

**Via Hand Delivery and E-filing**

July 8, 2009

Ms. Debra Howland  
Executive Director and Secretary  
NH Public Utilities Commission  
21 S. Fruit Street, Suite 10  
Concord, NH 03301

**Re: DG 09-095; EnergyNorth Natural Gas, Inc. d/b/a National Grid NH Cast Iron/Bare Steel Replacement Program**

Dear Ms. Howland:

Enclosed please find seven (7) copies of the settlement agreement (“Settlement”) between EnergyNorth Natural Gas, Inc. d/b/a National Grid NH and Staff of the New Hampshire Public Utilities Commission.

Due to vacation scheduling, National Grid NH was not able to execute and deliver this settlement within the time frame set forth in PUC 203.20(e). Accordingly, National Grid NH respectfully requests that the Commission accept the Settlement as late-filed pursuant to PUC 203.20(f). Acceptance of the Settlement will promote the orderly and efficient conduct of the proceeding and will not impair the rights of any party to the proceeding.

Thank you for your time and attention to this filing. Please do not hesitate to contact me at (781) 907-1809 if you have any questions.

Very truly yours,



Thomas P. O'Neill

TPO/tas  
Enclosure

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

**RE: ENERGINORTH NATURAL GAS, INC.  
D/B/A National Grid NH**

**DOCKET NO. DG 09-95**

**Settlement Agreement**

This Settlement Agreement is entered into by and between EnergyNorth Natural Gas, Inc. d/b/a National Grid NH ("National Grid" or "Company"), and the Staff of the New Hampshire Public Utilities Commission ("Staff"). (The signatories to this Settlement Agreement are collectively referred to below as the "Parties")

**BACKGROUND**

On July 12, 2007 in Order No. 24, 277, the Commission approved a cast iron bare steel replacement program ("CIBS") for National Grid. The terms of the CIBS program are set forth in Exhibit EN-3 of the settlement agreement in docket DG 06-107 that was approved in Order No 24,277. A copy of Exhibit EN-3 is attached hereto as Exhibit A. In Accordance with the terms of the CIBS program, on June 19, 2008, National Grid confirmed in a letter to Staff, its agreement regarding the scope of the CIBS program for fiscal year 2009. A copy of the letter is attached as Exhibit B. On May 19, 2009, National Grid provided Staff with a report documenting its actual CIBS program performance for fiscal year 2009 in this docket.

After the Staff completed its review of the Company's May 19, 2009 report, the Parties met to discuss a resolution of certain matters of concern to Staff. As a result, the Parties have entered into this Settlement Agreement. The Parties believe that the resolution of the matters in this docket as set forth below is in the public interest and, therefore, they recommend that the Commission adopt the terms of this Settlement Agreement as the terms of its order resolving this proceeding.

**AGREEMENT**

The Parties agree as follows:

1. The Company should be allowed a permanent increase in its base distribution delivery rates in the amount of \$262,185, for effect as of August 1, 2009, to

recover an annual incremental revenue requirement of \$1,965,616 calculated in accordance with Exhibit C hereto.<sup>1</sup>

2. The Company shall catalogue, photograph and test for remaining wall thickness the bare steel segments that were removed from service at the following eight locations:

| Division            | Town Code | WONUM  | DESCRIPTION                               |
|---------------------|-----------|--------|---|
| New Hampshire-North | CCD       | 679636 | 7-13 CONCORD ST, CCD                      |
| New Hampshire-North | CCD       | 679642 | 4-8 WOODMAN ST, CCD                       |
| New Hampshire-South | HUD       | 679659 | 6-14 CONNELL ST, HUD                      |
| New Hampshire-South | HUD       | 679662 | 11-19 GLORIA AVE, HUD                     |
| New Hampshire-South | HUD       | 679663 | 2-19 LIBRARY ST, HUD                      |
| New Hampshire-South | NAS       | 679667 | 18-38 MULBERRY ST, NAS                    |
| New Hampshire-South | NAS       | 679668 | 31-40 PRESCOTT ST, NAS, 250' UP PUTNAM ST |
| New Hampshire-South | NAS       | 679669 | 1 REED CT, NAS                            |

The results of such tests along with a soil sample from each location shall be provided to Staff prior to July 13, 2009.

3. In the event the Company is not able to complete the work described in paragraph 2 above and report the results to Staff prior to July 13, 2009, there shall be a \$10,000 reduction to the rate base for each location not completed and a corresponding reduction to the allowed increase to base distribution delivery rates calculated consistent with Exhibit C. This reduction to rate base would stay in place until the Company's next base rate case.

