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Exhibit No.	<u>#1</u>
Witness	<u>Panel 1</u>
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**Fiscal Year 2010 (April 1, 2009 –
March 31, 2010) Cast Iron/Bare
Steel Replacement Program
Results Filing**

DG 10-_____

May 17, 2010

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

Submitted by:

National Grid NH

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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 plc/KeySpan Corporation 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 2010 (April 1, 2009-March 31, 2010). 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 2010 ; (2) A calculation of the incremental revenue requirement associated with placing the capital investments into rate base above a base spending level of \$482,110; (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 \$479,462 effective for usage on and after July 1, 2010.

Section 1: Actual Capital Expenditures

Actual capital expenditures incurred during implementation of the CIBS for fiscal year 2010 are detailed in Attachment A. At a May 9, 2008 technical session, Commission Staff and the Company agreed that the capital investments amounts to be included for recovery under CIBS may include all prudently incurred direct and indirect² costs associated with:

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

² 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.

(i) replacement or abandonment³ 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 CIBS 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.

Prior to submitting this fiscal year 2010 report to the Commission, the Company met with Commission Staff, to review the CIBS results for fiscal year 2010 against the agreed upon scope of the program. No costs were removed as being beyond the scope of the agreed upon plan as a result of that meeting. It should be noted however, that while Attachment A documents the costs of each CIBS project undertaken between April 1, 2009 and March 31, 2010, in this filing the Company is seeking cost recovery of only those projects completed and placed in service between July 1, 2009 and March 31, 2010. This is because any costs that were reflected on the Company's books prior to June 30, 2009 are part of the rate base on

³ 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.

which the Company's revenue requirement that is pending before the Commission in Docket DG -10-17 is based. Taking into account, the adjustment to remove those costs reflected on the Company's books prior to June 30, 2010, Line 46 column H of Attachment A shows actual expenditures of \$4,848,550. After removing the CIBS base amount of \$482,110⁴ from the actual expenditures, the total incremental expenditures to be included in rate base amounts to \$4,366,440.

Section 2: Calculation of Incremental revenue Requirement

In this filing, National Grid is seeking recovery of the incremental revenue requirement associated with \$4,366,440 of CIBS capital investments in rates. As set forth in Attachment B, the revenue requirement associated with fiscal year 2010 capital expenditures of \$4,366,440 is \$479,462. Attachment B also indicates the bill impacts for a typical residential customer and commercial customers in rate classes G-41, G-42 and G-52.

Section 3: Differences between planned and actual expenditures

The Company's proposed CIBS program for fiscal year 2010, which was submitted to the Commission Staff on May 15, 2009, provided for the replacement of 4.08 miles of cast iron and bare steel pipe at an estimated cost of \$4,029,305.06. As shown on Attachment A, the Company actually completed 4.0 miles of replacement at a cost of \$5,028,169, which includes \$119,336 of cost incurred in fiscal year 2010 for final street restoration on three projects that were part of the fiscal year 2009 program.⁵ There were two significant factors that contributed to the difference between the proposed fiscal year 2010 CIBS program and actual expenditures for fiscal year 2010. First, the actual average overhead rate experienced

⁴ This represents the pro-rated portion of the \$500,000 base spending amount approved by the Commission in Order No. 24,777.

⁵ As of April 1, 2010, there is approximately 142 miles of remaining cast iron, bare steel and wrought iron pipe in the Company's distribution system; made up of 672,539 feet of cast iron, 69,294 feet of bare steel, and 7,880 feet of wrought iron.

by the Company was 61% as compared to its initial estimate of 41%. Second, the estimate prepared by the Company was based on the contract with its outside contractor that was in place at the time the estimate was prepared. The Company subsequently awarded a new contract with revised pricing that reflected more current market prices and caused a general increase in the direct costs of the program. Additional detail of the differences between estimated and actual costs by project are shown in Attachment A.

