$69,299.64	\$110,879.42	\$0.00	\$0.00	\$161.16	\$257.86	20.00
586510	NH - Central	MNC	Harrison St	Hall St	High Ridge Rd	239-387	4	CI	1901	LP	6	1280	0	1280	0	5	14	19	\$146,495.32	\$23,581.40	\$170,076.72	\$272,122.75	\$0.00	\$0.00	\$132.87	\$212.60	16.25
548894	NH - South	NAS	Reed Ct	1 Reed Ct		1	1.25	BS	1913	LP	4	100	0	100	0	1	1	2	\$17,901.06	\$2,195.53	\$20,096.59	\$32,154.54	\$0.00	\$0.00	\$200.97	\$321.55	13.40
586411	NH - North	CCD	N State St	Chapel St	Centre St	65-105	6	CI	1892	LP AB to 60 PSIG	Relay/Abandon	225	1030	1255	3	13	16	32	\$39,632.34	\$31,313.00	\$70,945.34	\$113,512.54	\$0.00	\$0.00	\$56.53	\$90.45	11.67
609897		CCD	N Main St			102-114																					
586416	NH - North	CCD	Woodman St (at High School)	#4 Woodman St	#8 Woodman St	4-8	2	BS	1929	LP to 60 PSIG	2	295	0	295	0	3	0	3	\$15,936.84	\$2,156.22	\$18,093.06	\$28,948.90	\$0.00	\$0.00	\$61.33	\$98.13	0.00
586417	NH - South	HUD	Connell St	Library St	#10 Connell St	6-10	2	BS	1928	LP to 60 PSIG	2	575	0	575	0	0	6	6	\$24,302.26	\$8,019.31	\$32,321.57	\$51,714.51	\$0.00	\$0.00	\$56.21	\$89.94	0.00
									= Reduced Diameter from OE Analysis				Sub-tot	12067					\$1,299,033.84		\$2,078,454.14	\$24,786.40	\$39,658.24				
													Total	15652					Less Increased Sizing		\$1,274,247.44	\$2,038,795.90					
586529	NH - Central	MNC	Lowell St & Chestnut St	Rosciuszko Rd	Bridge St		3&4	CI	1914	LP	6	1100	0	1100	4	2	6	12	\$120,111.84	\$9,619.31	\$129,731.15	\$207,569.84	\$0.00	\$0.00	\$117.94	\$188.70	15.82
586410	NH - North	CCD	N Main St	Storrs St	Chapel St	143-204	6	CI	1892	LP	8	875	0	875	0	5	11	16	\$100,838.30	\$18,996.96	\$119,835.26	\$191,736.42	\$0.00	\$0.00	\$136.95	\$219.13	24.00
586414	NH - North	CCD	Warren St & N Spring St	Rumford St	Pleasant St		4	CI	1892	LP	6	990	0	990	2	5	14	21	\$89,954.79	\$20,706.46	\$110,661.25	\$177,058.00	\$0.00	\$0.00	\$111.78	\$178.85	27.50
586493	NH - South	HUD	School St	Library St	First St	26-46	4	BS	1947	LP	6	860	0	860	0	0	1	1	\$90,503.75	\$1,395.53	\$91,899.28	\$147,038.85	\$0.00	\$0.00	\$106.86	\$170.98	50.00
586536	NH - Central	MNC	Sagamore St	Beech St	Russell St	149-219	4	CI	1917	LP	6	1250	0	1250	3	9	21	33	\$169,848.39	\$35,798.39	\$205,646.78	\$329,034.85	\$0.00	\$0.00			

Bill Impacts due to Cast Iron and Bare Steel Replacement Program

	Total Yr 1
Annual Increase due to Cast Iron Bare Steel program	\$314,318
Annual Throughput (based on Nov 07 COG filing)	154,702,063
Increase Factor	\$0.0020
Typical Residential bill (Based on Pk 08-09 and OffPeak 09 COG)	\$1,757
Typical Usage	1,250
Annual Increase for Residential Heating customer	\$2.54
Percent bill increase	0.14%
Annual Revenues 2006-07 from Rate Case	\$176,520,000
Annual percent increase	0.18%
Typical G-41 (Based on Pk 08-09 and OffPeak 09 COG)	\$2,944
Typical Usage	2,000
Annual Increase for G-41 customer	\$4.06
Percent bill increase	0.14%
Typical G-42 (Based on Pk 08-09 and OffPeak 09 COG)	\$28,260
Typical Usage	21,023
Annual Increase for G-42 customer	\$42.71
Percent bill increase	0.15%
Typical G-52 (Based on Pk 08-09 and OffPeak 09 COG)	\$23,840
Typical Usage	20,489
Annual Increase for G-52 customer	\$41.63
Percent bill increase	0.17%

Energy North
Illustrative Cast Iron, Bare Steel Replacement Program
Illustrative Computation of Revenue Requirement

Annual Increase due to Cast Iron Bare Steel program

		Year 1 FY09			
	<u>Deferred Tax Calculation</u>				
1	CIBS Program Actual Spend	2,465,616			
2	Base Spending Amount	500,000			
3	Incremental Amount	1,965,616			
4	Cumulative REP Program Spend	1,965,616			
5					
6	Book Depreciation Rate (a)	2.23%			
7	15/20 YR MACRS Tax Depr. Rates	5.00%			
8	Vintage Year Tax Depreciation:				
9	Year 1 Spend	98,281			
10	Year 2 Spend				
11	Year 3 Spend				
12	Year 4 Spend				
13	Year 5 Spend				
14					
15	Annual Tax Depreciation	98,281			
16	Cumulative Tax Depreciation	98,281			
17					
18	Book Depreciation	43,800			
19	Cumulative Book Depreciation	43,800			
20					
21	Book/Tax Timer	54,480			
22	Effective Tax Rate	40.53%			
23					
24	Deferred Tax Reserve	22,078			
25					
26	<u>Rate Base Calculation</u>				
27	Plant In Service	1,965,616			
28	Accum Depr	(43,800)			
29	Def Tax Reserve	(22,078)			
30	Year End Rate Base	1,899,737			
31					
32	<u>Revenue Requirement Calculation</u>				
33	Year End Rate Base	1,899,737			
34	Pre-Tax ROR	12.25%			
35	Return and Taxes	232,778			
36	Book Depreciation	43,800			
37	Property Taxes (b)	1.92% 37,740			
38	Annual Revenue Requirement	314,318			
39					
40	<u>Annual Rate Adjustment</u>				
41					
42	Incremental Annual Rate Adjustment				
43					
44					
45	<u>Imputed Capital Structure</u>				
46		Ratio	Rate	Weighted Rate	Pre Tax
47	Long Term Debt (c)	50.00%	7.02%	3.51%	3.51%
48	Short Term Debt	0.00%	0.00%	0.00%	0.00%
49	Common Equity (d)	50.00%	10.39%	5.20%	8.74%
50					
51		100.00%		8.71%	12.25%

(a) Actual 2007 Composite Depreciation rate for distribution property.

(b) Actual 2007 ratio of municipal tax expense to net plant in service.

(c) Capital structure per Merger Settlement in Docket DG 06-107, Exhibit 1, Section 3(c).