4. The Company shall not seek, in this or any future proceeding, recovery of the cost incurred in connection with the work described in paragraph 2 above.

5. This Agreement and any order approving it is intended to finally resolve all matters relating to the investigation undertaken by the Commission in this proceeding.

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<sup>1</sup> On June 29, 2009, the Company filed a motion for reconsideration of the Commission's order No. 24,972 approving an allowed ROE of 9.54% for National Grid NH. Should the Commission grant the Company's motion and authorize a different ROE, Exhibit C shall be adjusted to reflect the final allowed ROE and the base distribution rate increase shall be adjusted and reconciled back to August 1, 2009. Any such adjustment would be reflected in the CIBS compliance filing that follows the Commission ruling on the Company's motion.

**MISCELLANEOUS**

1. This Settlement Agreement is agreed to on the condition that, in the event the Commission does not approve it in its entirety, the agreement shall be deemed withdrawn and void and shall not constitute any part of the record in this or any future proceeding or be used for any other purpose.

2. The Parties have entered into this Settlement Agreement to resolve pending differences among them and avoid the time and expense of litigation, as well as to provide for a just and reasonable resolution of the issues in this docket.

3. Except as set forth in this Settlement Agreement, this Settlement Agreement and any order approving it shall not constitute, be construed as, or operate as (i) an admission or evidence of liability by National Grid; (ii) an admission by National Grid or evidence that it violated any law, rule, regulation, policy or regulatory interpretation; or (iii) a waiver of any defense National Grid might raise in any other proceeding.

WHEREFORE, this Settlement Agreement has been executed by the Parties and Staff on the dates set forth beside their names.

ENERGYNORTH NATURAL GAS, INC.  
d/b/a NATIONAL Grid NH  
By



\_\_\_\_\_  
Thomas P. O'Neill  
Senior Counsel

Date: 07/08/09

STAFF OF THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION  
By their attorney,

\_\_\_\_\_  
Matthew J. Fossum, Esq.

Date:

DG 09-095

EXHIBIT A

**Cast Iron/Bare Steel Replacement Program**

**(A) Preparation and Review of Plans**

(1) This program shall begin for fiscal year 2009 (April 1, 2008 through March 31, 2009). By no later than January 15 of each year, the Company will provide a copy of its Cast Iron/Bare Steel Replacement Program Plan ("CIBS Plan") to Staff for Staff's review and comment. The Company will meet with Staff in technical sessions to discuss the Plans, obtain comments, and answer any questions on the Plan to be implemented for the subsequent fiscal year.

(2) The CIBS Plan shall provide a description of the activities along with targeted amount of investments to be made during the following fiscal year and a budget of no less than the CIBS Base Amount set forth in Section C. The CIBS Plan will itemize the proposed activities by general category. The CIBS Plan will pertain to cast iron and bare steel pipe replacements that are prioritized based on factors including leakage, material condition, age and other components affecting pipe integrity, and does not address replacement of cast iron and bare steel pipes required in public works projects and/or carried out pursuant to the main encroachment policy in effect on January 1, 2007, which the Company will continue in the ordinary course of business. However, it is recognized that the Company may include in its CIBS Plan replacement of cast iron and bare steel pipe located in the vicinity of public works projects, where replacement is not required as a part of the project, but permitted for convenience or other reasons.

(2) Provided that the investments were made in accordance with the approved CIBS Plan, the Company will be allowed a permanent increase in its base distribution delivery rates to recover the annual revenue requirement for those investments made in the preceding fiscal year ended March 31<sup>st</sup> in excess of the CIBS Base Amount. This permanent "Capital Investment Allowance" will first take effect for usage on and after July 1, 2009 and annually on July 1 thereafter.

**(E) Annual Report and Plan Deviations**

The Company will file an annual CIBS Report on the prior fiscal year's activities at the time it makes its rate adjustment filing on May 15. In implementing the CIBS Plan, the circumstances encountered during the year may require reasonable deviations from the original Plan. In such cases, the Company would include an explanation of any deviations in the report. For cost recovery purposes, the Company has the burden to show that any deviations were due to circumstances out of its reasonable control or, if within its control, were reasonable and prudent.