Work Order	Comments	STATUS	Actual Feet	Total Spend 2010-10	Av. Cost/Ft. based on Actual	Estimated Cost/Ft.	Estimated Rate Actual Feet (1000/Actual)	Aband Count	Remed Count	Relay/Inst Count	# of Services	Estimated Direct Main Cost	Estimated Direct Service Cost	Total Estimated Direct Cost	Total Estimated Loaded Cost (41%)	Estimated Direct Cost/Ft.	Estimated Loaded Cost/Ft.
586520	Carryover from 2009 program. Actual overhead rate of 78%. Estimate based on 2007 pricing. 24% of sheathing - \$26,723. 160 of ledge removal - \$1,502. Significant restoration overrun - \$46,074 compared to a total estimate of \$135,421.	CASH/ULT	993	\$401,510	\$404	\$172	100	0	0	0	0	\$135,421	\$0	\$135,421	\$190,944	\$120	\$174
586554	Scope change-Feasibility Street guaranteed. Removed footage from estimate.	CASH/ULT	50	\$102,907	\$180	\$234	975	0	4	0	4	\$83,406	\$12,092	\$95,498	\$134,526	\$166	\$234
586536	Significant restoration overrun \$95,827 as compared to direct estimate of \$34,104.	CASH/ULT	1,504	\$285,205	\$256	\$193	200	3	9	22	34	\$169,845	\$35,785	\$205,630	\$289,962	\$137	\$193
586410	Actual overhead rate of 70%. 645 of Sheathing not identified - \$7,032. Additional \$5,472,232.	CASH/ULT	1,230	\$262,535	\$213	\$144	175	0	5	11	16	\$100,838	\$19,197	\$119,835	\$168,968	\$102	\$144
580414	Estimate based on 900' and scope changed to incorporate additional 3" cut in. 3,559 of sheathing not previously identified - \$38,754. Unanticipated Sheathing. Actual overhead rate of 65%. Additional \$69,57,521.	CASH/ULT	1,494	\$452,802	\$303	\$169	425	2	5	14	21	\$89,955	\$20,706	\$110,661	\$156,032	\$78	\$109
628981	Additional 300' of main installed on Chestnut to replace 3" CL. platted as CS-556,610. Actual overhead rate of 12%. 648 of ledge removal - \$7,040. 648 of sheathing - \$7,031.	CASH/ULT	1,621	\$472,596	\$292	\$185	315	0	0	13	13	\$161,745	\$10,406	\$172,151	\$243,724	\$131	\$185
628987	Actual loaded spend within 2% of estimated costs.	CASH/ULT	706	\$135,896	\$193	\$213	656	0	0	7	7	\$92,566	\$5,607	\$98,163	\$138,417	\$151	\$213
642220	120' of sheathing not previously identified - \$3,046. Additional footage of 20' due to tie-in configuration - \$21,600.	CASH/ULT	570	\$181,050	\$318	\$270	430	0	0	14	14	\$74,808	\$11,207	\$86,015	\$121,269	\$191	\$270
642228	Scope change-estimate based on 425' of LF and changed to 600' of LF. Additional footage required to abandon the 425' of CL.	CASH/ULT	627	\$157,241	\$251	\$241	425	0	0	9	9	\$65,301	\$7,200	\$72,501	\$102,227	\$171	\$241
641992	Abandoned 165' of main rather than replacement. Replaced 1' on tie.	CASH/ULT	1	\$4,002	\$4,002	\$163	165	0	0	2	2	\$17,495	\$1,602	\$19,097	\$26,917	\$116	\$163
642294	Final Restoration in Spring of 2010-523,110.	CASH/ULT	180	\$45,530	\$253	\$430	165	0	0	4	4	\$44,428	\$3,202	\$47,630	\$67,152	\$268	\$430
655576	Actual overhead rate of 81%. Actual length 9W' greater than plan - \$26,264. 540' of sheathing - \$5,859.	CASH/ULT	1,173	\$398,102	\$339	\$268	775	0	0	29	29	\$181,256	\$21,206	\$202,462	\$288,282	\$190	\$268
642250	Additional 122' due to tie-in configuration - \$31,842.	CASH/ULT	652	\$180,024	\$276	\$281	530	0	2	14	16	\$85,268	\$12,907	\$98,083	\$138,207	\$185	\$261