**(F) Term of CIBS Program**

It is the intention of the parties that the CIBS program will remain in place through and beyond the Company's future rate cases contemplated in the Rate Agreement, until terminated by the Commission or by mutual agreement at the end of a given fiscal year, with a final capital allowance pertaining to the final year. This program shall commence for Fiscal Year 2009 and is not contingent upon the closing of the Merger.

- (1) The Company will undertake an annual review of the performance of the Company's distribution system in New Hampshire as it relates to the integrity of its cast iron and bare steel pipelines. This review will provide a detailed analysis of leak activity over the preceding ten years on the bare steel and cast iron gas mains and an evaluation of which main segments represent the highest priority segments for replacement. Consideration will be given to the age of the main, the date the leak(s) occurred, leak classification, type of leak, number of clamps used in leak repair, condition of main when repaired, specific leak location, and building types in the area of the main segment.
- (2) Adjustments in the priority of main segment replacement may be made due to planned paving projects, public relations, or identification of new main segments by operating personnel in the field that were not captured through the company's data systems.
- (3) Categories of spending in this program will include the following:
  - a. Unprotected bare steel main replacement,
  - b. Cast iron main replacement, and
  - c. Main replacement candidates requested by operating personnel.
- (4) Using the process identified above, the Company will rank and prioritize those mains to be replaced in the following year and provide its plans to the Commission.

**(C) CIBS Base Amount**

There shall be established for the Rate Agreement a base amount of capital expenditures equal to \$ 500,000 ("CIBS Base Amount"). The CIBS Base Amount excludes replacement activity required by public works projects and/or carried out pursuant to the main encroachment policy in effect on January 1, 2007.

**(D) Capital Investment Allowance**

(1) After Staff reviews the CIBS Plan for a given fiscal year, the Company shall track all capital investments made in accordance with the CIBS Plan. On May 15, the Company shall file a report ("CIBS Report") with the Commission detailing the actual amount of capital investments made in accordance with implementing the CIBS Plan during the prior fiscal year. The report shall include a calculation of the incremental revenue requirement associated with the capital investments into rate base above the CIBS Base Amount, using the Commission-approved imputed or actual capital structure and cost of capital determined using the Commission-approved return on equity and updated cost of debt in effect at that time, and as illustrated on the accompanying Attachment A to this Exhibit. If the Commission has not made a final determination in the First Rate Case by the time the first adjustment is to be calculated, a reasonable proxy shall be used for the rate calculation and an adjustment shall be made to the revenue requirement to reconcile to the approved cost of capital rates when the rates from the First Rate Case go into effect.

(2) Provided that the investments were made in accordance with the approved CIBS Plan, the Company will be allowed a permanent increase in its base distribution delivery rates to recover the annual revenue requirement for those investments made in the preceding fiscal year ended March 31<sup>st</sup> in excess of the CIBS Base Amount. This permanent "Capital Investment Allowance" will first take effect for usage on and after July 1, 2009 and annually on July 1 thereafter.

**(E) Annual Report and Plan Deviations**

The Company will file an annual CIBS Report on the prior fiscal year's activities at the time it makes its rate adjustment filing on May 15. In implementing the CIBS Plan, the circumstances encountered during the year may require reasonable deviations from the original Plan. In such cases, the Company would include an explanation of any deviations in the report. For cost recovery purposes, the Company has the burden to show that any deviations were due to circumstances out of its reasonable control or, if within its control, were reasonable and prudent.

**(F) Term of CIBS Program**

It is the intention of the parties that the CIBS program will remain in place through and beyond the Company's future rate cases contemplated in the Rate Agreement, until terminated by the Commission or by mutual agreement at the end of a given fiscal year, with a final capital allowance pertaining to the final year. This program shall commence for Fiscal Year 2009 and is not contingent upon the closing of the Merger.

DG 09-095

EXHIBIT B

*Via UPS*

June 19, 2008

Edward Damon, Esq.  
New Hampshire Public Utilities Commission  
21 South Fruit Street  
Concord, NH 03301

**Re: DG 06-107 Cast Iron Bare Steel Replacement Plan**

Dear Mr. Damon:

I am writing to confirm the National Grid's understanding of the agreement reached at the technical session held on Friday May 9, 2008 regarding the Cast Iron Bare Steel Main Replacement Program, which was part of the May 15, 2007 Settlement Agreement approved by the Commission in Order No. 24,777 dated July 12, 2007.