642310	Revised B. Guaranteed reduced footage by 595'.	CASH/ULT	745	\$129,342	\$174	\$175	287	0	0	9	9	\$73,034	\$7,303	\$80,337	\$114,369	\$120	\$175
627817	81% of ledge removal - \$8,277. \$11,446 100% hand away gravel replacement.	CASH/ULT	1,831	\$444,693	\$243	\$187	340	0	0	28	28	\$142,040	\$22,408	\$164,448	\$231,846	\$123	\$173
642355	Final Restoration in Spring of 2010-540,982. 1,784 of sheathing not previously identified - \$19,156. Additional 60' - \$12,172.	CASH/ULT	1,573	\$271,561	\$173	\$170	505	0	0	23	23	\$118,404	\$25,271	\$143,675	\$205,328	\$133	\$187
628730	Actual overhead rate of 62%.	CASH/ULT	1,183	\$200,865	\$170	\$192	505	0	0	18	18	\$147,603	\$14,406	\$162,009	\$228,420	\$135	\$192
642295	360' of sheathing not previously identified - \$1,098. Significant restoration overrun - \$47,799 direct estimate of \$48,090, primarily 3" cut back and dig-out not included in original. Actual overhead rate of 60%.	FCUMP	500	\$162,805	\$326	\$227	530	0	0	10	10	\$55,180	\$12,502	\$67,682	\$95,682	\$168	\$227
650396	Refined 15'-10" (18') Hamilton 222' rather than uprete, both CS removed from cost of program.	CASH/ULT	2,215	\$297,865	\$135	\$193	1,750	0	0	31	31	\$215,255	\$24,396	\$239,651	\$338,471	\$137	\$193
589562	Actual overhead rate of 93%. 370 of Sheathing not previously identified - \$3,581. Additional 47' for tie-in-\$7,003.	CASH/ULT	107	\$34,049	\$318	\$149	120	0	0	0	0	\$12,720	\$0	\$12,720	\$17,935	\$166	\$149
Footnote Mileage			19,982	\$4,792,735	\$239	\$195	180	5	21	266	392	\$2,350,761	\$277,093	\$2,627,854	\$3,748,757	\$139	\$195
Added Projects:			3.8				3.6										
681851	Significant restoration overrun - \$74,191 for a total direct estimate of \$84,047, primarily 3" cut back and dig-out not included in upfront estimate. 432 of sheathing - \$2,134. 216 of ledge removal - \$2,134.	CASH/ULT	832	\$212,485	\$256	\$138	870	0	0	22	22	\$84,047	\$0	\$84,047	\$119,775	\$98	\$138
695903	Final Restoration in Spring of 2010-544,026. Actual overhead rate of 75%. 432 of Sheathing - \$4,687. 370 of ledge removal - \$2,022. Additional 60' for tie-in-\$26,230.	CASH/ULT	236	\$75,803	\$321	\$430	175	0	0	0	0	\$53,324	\$0	\$53,324	\$75,187	\$165	\$430
Footnote Mileage			21,856	\$5,841,021	\$269	\$195	1,235	5	21	289	314	\$2,389,632	\$277,093	\$2,666,725	\$3,943,719	\$138	\$195
FY09-10 Projects with Final Restoration:			4.0				3.8										
586496	Final Paving for FY09-10 program. Completed 12/09/09 performed 2" cut back in spring of 2009.	CASH/ULT	492	\$59,926													
586551	Final Paving for FY09-10 program. Completed 1/11/10 performed 3" cut back and dig-out in spring of 2009.	CASH/ULT	520	\$37,561													
586551	Final Paving for FY09-10 program	CASH/ULT	234	\$21,840													
FY09-10 Projects Deferred:																	
641895	Guaranteed Street - Permit denied	GUAR	0	\$0													
642274	Guaranteed Street - Permit denied	GUAR	0	\$0													
Actual overhead rate realized throughout the FY09-10 season for the NH CIBS program was 61% as opposed to the 41%, which accounts for Detailed estimates for FY09-10 provided prior to new construction contract being awarded. Estimates based on 2008 pricing units.																	

	3 Month Spending	Recoverable
Mains	\$4,206,293	\$156,370
Services	\$822,173	\$24,618
	\$5,028,466	\$180,988

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

Annual Increase due to Cast Iron Bare Steel program

	(a) 9 Months FY10	(b) Estimate FY11		
<u>Deferred Tax Calculation</u>				
1	CIBS Program Actual Spend-Mains	4,049,995		
2	CIBS Program Actual Spend-Service	798,555		
3	CIBS Program Estimated Spend-Mains		3,596,134	
4	CIBS Program Estimated Spend-Service		498,496	
5	Base Spending Amount	482,110	500,000	
6	Incremental Amount	4,366,440	3,594,630	
7	Cumulative REP Program Spend	4,366,440	7,961,070	
8				
9				
10	Annual Tax Depreciation	4,366,440	3,594,630	
11	Cumulative Tax Depreciation	4,366,440	7,961,070	
12				
13	Book Depreciation	98,794	177,140	
14	Cumulative Book Depreciation	98,794	275,934	
15				
16	Book/Tax Timer	4,267,646	7,685,136	
17	Effective Tax Rate	40.53%	40.53%	
18				
19	Deferred Tax Reserve	1,729,677	3,114,786	
20				
21	<u>Rate Base Calculation</u>			
22	Plant In Service	4,366,440	7,961,070	
23	Accum Depr	(98,794)	(275,934)	
24	Net Plant in Service	4,267,646	7,685,136	
25	Def Tax Reserve	(1,729,677)	(3,114,786)	
26	Year End Rate Base	2,537,969	4,570,351	
27				
28	<u>Revenue Requirement Calculation</u>			
29	Year End Rate Base	2,537,969	4,570,351	
30	Pre-Tax ROR	11.53%	11.53%	
31	Return and Taxes	292,628	526,961	
32	Book Depreciation	98,794	177,140	
33	Property Taxes	2.07% 88,340	159,082	
34	Annual Revenue Requirement	479,762	863,183	
35				
36	Prior Year Annual Revenue Requirement	-	479,762	
37				
38	Incremental Annual Rate Adjustment	479,762	383,421	
39				
40				
41	<u>Imputed Capital Structure</u>			
42		<u>Ratio</u>	<u>Rate</u>	<u>Weighted</u> <u>Rate</u> <u>Pre Tax</u>
43	Long Term Debt	50.00%	7.02%	3.51%
44	Short Term Debt	0.00%	0.00%	0.00%
45	Common Equity	50.00%	9.54%	4.77%
46				8.02%
47		<u>100.00%</u>		<u>8.28%</u> <u>11.53%</u>

3b & 4b Amounts based on estimated 90% 10% split of mains and services work
 33 Actual 2009 ratio of municipal tax expense to net plant in service.

Energy North
Cast Iron, Bare Steel Replacement Program
Vintage Year Book Depreciation Schedule

National Grid
DG 10-
Attachment B
May 17, 2010
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Book Depreciation Schedule-Mains		9 Months FY10	Estimate FY11
1	Actual CIBS spending	4,049,995	3,596,134
2	Base spending	(402,707)	(450,000)
3	Incremental CIBS spending	3,647,288	3,146,134
4			
5	Book Depreciation Rate:		
6	Year 1 (1)	2.54%	
7	Year 1 beginning in FY10	1.92% 70,028	60,406
8	Year 2	1.92%	70,028
9	Year 3	1.92%	
10	Year 4	1.92%	
11	Year 5	1.92%	
12	Year 6	1.92%	
13	Year 7	1.92%	
14	Year 8	1.92%	
15	Year 9	1.92%	
16	Year 10	1.92%	
17	Year 11	1.92%	
18	Year 12	1.92%	
19	Year 13	1.92%	
20	Year 14	1.92%	
21	Year 15	1.92%	
22	Year 16	1.92%	
23			
24	Book Depreciation Expense--Mains	70,028	130,434
25			
26	Accumulated Depreciation-Beginning of Year	-	70,028
27	Accumulated Depreciation-End of Year	70,028	200,462

- 2 FY11 split of mains and services estimated to be 90%-10%
6 FY09 filing used the composite depreciation rate for both mains and services