On February 12, 2008, National Grid NH ("National Grid" or the "Company") submitted its initial list of proposed cast iron and bare steel main replacement candidates for fiscal year 2009. As noted in that filing, these replacement candidates were determined and prioritized in accordance with the Company's Procedure GENG-2050 (Identification, Evaluation and Prioritization of distribution Main Segments for Replacement). Over the course of several meetings between the Company and the Staff, this list was modified and refined.<sup>1</sup> The final list of projects that resulted includes 4.07 miles (21,502 feet) at an estimated cost of \$3,635,605 dollars and is attached as Exhibit A (the "FY 2009 CIBS Plan"). Exhibit B is an updated Bill impact analysis based on the final proposal. In accordance with the Settlement Agreement dated May 15, 2007, the Plan does not include replacement of cast iron and bare steel pipes required in public works projects and/or carried pursuant to the main encroachment policy in effect on January 1, 2007, which the Company will continue in the ordinary course of business.<sup>2</sup>

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1 It also became apparent that GENG-2050 is an enterprise wide integrity management prioritized replacement policy containing many sections that are not pertinent to New Hampshire distribution systems and, as indicated below, a supplemental procedure specific to New Hampshire will need to be developed.

2 See Settlement dated May 15, 2007 at page 113 of 117.

Edward Damon, Esq.  
New Hampshire Public Utilities Commission  
June 19, 2008  
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The Company has commenced work based on the priorities established in Exhibit A and will track all capital investments made in accordance with the FY 2009 CIBS Plan. On or before May 15, 2009, the Company will file a report with the Commission in accordance with the Settlement Agreement. The report will document the actual amount of capital investments made in accordance with the Plan during fiscal year 2009 and propose recovery of that amount less the agreed upon base spending amount of \$500,000. The purpose of the filing is to true up cost estimates of planned projects, with actual costs incurred, including latest loading factors.

As agreed during the May 9, 2008 technical session, the capital investments amount to be included for recovery under the Plan may include all prudently incurred direct and indirect<sup>3</sup> costs associated with : (i) replacement or abandonment<sup>4</sup> 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.

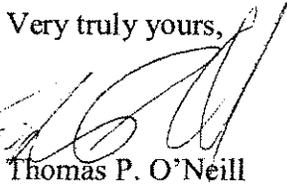
The Company and Staff have determined preliminary dates and associated milestones during fiscal year 2009 to develop a New Hampshire specific procedure to supplement the National Grid procedure GENG-2050 which supplemental procedure will be taken into account when

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- 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.

Edward Damon, Esq.  
New Hampshire Public Utilities Commission  
June 19, 2008  
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developing the National Grid, NH cast iron bare steel plan for fiscal year 2010 and beyond. Finally, bare steel segments that have been removed will be catalogued, photographed, and tested for remaining wall thickness and reported back to Staff.