Book Depreciation Schedule-Services		9 Months FY10	Estimate FY11
1	Actual CIBS spending	798,555	498,496
2	Base spending	(79,403)	(50,000)
3	Incremental CIBS spending	719,152	448,496
4			
5	Book Depreciation Rate:		
6	Year 1 (1)	2.54%	
7	Year 1 beginning in FY10	4.00% 28,766	17,940
8	Year 2	4.00%	28,766
9	Year 3	4.00%	
10	Year 4	4.00%	
11	Year 5	4.00%	
12	Year 6	4.00%	
13	Year 7	4.00%	
14	Year 8	4.00%	
15	Year 9	4.00%	
16	Year 10	4.00%	
17	Year 11	4.00%	
18	Year 12	4.00%	
19	Year 13	4.00%	
20	Year 14	4.00%	
21	Year 15	4.00%	
22	Year 16	4.00%	
23			
24	Book Depreciation Expense--Services	28,766	46,706
25			
26	Accumulated Depreciation-Beginning of Year	-	28,766
27	Accumulated Depreciation-End of Year	28,766	75,472
28			
29			
30			
31	Total Mains & Services Depreciation Expense	98,794	177,140
32			
33	Total Mains & Services Accumulated Depreciation	98,794	275,934

- 2 FY11 split of mains and services estimated to be 90%-10%
6 FY09 filing used the composite depreciation rate for both mains and services

**Energy North
 Cast Iron, Bare Steel Replacement Program
 Municipal Taxes as a Percentage of Net Plant**

	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	Estimate 12/31/2010
1 Plant in Service (page 100 table 10)	258,573	272,678	289,379	305,221	319,737	319,737
2 Depreciation Reserve (page 101 table 10) <i>(includes amount in)</i>	(82,363)	(88,564)	(94,562)	(102,587)	(108,270)	(108,270)
3 Net Plant	176,209	184,114	194,817	202,634	211,467	211,467
4						
5 Average Net Plant						
6 Plant in Service		265,625	281,028	297,300	312,479	319,737
7 Depreciation Reserve		(85,463)	(91,563)	(98,575)	(105,429)	(108,270)
8 Net Plant		180,162	189,465	198,726	207,051	211,467
9						
10 Municipal Taxes (page 112 table 33)		3,534	3,641	3,771	4,294	4,294
11						
12 % Municipal Taxes to Net Plant		1.96%	1.92%	1.90%	2.07%	2.03%

Note: Source of above data is the December 31 PUC Annual Report to be consistent with data previously provided to the Commission.

Energy North
Cast Iron, Bare Steel Replacement Program
Bill Impacts due to Cast Iron and Bare Steel Replacement Program

	Total Yr 1	Total Yr 2	Incremental from Yr. 2
1 Annual Increase due to Cast Iron Bare Steel program	479,762	863,183	383,421
2			
3 Annual Throughput (based on Nov 09 COG filing)	150,828,182	150,828,182	150,828,182
4			
5 Increase Factor	\$0.0032	\$0.0057	\$0.0025
6			
7 Annual Actual Revenues 2009	\$151,224,178	\$151,224,178	\$151,224,178
8			
9 Annual percent increase	0.32%	0.57%	0.25%
10			
11 Typical Residential bill (Based on Pk 09-10 and OffPeak 10 COG)	\$1,591	\$1,613	\$1,613
12			
13 Typical Usage	1,250	1,250	1,250
14			
15 Annual Increase for Residential Heating customer	\$3.98	\$7.15	\$3.18
16			
17 Percent bill increase	0.25%	0.44%	0.20%
18			
19			
20 Typical G-41 (Based on Pk 09-10 and OffPeak 09 COG)	\$2,662	\$2,692	\$2,692
21			
22 Typical Usage	2,000	2,000	2,000
23			
24 Annual Increase for G-41 customer	\$6.36	\$11.45	\$5.08
25			
26 Percent bill increase	0.24%	0.43%	0.19%
27			
28			
29 Typical G-42 (Based on Pk 09-10 and OffPeak 09 COG)	\$25,188	\$25,227	\$25,227
30			
31 Typical Usage	21,023	21,023	21,023
32			
33 Annual Increase for G-42 customer	\$66.87	\$120.31	\$53.44
34			
35 Percent bill increase	0.27%	0.48%	0.21%
36			
37			
38 Typical G-52 (Based on Pk 09-10 and OffPeak 09 COG)	\$21,185	\$21,185	\$21,185
39			
40 Typical Usage	20,489	20,489	20,489
41			
42 Annual Increase for G-52 customer	\$65.17	\$117.26	\$52.09
43			
44 Percent bill increase	0.31%	0.55%	0.25%