Very truly yours,



Thomas P. O'Neill

Enclosures

cc: Randy Knepper  
Stephen Frink

|      |   |   |      |                               |         |        |       | Cost   |    |    |     | Cost (00%) |                       |             |              | LPI          |             |             |          |          |        |        |
|------|---|---|------|-------------------------------|---------|--------|-------|--------|----|----|-----|------------|-----------------------|-------------|--------------|--------------|-------------|-------------|----------|----------|--------|--------|
| 2    | 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 | 586498 |
|      | 4 | CI  | 1932 | LP AB to 60 P: Relay/Abar     |         | 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 | 586407 |
|      | 2 | BS  | 1908 | LP AB to 60 P: 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 | 548871 |
|      | 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 | 586547 |
|      | 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   | 592301 |
|      |   |   |      |                               |         | 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    |              |             |             |          |          |        |        |
| 2    | 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 | 586538 |
|      | 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 | 586408 |
|      | 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  | 586501 |
|      | 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  | 548877 |
|      | 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  | 548872 |
|      | 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  | 586531 |
|      | 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  | 548884 |
|      | 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  | 586504 |
| 3    | 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  | 586508 |
|      | 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  | 586550 |
|      | 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  | 586493 |
|      | 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  | 586506 |
|      | 2 | BS  | 1908 | LP, LP AB to 60 P: Relay/Abar |         | 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  | 548886 |
|      | 2 | BS  | 1955 | LP to 60 PSIG Relay/Abar      |         | 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  | 548885 |
|      | 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  | 586413 |
|      | 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  | 586414 |
|      | 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  | 586551 |
|      | 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  | 586410 |
|      | 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  | 586496 |
|      | 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  | 586510 |
| 3&4  | 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  | 586529 |
|      | 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      | \$164.52 | \$263.23 | 15.13  | 586536 |
| 1.25 | 2 | 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  | 548894 |
|      | 2 | BS  | 1908 | LP                            | 4       | 200    | 0     | 200    | 0  | 0  | 1   | 1          | \$33,394.64           | \$1,395.53  | \$34,790.17  | \$55,664.27  | \$1,154.00  | \$1,846.40  | \$173.95 | \$278.32 | 12.00  | 548870 |
|      | 6 | CI  | 1892 | LP AB to 60 P: Relay/Abar     |         | 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  | 586411 |
|      | 4 | BS  | 1931 | 60                            | 6       | 575    | 0     | 575    | 0  | 4  | 0   | 4          | \$45,645.10           | \$3,200.00  | \$48,845.10  | \$78,152.16  | \$0.00      | \$0.00      | \$84.95  | \$135.92 | 10.91  | 586554 |
|      | 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   | 586416 |
|      | 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   | 586417 |
|      |   |   |      |                               |         | 16,115 | 1,802 | 17,917 | 21 | 89 | 182 | 292        | \$1,724,379           | \$316,064   | \$2,040,443  | \$3,264,709  | \$25,940    | \$41,505    |          | \$182.21 |        |        |
|      |   |   |      |                               |         | 3.05   | 0.34  | 3.39   |    |    |     |            | Less Increased Sizing | \$2,014,502 | \$3,223,204  |              |             |             |          |          |        |        |
|      |   | = Reduced Relay Diameter from OE Analysis |      |                               |         | 18250  | 3252  | 21502  | 26 | 96 | 207 | 329        | \$1,979,272           | \$354,519   | \$2,333,791  | \$3,734,066  | \$61,538    | \$98,460    |          | \$173.66 |        |        |
|      |   |   |      |                               |         | 3.46   | 0.62  | 4.07   |    |    |     |            | Less Increased Sizing | \$2,272,253 | \$3,635,605  |              |             |             |          |          |        |        |

| Bill Impacts due to Cast Iron and Bare Steel Replacement Program |               |        |
|--|---------------|--------|
| Annual Increase due to REP Cap program                           | \$512,004     |        |
| Annual Throughput (based on Nov 07 COG filing)                   | 155,445,404   | Therms |
| Increase Factor  | \$0.0033      | /therm |
| Typical Residential bill (Based on Nov 07 COG)                   | \$1,862       |        |
| Typical Usage  | 1250          | therms |
| Annual Increase for Residential Heating customer                 | \$4.12        |        |
| Percent bill increase  | 0.22%         |        |
| Annual Revenues 2006-07 from Rate Case                           | \$176,520,000 |        |
| Annual percent increase  | 0.29%         |        |

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

|                                  |  | 4/08-3/09<br>Year<br>1                          |
|----------------------------------|--|---|
| <u>Municipal Tax Computation</u> |  |   |
| 1                                | 2007 Program Reported Spend            | 3,635,605                                       |
| 2                                | Asset Spreading Adjustment             | 500,000   |
| 3                                | Incremental Amount                     | <u>3,135,605</u>                                |
| 4                                | Cumulative REP Program Spend           | 3,135,605                                       |
| 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                           | 181,780   |
| 10                               | Year 2 Spend                           |   |
| 11                               | Year 3 Spend                           |   |
| 12                               | Year 4 Spend                           |   |
| 13                               | Year 5 Spend                           |   |
| 14                               |  | <u>181,780</u>                                  |
| 15                               | Annual Tax Depreciation                | 181,780   |
| 16                               | Cumulative Tax Depreciation            | 181,780   |
| 17                               |  |   |
| 18                               | Book Depreciation                      | 81,013  |
| 19                               | Cumulative Book Depreciation           | 81,013  |
| 20                               |  |   |
| 21                               | Book/Tax Timer                         | 100,767   |
| 22                               | Effective Tax Rate                     | 40.53%  |
| 23                               |  |   |
| 24                               | Deferred Tax Reserve                   | <u>40,836</u>                                   |
| 25                               |  |   |
| 26                               | <u>Rate Base Calculation</u>           |   |
| 27                               | Plant In Service                       | 3,135,605                                       |
| 28                               | Accum Depr                             | (81,013)  |
| 29                               | Def Tax                                | (40,836)  |
| 30                               | Year End Rate Base                     | <u>3,013,756</u>                                |
| 31                               |  |   |
| 32                               | <u>Revenue Requirement Calculation</u> |   |
| 33                               | Year End Rate Base                     | 3,013,756                                       |
| 34                               | Pre-Tax ROR                            | 12.30%  |
| 35                               | Return and Taxes                       | 370,787   |
| 36                               | Book Depreciation                      | 81,013  |
| 37                               | Property Taxes (b)                     | 1.92% 60,204                                    |
| 38                               | Annual Revenue Requirement             | 512,004   |
| 39                               |  |   |
| 40                               | <u>Annual Rate Adjustment</u>          | <u>Year 2</u>                                   |
| 41                               |  |   |
| 42                               | Incremental Annual Rate Adjustment     | <u>512,004</u>                                  |
| 43                               |  |   |
| 44                               |  |   |
| 45                               | <u>Imputed Capital Structure</u>       |   |
| 46                               |  | Ratio      Rate      Weighted Rate      Pre Tax |
| 47                               | Long Term Debt (c)                     | 50.00%      7.12%      3.56%      3.56%         |
| 48                               | Shareholder Debt                       | 0.00%      0.00%      0.00%      0.00%          |
| 49                               | Common Equity (d)                      | 50.00%      10.39%      5.20%      8.74%        |
| 50                               |  | <u>100.00%</u> <u>8.76%</u> <u>12.30%</u>       |
| 51                               |  |   |

(a) Composite (Actual/Rate Case) Depreciation for Energy North Mains  
 (b) Actual 2007 ratio of municipal tax expense to net plant in service  
 (c) Actual/Rate Case Composite LTD Rate  
 (d) Last approved ROE. To be replaced with ROE ultimately approved in Energy North's First Rate Case or subsequent rate cases.

DG 09-095

EXHIBIT C

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

Annual Increase due to Cast Iron Bare Steel program

|                                 | Year<br>1<br>FY09 |  |                  |                          |
|---------------------------------|-------------------|--|------------------|--------------------------|
| <b>Deferred Tax Calculation</b> |                   |  |                  |                          |
| 1                               |                   | CIBS Program Actual Spend-Mains        | 1,736,153        |                          |
| 2                               |                   | CIBS Program Actual Spend-Service      | 729,463          |                          |
| 3                               |                   | Base Spending Amount                   | <u>500,000</u>   |                          |
| 4                               |                   | Incremental Amount                     | 1,965,616        |                          |
| 5                               |                   | Cumulative REP Program Spend           | 1,965,616        |                          |
| 6                               |                   |  |                  |                          |
| 7                               |                   | Book Depreciation Rate (a)             | 2.54%            |                          |
| 8                               |                   | 15 YR MACRS Tax Depr. Rates            | 5.00%            |                          |
| 9                               |                   | Bonus Depreciation                     | 50.00%           |                          |
| 10                              |                   | Vintage Year Tax Depreciation:         |                  |                          |
| 11                              |                   | Year 1 Normal                          | 49,140           |                          |
| 12                              |                   | Year 1 Bonus                           | <u>982,808</u>   |                          |
| 13                              |                   |  |                  |                          |
| 14                              |                   | Annual Tax Depreciation                | 1,031,948        |                          |
| 15                              |                   | Cumulative Tax Depreciation            | 1,031,948        |                          |
| 16                              |                   |  |                  |                          |
| 17                              |                   | Book Depreciation                      | 49,836           |                          |
| 18                              |                   | Cumulative Book Depreciation           | 49,836           |                          |
| 19                              |                   |  |                  |                          |
| 20                              |                   | Book/Tax Timer                         | 982,112          |                          |
| 21                              |                   | Effective Tax Rate                     | 40.53%           |                          |
| 22                              |                   |  |                  |                          |
| 23                              |                   | Deferred Tax Reserve                   | <u>398,001</u>   |                          |
| 24                              |                   |  |                  |                          |
| 25                              |                   | <b>Rate Base Calculation</b>           |                  |                          |
| 26                              |                   | Plant In Service                       | 1,965,616        |                          |
| 27                              |                   | Accum Depr                             | (49,836)         |                          |
| 28                              |                   | Def Tax Reserve                        | <u>(398,001)</u> |                          |
| 29                              |                   | Year End Rate Base                     | <u>1,517,779</u> |                          |
| 30                              |                   |  |                  |                          |
| 31                              |                   | <b>Revenue Requirement Calculation</b> |                  |                          |
| 32                              |                   | Year End Rate Base                     | 1,517,779        |                          |
| 33                              |                   | Pre-Tax ROR                            | <u>11.53%</u>    |                          |
| 34                              |                   | Return and Taxes                       | 175,003          |                          |
| 35                              |                   | Book Depreciation                      | 49,836           |                          |
| 36                              |                   | Property Taxes (b)                     | <u>37,347</u>    |                          |
| 37                              |                   | Annual Revenue Requirement             | 262,185          |                          |
| 38                              |                   |  |                  |                          |
| 39                              |                   | <b>Annual Rate Adjustment</b>          |                  |                          |
| 40                              |                   |  |                  |                          |
| 41                              |                   | Incremental Annual Rate Adjustment     |                  |                          |
| 42                              |                   |  |                  |                          |
| 43                              |                   |  |                  |                          |
| 44                              |                   | <b>Imputed Capital Structure</b>       |                  |                          |
| 45                              |                   | <u>Ratio</u>                           | <u>Rate</u>      | <u>Weighted<br/>Rate</u> |
| 46                              |                   | Long Term Debt (c)                     | 50.00%           | 7.02%                    |
| 47                              |                   | Short Term Debt                        | 0.00%            | 0.00%                    |
| 48                              |                   | Common Equity (d)                      | <u>50.00%</u>    | <u>9.54%</u>             |
| 49                              |                   |  |                  |                          |
| 50                              |                   | <u>100.00%</u>                         | <u>8.28%</u>     | <u>11.53%</u>            |

(a) Actual 2008 Composite Depreciation rate for property put in service.

(b) Actual 2008 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).

| <b>DR 91-212 Capital Structure</b> |                | Weighted      |              |                |
|------------------------------------|----------------|---------------|--------------|----------------|
|                                    | <u>Ratio</u>   | <u>Rate</u>   | <u>Rate</u>  | <u>Pre Tax</u> |
| Long Term Debt (c)                 | 46.96%         | 9.55%         | 4.48%        | 4.48%          |
| Short Term Debt                    | 3.72%          | 6.00%         | 0.22%        | 0.22%          |
| Common Equity                      | <u>49.33%</u>  | <u>10.39%</u> | <u>5.13%</u> | <u>8.63%</u>   |
|                                    | <u>100.01%</u> |               | <u>9.83%</u> | <u>13.33%</u>  |

|                                    |       |                |                |                |                |                |
|------------------------------------|-------|----------------|----------------|----------------|----------------|----------------|
| Incremental Annual Rate Adjustment | 9.67% | <u>256,366</u> | <u>247,879</u> | <u>239,805</u> | <u>232,113</u> | <u>224,775</u> |
|------------------------------------|-------|----------------|----------------|----------------|----------------|----------------|

Bill Impacts due to Cast Iron and Bare Steel Replacement Program

|  | <b>Total Yr 1</b> |
|--|-------------------|
| Annual Increase due to Cast Iron Bare Steel program                    | \$262,185         |
| Annual Throughput (based on Nov 07 COG filing)                         | 154,702,063       |
| Increase Factor  | \$0.0017          |
| <b>Typical Residential bill (Based on Pk 08-09 and OffPeak 09 COG)</b> | <b>\$1,757</b>    |
| Typical Usage  | 1,250             |
| Annual Increase for Residential Heating customer                       | \$2.12            |
| Percent bill increase  | 0.12%             |
| Annual Revenues 2006-07 from Rate Case                                 | \$176,520,000     |
| Annual percent increase  | 0.15%             |
| <b>Typical G-41 (Based on Pk 08-09 and OffPeak 09 COG)</b>             | <b>\$2,944</b>    |
| Typical Usage  | 2,000             |
| Annual Increase for G-41 customer                                      | \$3.39            |
| Percent bill increase  | 0.12%             |
| <b>Typical G-42 (Based on Pk 08-09 and OffPeak 09 COG)</b>             | <b>\$28,260</b>   |
| Typical Usage  | 21,023            |
| Annual Increase for G-42 customer                                      | \$35.63           |
| Percent bill increase  | 0.13%             |
| <b>Typical G-52 (Based on Pk 08-09 and OffPeak 09 COG)</b>             | <b>\$23,840</b>   |
| Typical Usage  | 20,489            |
| Annual Increase for G-52 customer                                      | \$34.72           |
| Percent bill increase  | 0.15%             |